



Northeastern University



# Undergraduate Catalog 2021-2022

*Full-Time Day Programs*

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## Admission Policy and Entrance Requirements

Admission to Northeastern is highly selective. Applicants are admitted either as first-year or transfer students. Candidates who bring diverse experiences, perspectives, and interests to our community are identified by the Admissions Committee following a holistic application evaluation. Approximately 2,800 first-year students and an additional cohort of transfer students enroll each September; approximately 1,200 new first-year students will enroll in January through The N.U.*in* Program, a first-year global experience that requires enrolling students to begin their college studies by earning transfer credit in the fall semester<sup>1</sup> at one of our partner institutions and matriculating to our Boston-based undergraduate program in the spring semester. In addition to The N.U.*in* Program, first-year applicants may also be offered direct or conditional admission into other specialized entry programs. Additional information on specialized entry programs is available online (p. 15), and additional information about The N.U.*in* Program is available here.

In building a diverse and talented incoming class, the Admissions Committee seeks to enroll students who have been academically successful and who have been actively involved in their school and community.

When considering applicants for first-year admission, the committee considers whether the applicant's high school transcript reflects the various academic opportunities offered such as honors, Advanced Placement (AP), International Baccalaureate (IB), or college-level courses. Typically, students admitted to Northeastern have been extremely successful with a challenging course load.

When reviewing transfer students, the committee considers the candidate's college and high school transcripts, letters of recommendation, resumé, essay, academic preparation for major of choice, and contributions to the community. In certain cases, standardized test scores are required. Transfer applicants are encouraged to submit all supporting materials by the application deadline.

**Northeastern accepts both the Common Application and the Coalition Application.** Students may apply online via the Common Application or the Coalition Application. Northeastern does not have a preference for which application is submitted. Both the Common Application and the Coalition Application will be reviewed equally.

The committee will begin to evaluate an applicant's candidacy for admission when all application credentials have been received. Students are informed of their application information through the Application Status Check. Students are highly encouraged to verify that identification information (name, date of birth, and NU ID) is on every item submitted to ensure timely and accurate processing.

<sup>1</sup> Throughout this catalog, the word semester refers both to full semesters and to half semesters, except in cases where there is a cost or timeline difference. In such cases, the terms "full semester" and "half semester" are used.

## Application Programs

Northeastern offers the following application programs.

### Freshman Applicants:

- Early Decision I (binding enrollment for fall admission)
- Early Action (nonbinding)
- Early Decision II (binding enrollment for fall admission)
- Regular Decision (nonbinding)

### Transfer Applicants\*:

- Application for fall start (apply in spring)
- Application for spring start (apply in fall)

\*All transfer application options are dependent on space availability.

## Required Materials

The committee will evaluate an applicant's candidacy for admission when all application credentials have been received. Students are informed of their application information through the Application Status Check. Students are highly encouraged to verify that identification information (name, date of birth, and NU ID) is on every item submitted to ensure timely and accurate processing.

### FRESHMAN APPLICANTS

More than 75,000 students apply for a space in the freshman class. The committee is responsible for admitting applicants believed to be contributors to Northeastern's diverse and vibrant academic and social community. In particular, the committee is interested in applicants who have challenged themselves academically; are highly motivated; and who have demonstrated qualities of leadership, creativity, diversity, engagement, global perspective, adaptability, and resiliency. Our students exhibit a commitment to involvement and to being a positive influence in their community and in the world. We encourage applicants to spend time to thoughtfully prepare their application in order to make sure their strengths and qualities resonate with the Admissions Committee.

### Freshman applicants must submit the following:

- Completed Common Application or Coalition Application, including any Northeastern-specific questions. A complete application includes:
  - An application fee of \$75 (or request for fee waiver through application question).
  - The Early Decision Agreement for students applying under the binding Early Decision I or II application options.
- Secondary school counselor and teacher recommendations.
- Secondary school report and transcripts with final junior-year grades. First-semester or first-trimester grades should be submitted when they are available; first-quarter grades are not required.
  - General Equivalency Diploma (GED) recipients should provide their official GED score reports and their most complete high school transcript.
  - Home-schooled applicants should submit an academic portfolio/transcript consistent with their state guidelines. This should include grades for each course. They must also provide proof that they will have met by the end of May of the year of graduation

all requirements for an official high school diploma and submit a GED, or a certificate of completion from their local school district or state board of education, by the end of July of the year of matriculation. In addition to all other first-year requirements, home-schooled students must submit Northeastern's home-school supplement, which requires students to detail the rigor of their coursework.

- Early high school graduates: Northeastern will review applications from students who will complete high school in three years or less. Before enrolling at the university, all applicants for early admission must have completed all units required for high school graduation or must have earned the GED. In addition to the required materials for freshman applicants, early high school graduate applicants must provide statements of support from the school principal or guidance counselor and the student's parents. The endorsements should speak directly to the applicant's academic readiness and emotional maturity for college. Early high school graduates will only be considered at Regular Decision or Early Decision II so first-semester/trimester grades from the current academic year can be considered.
  - Nontraditional grading policies: Students who attend schools where narrative evaluations are used instead of traditional letter grades are required to submit the narratives to complete their applications.
  - 2021–22 policy on standardized tests:
    - **In the 2021–22 application cycle, Northeastern will be test optional and does not require applicants to submit standardized testing to be considered for admission.** (Please note English proficiency requirements).
    - Any student may choose to submit SAT or ACT scores for consideration.
    - Students who choose not to submit standardized test scores will not be disadvantaged in the process.
    - If an applicant self-reports their scores through the Application Status Check, official scores must be sent to Northeastern upon submitting their enrollment deposit.
  - English proficiency: As the primary instructional language at Northeastern is English, proficiency in English must be demonstrated in order to qualify for admission. Non-native English-speaking applicants, who were not educated entirely in English throughout the four consecutive academic years immediately prior to enrolling at Northeastern, will be required to submit valid and official results from an approved English Language Test. Please see the International Applicants (<https://www.northeastern.edu/admissions/application-information/international-student-admissions/>) page on the Undergraduate Admissions website for the most up-to-date information.
  - International students are required to submit Northeastern's Declaration and Certification of Finances (DCF), which can be accessed and submitted through the Application Status Check.
  - Portfolios are required for studio art and are highly encouraged for majors within the College of Arts, Media and Design. Northeastern uses SlideRoom (<http://www.northeastern.edu/admissions/application-information/>) for online portfolio submissions. See additional information (p. 11).
- Completed Common Application or Coalition Application.
  - Application fee of \$75.
  - Official college transcript(s) for all institutions you have attended.
  - College Report to be completed by the registrar's office or dean of your current/previous school.
  - Academic evaluation from an academic advisor, professor, or employer.
  - Final high school transcript or GED.
  - Joint Service Transcript (if you are a veteran).
  - 2021–22 policy on standardized tests:
    - **In the 2021–22 application cycle, Northeastern will be test optional and does not require applicants to submit standardized testing to be considered for admission.** (Please note English proficiency requirements).
    - Any student may choose to submit SAT or ACT scores for consideration.
    - Students who choose not to submit standardized test scores will not be disadvantaged in the process.
    - If an applicant self-reports their scores through the Application Status Check, official scores must be sent to Northeastern upon submitting their enrollment deposit.
  - English proficiency: As the primary instructional language at Northeastern is English, proficiency in English must be demonstrated in order to qualify for admission. Non-native English-speaking applicants, who were not educated entirely in English throughout the four consecutive academic years immediately prior to enrolling at Northeastern, will be required to submit valid and official results from an approved English Language Test. Please see the International Applicants (<https://www.northeastern.edu/admissions/application-information/international-student-admissions/>) page on the Undergraduate Admissions website for the most up-to-date information.
  - International students are required to submit Northeastern's Declaration and Certification of Finances (DCF), which can be accessed and submitted through the Application Status Check.
  - Portfolios are required for studio art and are highly encouraged for majors within the College of Arts, Media and Design. Northeastern uses SlideRoom (<http://www.northeastern.edu/admissions/application-information/>) for online portfolio submissions. See additional information (p. 14).

## Transfer Credit

Students may transfer up to 60 semester hours of credit from a two-year college, or up to 80 semester hours from a four-year college, or a combination of the two types of colleges. If you have been admitted to the D'Amore-McKim School of Business and your college or university is not AACSB-accredited, the maximum number of credits that you can transfer to Northeastern is 60. See also Residency Requirement (p. 32).

College courses completed with a grade of C or better are considered for transfer credit by faculty evaluators. Liberal arts coursework taken more than 10 years ago and math and science coursework completed more than 5 years ago cannot be considered.

All transfer-credit documents should be received prior to matriculation and *must* be received within one semester of matriculation. These documents include, but are not limited to, Advanced Placement (AP), International Baccalaureate (IB), and International Matriculation Exam scores and official transcripts from colleges and universities. These

## TRANSFER APPLICANTS

Each year we receive more than 4,000 applications for transfer admission. Our most competitive candidates for transfer admission typically have a grade-point average of 3.500 or higher.

**Transfer applicants must submit the following:**

documents should be submitted whether or not you wish to receive transfer credit from this work. Transfer credit *will not* be granted for work completed prior to matriculation if the official credential is received after the completion of the first semester. College coursework completed at an international institution must be translated into English and evaluated by a recognized credential agency.

### ADVANCED STANDING FOR FRESHMEN

Results from your AP exams, IB exams, and other international matriculation examinations (listed below) may enable you to receive advanced credits. You may also receive transfer credit if you successfully completed accredited college-level courses that were taken while you were in high school, before you enrolled at Northeastern. You may apply up to 32 semester hours of advanced credit toward your undergraduate degree. For consideration, you must submit official transcripts or test results before matriculation and must submit official score reports for credit.

Northeastern currently awards advanced credit for the following examinations:

- Advanced Placement (AP)
- International Baccalaureate (IB)
- Advanced Levels (A-Levels)
- Abitur (Germany)
- Baccalauréat (France)
- Cambridge Pre-University (Pre-U)
- Caribbean Advanced Proficiency Examinations (CAPE)
- Maturität/Maturité (Switzerland)
- All-India Senior School Certificate Examination (Standard XII)
- Indian School Certificate (ISC) Examinations (Standard XII)

#### Advanced Placement (AP) Examinations

- Credit is generally awarded for scores of 4 and 5.
- Visit the Transfer Equivalency Database (<https://ugadmissions.northeastern.edu/transfercredit/TransferCreditevaluatedstudent2.asp>) for an up-to-date listing.

#### International Baccalaureate (IB) Examinations

- Credit is generally awarded for scores of 5, 6, or 7 on Higher Level (HL) exams.
- No credit is awarded for Standard Level (SL) exams, the Extended Essay (EE), or Theory of Knowledge (TOK).
- Visit the Transfer Equivalency Database (<https://ugadmissions.northeastern.edu/transfercredit/TransferCreditevaluatedstudent2.asp>) for an up-to-date listing.

#### Advanced Level (A-Level) Examinations

- Credit is generally awarded for grades C or better on General Certificate of Education (GCE) Advanced Level (A-Level) examinations.
- No credit is awarded for Advanced Subsidiary (AS) Level exams, Ordinary Level (O-Level) exams, or the (International) General Certificate of Secondary Education (GCSE/IGCSE).
- For Singapore-Cambridge GCE Advanced Level exams, credit is awarded for H2 exams. No credit is awarded for H1 exams. H3 credit is subject to review and only awarded if the student is not receiving credit from the H2 exam in the same subject.
- Northeastern will only award credit for exams that were administered by AQA, Cambridge Assessment (including OCR), CCEA, Pearson Edexcel, WJEC, or any subsidiaries.

#### International Matriculation Examinations

- Abitur (Allgemeinen Hochschulreife): Credit is generally awarded for scores 7 (out of 15) and higher on written (schriftlich) final exams (Abiturprüfung). No credit is awarded for oral (mündlich) exams.
- Baccalauréat (Baccalauréat Général, Diplôme de Bachelier de l'Enseignement du Second Degré, or Option Internationale du Baccalauréat): Credit is generally awarded for scores 12 or higher (out of 20) on final written exams in subjects studied with coefficients 10 or higher. No credit is awarded for oral exams.
- Cambridge Pre-University (Pre-U): Credit is generally awarded for scores M3 or higher on Principal Subjects. No credit is awarded for Short Courses or Global Perspectives and Research.
- Caribbean Advanced Proficiency Examinations (CAPE): Credit is generally awarded for grades 3 or below (out of 7, with 1 being the highest) on two-unit subjects. No credit is awarded for one-unit courses.
- Maturität/Maturité: Credit is generally awarded for scores 4.5 or higher (out of 6) on the main subject (Schwerpunktfach) or complementary subject (Ergänzungsfach) on either the Swiss Federal Maturity Certificate or federally recognized cantonal maturity certificates.
- All-India Senior School Certificate Examination (Standard XII): Credit is generally awarded for scores of 81 or higher (out of 100) for subjects completed in the general academic track on the All-India Senior School Certificate Examination (AISSE) administered by the Central Board of Secondary Education (CBSE).
- Indian School Certificate (ISC) Examinations (Standard XII): Credit is generally awarded for scores of 80 or higher (out of 100) for subjects completed in the general academic track on the Indian School Certificate (ISC) examinations administered by the Council for the Indian School Certificate Examination (CISCE).

#### Additional Information for International Applicants

In order to enroll at Northeastern, enrolling international students may be required to apply for either F-1 (student) or J-1 (exchange visitor) nonimmigrant status. To begin the process, each student must first request their certificate of eligibility from the Office of Global Services (<https://international.northeastern.edu/ogs/>) (OGS). For the F-1 visa, students must request the Form I-20, while for the J-1 visa, students must request Form DS-2019. Both forms can be requested through myOGS, Northeastern's online portal for international students.

- Once an enrollment deposit is submitted, all international students will be able to access myOGS, Northeastern's online international student portal. (International students can access myOGS through their myNortheastern portal.)
- International students must submit the appropriate request form in myOGS ([https://myogs.northeastern.edu/istart/controllers/client/ClientEngine.cfm?serviceid=EFormGroupProvider&eformGroup=55#\\_ga=2.114820615.106419839](https://myogs.northeastern.edu/istart/controllers/client/ClientEngine.cfm?serviceid=EFormGroupProvider&eformGroup=55#_ga=2.114820615.106419839)) for either the Form I-20 or Form DS-2019.
- Once the student submits the request form and all required supporting documents (<https://international.northeastern.edu/ogs/new-students/i-20-ds-2019-application/applying-for-your-initial-i-20/>), the OGS team will review the request and generate the I-20 within 10 business days.
- Once students receive the I-20 or DS-2019, students can apply for the F-1 or J-1 visa at a nearby overseas U.S. embassy or consulate.

- If the visa is granted, students are permitted to enter the United States no more than 30 days before the start date of their academic program (which will be provided on the I-20 or DS-2019).

In order to maintain lawful student status in the United States, international students must be mindful of the rules and regulations that govern their nonimmigrant visa classification. Numerous U.S. federal mandates and regulations make it especially important for students with F-1 or J-1 visas to consult regularly with an international student advisor at the Office of Global Services (<https://international.northeastern.edu/ogs/>) (OGS) before taking any action that might affect their immigration status and educational endeavors in the United States. Please note the following:

- International students in F-1 and J-1 status must register as full-time students (minimum of 12 credits) and on time (within the appropriate registration period) each term during the regular academic year. Any exceptions to full-time registration requirements must be preapproved by OGS in accordance with specified federal regulations.
- International students must not begin, extend, or resume any type of employment without first obtaining proper employment authorization or verification from the OGS.
- Some international students must apply and be approved for a change of status (e.g., from F-2 to F-1 nonimmigrant status) before beginning their academic program at Northeastern.
- For information on nonimmigrant statutes other than F-1 and J-1 (including eligibility to work in the United States or participate in co-op and other forms of experiential learning), contact OGS ([ogs@northeastern.edu](mailto:ogs@northeastern.edu)). Note that some academic programs at Northeastern have experiential learning requirements (e.g., co-op or study abroad). Not all visa categories allow for internships, co-ops, international travel, or other experiential learning opportunities and may impede the successful completion of your program of study.

### Non-Native English-Speaking Applicants

All non-native English-speaking applicants, regardless of citizenship, must submit official results from one of the following proficiency tests: the Duolingo English Test (DET), C1 Advanced or C2 Proficiency (Cambridge English: Advanced or Proficiency), the International English Language Testing System (IELTS), the Pearson Test of English Academic (PTE Academic), or the Test of English as a Foreign Language (TOEFL). Applicants who will complete four or more consecutive academic years of high school or university where academic or native English was the primary instructional language may contact the Office of Undergraduate Admissions in order to request a waiver. English-language learners or students enrolled in ESL courses in the four years preceding their application are strongly recommended to submit IELTS. Based on IELTS, some undergraduate applicants with substantial English proficiency but insufficient proficiency for undertaking a full-time, degree-seeking academic program may instead be referred to NU Immerse, our structured English immersion program.

### College, Major, and Length of Program Selection

Applicants to Northeastern University apply to one of our seven undergraduate colleges or to the Explore Program for undeclared students.

We encourage students to select a major that reflects their current academic interests and aspirations; however, the Explore Program for undeclared students provides opportunities to explore our various disciplines and programs. Northeastern offers advisory programs for students interested in preprofessional programs, including medical, dental, law, and veterinary graduate school.

Northeastern University offers a broad and deep curriculum that is flexible, and the academic calendar allows students to maximize experiential learning opportunities, including research, study abroad, and our signature co-op program. Students become architects of their own paths, charting their unique course that determines their time to degree. Students can build a program that is four years or five years and gain up to 18 months of full-time experiential learning. Freshmen can participate in NUterm in Summer I of their freshman year, taking advantage of exciting and unique course offerings or regular classes during the May/June semester. By participating in NUterm, students take advantage of Northeastern's signature flexibility, beginning their sophomore year with an additional half term completed. Many colleges offer PlusOne programs, which link undergraduate work with graduate studies. See the detailed curricula in this catalog for more information.

### ADMISSION REQUIREMENTS FOR THE COLLEGE OF ARTS, MEDIA AND DESIGN

#### *Guidelines for Portfolio Submission*

All portfolios should be submitted electronically via SlideRoom. Hard-copy portfolios will not be accepted and cannot be reviewed.

#### *Studio Art*

Applicants for the studio art major, a joint program of Northeastern University and the School of the Museum of Fine Arts, Boston, are required to submit a portfolio through SlideRoom. This portfolio requires a minimum of 15 individual images of original artwork. The portfolio may include work in a variety of media; no particular subject matter or style is required. Rather, students should select work that best shows their personal style, creativity, and commitment to innovation. Check the Department of Art + Design website (<http://www.northeastern.edu/camd/artdesign/>) for more information.

#### *Music Composition and Technology*

Beginning in spring 2018, portfolios are no longer required for students applying to music composition and technology.

#### *Music Performance*

Once enrolled, students in any music concentration may also audition to pursue a minor in musical performance. This program is highly competitive and therefore requires evaluation by the Department of Music. Auditions are typically scheduled during a student's first semester at Northeastern. For specific questions regarding the program or audition requirements, please reference the CAMD website ([https://camd.northeastern.edu/music/academic-programs/minor-in-music-performance/#\\_ga=26162929219060109681522070914-16965839841517851807](https://camd.northeastern.edu/music/academic-programs/minor-in-music-performance/#_ga=26162929219060109681522070914-16965839841517851807)).

## Conditional Admission

### Conditional Admission

A student who has not provided required documentation for admission by the due date for final grades for the student's first academic term will not be permitted to register for a future term.

## University Honors Program

The University Honors Program values integrated, student-directed, and experiential learning that is personalized to meet students' individual goals and interests. Our community of intellectually engaged students, faculty, and advisors are committed to engagement in scholarship that will enable students to confront critical societal issues and make a difference at home and in the world. Students benefit from unique and enriched educational options that include stimulating courses, opportunities for research and creative endeavors, global experiences,

service-learning, mentoring, and the development of competencies that will position them for lifelong learning and personal and professional success. Throughout their undergraduate experience, Honors students are guided and supported as they chart their unique educational plans through personalized advising, engagement in diverse competency-based learning experiences, and participation in a set of networked communities that include Honors Living Learning Communities.

All applicants seeking freshman entry at Northeastern University (for fall semester entry) are considered for admission into the University Honors Program and are notified of their selection in their letter of admission. There is no separate application. Continuing students in their first, second, or third semesters who wish to be considered for entry may consult the University Honors Program's website (<https://undergraduate.northeastern.edu/honors/>) for application instructions.

## Specialized Entry Programs

Northeastern University offers admission and enrollment programs and opportunities that advance the university's mission and help meet students' needs. Students who apply for admission to Northeastern may be automatically offered direct entry into some of these programs or, in some cases, may be referred to other specialized entry programs. These selections are based on a holistic review of students' applications. Northeastern continually assesses our specialized entry programs and opportunities, and additional programs and opportunities may become available while existing programs and opportunities may be modified. For a complete list of our specialized programs and opportunities, visit the Specialized Entry Programs web (<https://www.northeastern.edu/admissions/academics/specialized-entry/>) site (<https://www.northeastern.edu/admissions/academics/specialized-entry/>).

### The N.U.*in* Program

Northeastern enrolls selected new students in the spring semester through the N.U.*in* Program. During the fall semester, N.U.*in* participants earn transfer credit at a partner institution and matriculate to the undergraduate program in Boston in the spring. *These transfer credits earned are guaranteed to be valid at Northeastern but may not be accepted by other institutions.* For the most up-to-date information regarding the N.U.*in* Program, please refer to the program website (<https://nuin.northeastern.edu/>).

### General Studies Program

General Studies is a first-year program designed to help students build skills for academic success in their freshman year and beyond. General Studies students spend their freshman year immersed in a combination of first-year requirements, NUpath courses, and introductory courses for their intended major. See additional information (p. 44).

### Foundation Year

An innovative, first-year college program, Foundation Year supports City of Boston students as they develop the skills to be successful in their entire Northeastern experience. During their first year of college, students receive rigorous academics, extensive support services, real-world experience, and the privileges that come with being a Northeastern University student. Foundation Year brings together the right resources for each student—maximizing the potential for success. Visit the Foundation Year page of this catalog (p. 15) for additional information.

### Torch Scholars Program

The Torch Scholars (<https://torch.northeastern.edu/>) is a comprehensive scholarship and support program for first-generation college students. Students selected into the program have demonstrated exceptional leadership and community service throughout high school but have not yet reached their full academic potential. After a holistic review, which includes a thorough interview process, selected Torch Scholars receive a full scholarship that covers tuition, room and board, books, and fees for eight semesters, as well as coverage for a four-week Summer Immersion program. Torch alumni have continued their education in PhD and master's programs, founded startups, and begun careers in major corporations.

### NU Bound

NU Bound is an academically rigorous one-year program for select students that is hosted by the New College of the Humanities (NCH) in London, England, and provides a pathway to transfer to Northeastern in the second year of university study. Please note, NU Bound provides a conditional offer of admission to undergraduate degree programs at Northeastern upon successful completion of the program.

### NU Immerse

NU Immerse is a transitional experience for non-native English-speaking students, which offers advanced English-language preparation and an introduction to college culture through a yearlong program in Boston through the College of Professional Studies, or London through the New College of the Humanities (NCH). Students will improve language and academic skills through a specially designed two-semester curriculum. Please note, NU Immerse provides a conditional offer of admission to undergraduate degree programs at Northeastern upon successful completion of the program.

## Foundation Year

### Overview

An innovative, first-year college program, Foundation Year supports City of Boston students as they develop the skills to be successful in their entire Northeastern experience. Launched in 2009, Foundation Year is designed for recent City of Boston high school graduates and GED/HiSET completers who desire and would benefit from a more structured learning environment during their first year of college. Featuring rigorous academics, extensive support services, real-world experience, and the privileges that come with being a Northeastern University student, Foundation Year brings together the right resources for each student—maximizing the potential for success.

Accepted students are enrolled in Northeastern University's College of Professional Studies where they may earn a full year of college credits upon graduation. To foster camaraderie and peer-to-peer learning, the program is built around the cohort model, in which Foundation Year students attend all classes and workshops together.

Upon graduation, students are eligible to:

- Transfer to another college at Northeastern if progression standards are met
- Continue at Northeastern University's College of Professional Studies in a bachelor's completion program

### Application

To be considered for Foundation Year, students must be:



- Boston residents
- High school graduates or students holding GED/HiSET completion certificates
- Motivated and willing to work hard to achieve their goals and earn a college degree

### PROCESS

1. Submit an application to Northeastern (<https://www.northeastern.edu/admissions/application-information/apply/>) using the Common Application or the Coalition Application.
2. Submit required materials (<https://www.northeastern.edu/admissions/application-information/apply/>).
3. Complete the Free Application for Federal Student Aid (FAFSA (<http://www.fafsa.ed.gov/>)) online.

### CONTACT INFORMATION

Fax: 617.373.8574

[foundationyear@northeastern.edu](mailto:foundationyear@northeastern.edu)

### Program Requirements

Designed with the student in mind, Foundation Year's intensive curriculum includes courses in English, sociology, mathematics, and history. Students can also focus their studies by choosing from electives in a business, science, or liberal arts track. Foundation Year students can earn up to 32 semester hours of credit—equivalent to one year of college credits.

To help facilitate learning, Foundation Year provides all students with textbooks and laptops to use for the entire school year.

Complete all courses below unless otherwise indicated.

### CORE COURSES

*Note:* Students are placed into math courses based on proficiency.

Code	Title	Hours
CDV 0220		1.2
CDV 0225		1.2
CMN 2310	Professional Speaking	3
ENG 1105	College Writing 1	3
ENG 1106	Lab for ENG 1105	1
ENG 1107	College Writing 2	3
ENG 1108	Lab for ENG 1107	1
SOC 1220	Engaging Difference and Diversity	3
Complete two of the following:		6
MTH 1100	College Algebra	
MTH 1200	Precalculus	
MTH 2100	Calculus 1	
MTH 2300	Business Statistics	

### ELECTIVES

Code	Title	Hours
<b>Liberal Arts Course Track</b>		
HST 2425	Coming to America: The American Immigrant Experience	3
PHL 1100	Social and Political Philosophy	3
POL 1300	American Government	3
PSY 1100	Foundations of Psychology	3
SOC 2240	Death and Dying	3
<b>Science Course Track</b>		
BIO 1100	Principles of Biology 1	3

BIO 1101	Lab for BIO 1100	1
CHM 1100	General Chemistry 1	3
CHM 1101	Lab for CHM 1100	1
CHM 1200	General Chemistry 2	3
CHM 1201	Lab for CHM 1200	1
<b>Business Course Track</b>		
ECN 1100	Principles of Microeconomics	3
ECN 1200	Principles of Macroeconomics	3
MGT 2100	Principles of Management	3
MGT 2330	Business Law	3

## Merit Scholarships

Northeastern provides highly selective scholarship programs aimed at rewarding and recognizing outstanding academic achievement. All applicants who apply on time are considered for these scholarships and no additional applications are necessary. Please note that scholarship consideration is separate from the financial aid application process. International students are eligible for merit scholarship consideration, but Northeastern University does not offer need-based assistance to international students.

### National Merit Finalist and National Recognition Program Scholarships

**Award:** A scholarship for admitted freshman applicants who are designated National Merit Finalists or College Board National Recognition Program Scholars. National African American Recognition Scholars, National Hispanic Recognition Scholars, National Indigenous Recognition Scholars, or National Rural and Small Town Recognition Scholars must have been identified as such by the College Board or submit documentation to Northeastern to be eligible for the scholarship. National Merit Finalists must rank Northeastern as their school of choice with the National Merit Scholarship Corporation to be eligible for the scholarship. Recipients who maintain normal progress toward a degree, with the minimum 3.000 grade-point average, may renew the award for the full eight-semester program.

**Eligibility:** Admitted freshman applicants who have been designated National Merit Finalists by the National Merit Scholarship Corporation or students who are National African American Recognition Scholars, National Hispanic Recognition Scholars, National Indigenous Recognition Scholars, or National Rural and Small Town Recognition Scholars are eligible for a National Recognition Program Scholarship.

### Merit Scholarships

**Awards:** Students who are in the top 10 to 15 percent of our applicant pool are most competitive for merit scholarships, including Dean's, Connections, and International Scholarships. Recipients who maintain normal progress toward a degree, with a minimum grade-point average of 3.000, may renew these awards.

### Northeastern Honors Program

Each year, the admissions office selects a group of students to join the University Honors Program at Northeastern University. Those invited into the Honors Program are among our most highly accomplished admitted students. There is no separate application process for the Honors Program, and students are considered at all decision deadlines. Decisions are rendered based on the undergraduate admissions application submitted to the university. The invitation to join the

University Honors Program is included in the official admission letter. Visit the University Honors Program (<http://www.northeastern.edu/honors/community/honors-program-scholarships/>) for additional details regarding scholarships and grants for Honors Program students.

### Phi Theta Kappa Scholarships (Transfer Students Only)

**Award:** A grant recognizing high levels of academic achievement in the beginning years of college. Recipients who maintain normal progress toward a degree, with a minimum grade-point average of 3.000, may renew the award.

**Eligibility:** Applicants for fall transfer admission who have earned a 3.500 grade-point average in 32 semester hours or equivalent quarter hours or units of college-level coursework. For eligibility, you must be a U.S. citizen or a permanent resident enrolling directly from a two-year institution of higher education.

### Ujima Global Leaders Program

The Ujima Global Leaders Program is a scholarship program focused on developing leaders for tomorrow's diverse and complex world. Ujima Global Leaders from all academic disciplines will work collaboratively to develop intercultural competence and awareness by engaging with communities on campus, throughout Boston and the world. Working with staff and faculty, Ujima Global Leaders may choose to make an impact based on their interests and goals via community service involvement, experiential opportunities, and research and global experiences. Committed to excellence, academic achievement, service, and diversity, Ujima Global Leaders will be prepared to meet the challenges of tomorrow. The Ujima Global Leaders Program seeks to enroll academically talented first-year students with demonstrated leadership skills, community involvement, and/or an interest in issues related to serving underrepresented and underserved populations. Recipients receive a scholarship called the Ujima Global Leadership Award, and those with demonstrated financial need will have their full need met.

**Contact the Office of Undergraduate Admissions if you have any questions about the application process.** For more information, consult the admissions website (<https://www.northeastern.edu/admissions/>).

### Information for Entering Students

- Accommodations for Students with Disabilities (p. 17)
- Health Requirements—University Health and Counseling Services (UHCS) (p. 17)
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- Information for International Students (p. 18)
- Parent/Family Programs (p. 19)
- Public Safety (p. 19)
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### Accommodations for Students with Disabilities

617.373.2675  
617.373.7800 (fax)  
Website (<http://www.northeastern.edu/drc/>)

Northeastern University and the Disability Resource Center (DRC) are committed to providing disability services that enable students who qualify under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act Amendments Act (ADAAA) to participate fully in the activities of the university. To receive accommodations through the DRC, students must provide appropriate documentation that demonstrates a current substantially limiting disability. Accommodations are provided based on an evaluation of the information provided by students and their clinicians, on a case-by-case basis. These services are available for, but not limited to, students with the following diagnoses:

- Learning disabilities and/or AD(H)D
- Autism spectrum disorders
- Chronic or degenerative disorders
- Hearing loss
- Mobility impairments
- Psychiatric disorders
- Traumatic or acquired brain injury
- Vision impairments

Students should provide documentation to the DRC at their earliest convenience to allow for sufficient time for review. After the documentation has been reviewed, a disability specialist will contact the student regarding appropriate next steps. Visit the DRC website (<http://www.northeastern.edu/drc/>) for additional information or contact staff at 617.373.2675.

### Health Requirements—University Health and Counseling Services (UHCS)

Prior to entering Northeastern, all enrolled students must complete and submit a University Health Report (<https://www.northeastern.edu/uahcs/forms/university-health-report/>) to University Health and Counseling Services (UHCS). It must be completed and returned by the stated deadline. The required record of immunity section is necessary for compliance with the Massachusetts School Immunization Requirements for Post-Secondary Institutions. Failure to meet the requirement will prevent future course registration. All vaccination information will be entered into the Massachusetts Immunization and Information System (MIIS). This system allows immunization information to be portable between providers, accessible during an emergency, and allows the patient to access the information as needed. To learn more, visit the University Health Report (<https://www.northeastern.edu/uahcs/forms/university-health-report/>) information, including how to opt out of the MIIS reporting.

Further documentation of immunity is mandatory for students in Bouvé College of Health Sciences. For more information, health sciences students should check with their program advisor or placement supervisor.

Visit the UHCS website (<http://www.northeastern.edu/uahcs/>) to access the University Health Report requirements and more information.

### Information Technology Services

IT Services is the university's central group that provides technology services, solutions, and support to all Northeastern students. Visit the Connect To Tech guide ([https://connect-to-tech.northeastern.edu/students/?utm\\_source=fy22&utm\\_medium=catalog&utm\\_campaign=connect](https://connect-to-tech.northeastern.edu/students/?utm_source=fy22&utm_medium=catalog&utm_campaign=connect)) for key technology resources and information that are particularly

helpful to students, such as Northeastern accounts, email, laptop recommendations and discounts, software, and good-to-know websites and mobile apps.

## Technology Support and IT Service Desk

Tech Service Portal (<https://service.northeastern.edu/tech/>) (for self-service and live chat support)

617.373.HELP [4357]

[help@northeastern.edu](mailto:help@northeastern.edu)

The IT Service Desk is available 24 hours a day, 7 days a week, to assist you with your technology questions and issues—call or email anytime for support. Outside of the Boston area, i ([https://services.northeastern.edu/tech/?id=kb\\_article&sys\\_id=18ace88a1bd4b0100813a643b24bcb11](https://services.northeastern.edu/tech/?id=kb_article&sys_id=18ace88a1bd4b0100813a643b24bcb11)) international and toll-free calling options are available ([https://services.northeastern.edu/tech/?id=kb\\_article&sys\\_id=18ace88a1bd4b0100813a643b24bcb11](https://services.northeastern.edu/tech/?id=kb_article&sys_id=18ace88a1bd4b0100813a643b24bcb11)). Visit the Tech Service Portal (<https://services.northeastern.edu/tech/>) to search for how-tos and FAQs, borrow a laptop or other equipment, start a live chat, and search other resources. Occasionally, interruptions to university systems, services, and tools can happen for both expected and unexpected reasons—when they do, get updates about them through Northeastern's IT Status page (<https://northeastern.statuspage.io/>).

## Information for International Students

### Office of Global Services

Website (<http://www.northeastern.edu/ogs/>)

617.373.2310

617.373.8788 (fax)

The Office of Global Services (OGS) offers a vast array of programs and services to more than 18,000 international students and scholars who represent approximately 146 nations.

OGS also works to promote meaningful interaction and intercultural understanding among citizens of all countries and their peers from the United States, providing educational and cultural enrichment opportunities for all members of Northeastern and the community at large. OGS advances the international community of Northeastern by ensuring immigration compliance while providing transformational academic services and cultural experiences for student satisfaction and successful graduation.

OGS maintains the SEVIS (Student and Exchange Visitor Information System) records of nonimmigrant students and scholars at Northeastern, as mandated by the U.S. federal government. OGS provides information and services to ensure compliance with regulations and procedures affecting those international students and scholars in specified nonimmigrant visa classifications.

OGS serves as a "home away from home" for all international students. Affiliation with OGS begins with admission to the academic program and continues throughout the student life cycle at Northeastern and beyond for alumni who apply for Optional Practical Training (OPT). OGS offers academic support services; cultural acclimation support; and events and initiatives including the cultural festival "Carnevale" in the spring, which celebrates the cultural diversity of the entire university community. For a list of OGS services and programs, visit the OGS website. (<http://www.northeastern.edu/ogs/>)

International students must maintain full-time status at Northeastern to be in compliance with immigration and SEVIS regulations. Also, they

must not engage in any type of employment unless timely authorized by OGS. Note that timely registration for courses is especially important so that they may remain in compliance with current federal regulations. They should consult with OGS if they have questions about their individual status.

## Coming to Northeastern

Preparing to study at Northeastern University is exciting, and students have many things to do in preparation. Here are some of the key items students should do to prepare.

- **Obtain F-1 or J-1 visa** from the U.S. embassy or consulate in the home country to be eligible to study in the United States. An international student may attend Northeastern in a nonimmigrant status other than F-1 or J-1 only if U.S. immigration regulations allow for study in the United States under that specific visa classification. Some international students must apply and be approved for a change of status (e.g., from B-2 to F-1) before beginning the program at Northeastern. For detailed information/instructions specific to a student's current nonimmigrant status, eligibility to participate in co-op, or other forms of experiential learning, contact OGS (<http://www.northeastern.edu/ogs/>).
- **Acquire Student Health Insurance:** Since September 1989, Massachusetts law (M.G.L. c.15A, § 18) has required every full-time and part-time student enrolled in a certificate, diploma, or degree-granting program in a Massachusetts institution of higher learning to participate in a Student Health Insurance Program (SHIP) or in a health benefit plan with comparable coverage. The Student Health Program defines a part-time student as a student enrolled in at least 75 percent of the full-time curriculum (College of Professional Studies graduate students—7 credits, part-time graduate students—6 credits).
- **Complete health report:** Prior to entering Northeastern, all enrolled students must complete and submit a health report to University Health and Counseling Services (UHCS). It must be completed and returned by the stated deadline. The required record of immunity section is necessary for compliance with the Massachusetts immunization requirements for college-age students. Failure to meet the requirement will prevent future course registration. Additionally, further documentation of immunity is mandatory for students in Bouvé College of Health Sciences. Visit the UHCS webpage (<http://www.northeastern.edu/uahcs/>) to access the health report online.

## Planning Information

New international students are expected to arrive by the program start date stated on the I-20 issued by Northeastern or on the DS-2019 issued by Northeastern or by the sponsoring agency/government.

When making travel arrangements, students should seek admission to the United States no more than 30 days prior to the report date on the I-20 or DS-2019, and students should not arrive after the program start date on the I-20 or DS-2019.

All international students will need to attend the mandatory international student orientation program and complete the international student Online Immigration Clearance. For further details on the OGS international student orientation and online immigration clearance process, and for other information pertinent to international students, check the OGS website (<https://international.northeastern.edu/ogs/new-students/arrival/>).

## International Student Orientation and Cultural Events

OGS (<https://international.northeastern.edu/ogs/>) organizes a mandatory orientation for international students on an F-1 or J-1 visa. Students will

receive an overview of nonimmigrant visa compliance requirements along with information and resources to support academic success, student life, campus safety, and cultural adjustment.

International students on an F-1 or J-1 visa should plan to arrive on campus no more than 30 days prior to the program start date on the I-20 or DS-2019 in order to attend the International Student Orientation and complete the mandatory Online Immigration Clearance. International orientation dates will be listed on the OGS website.

Throughout the year, OGS hosts cocurricular events that celebrate cultures and the rich diversity of the campus. These events are encouraged as a way to gain familiarity with Northeastern in a cross-cultural context while also facilitating the formation of friendships across cultures.

U.S. citizens who have been living abroad are not required to complete OGS orientation sessions but are welcome to participate in cocurricular events. For more information and to register, check the schedule of events on the OGS website. (<https://international.northeastern.edu/ogs/>)

## SEVIS Compliance

OGS is required to comply with immigration regulations governing student status and must report information every semester as required by the Department of Homeland Security.

## OGS: Your Resource for SEVIS Advice and Assistance

OGS advises students on the complexities of immigration compliance and interfaces with various U.S. government agencies. OGS maintains and updates the SEVIS system and advises students on relevant issues related to nonimmigrant student status by individual appointments or through workshops and information sessions. Check the OGS website (<https://international.northeastern.edu/ogs/>) for important updates and/or contact OGS with questions relating to nonimmigrant student status or any aspect of SEVIS compliance.

## Family Programs

Website (<https://www.northeastern.edu/orientation/family-programs/>)

800.696.6516  
parents@northeastern.edu

The Office of Student Orientation and Family Programs connects families with university resources, helping you navigate and build networks within Northeastern's global community. We support families throughout their Northeastern experience—including academic, administrative, and personal matters.

Each year, the office hosts several programs for family engagement including Husky 101 Family Orientation, Family & Friends Weekend, and Tuesday Talks Family Panels, as well as timely communications on campus news and events through their website (<https://www.northeastern.edu/orientation/family-programs/>) and Facebook page (<https://www.facebook.com/nufamilyprograms/>).

## Public Safety

### Northeastern University Police Department

100 Columbus Place  
617.373.3333 (EMERGENCY—police, fire, medical)  
617.373.3934 (TTY emergency or nonemergency)  
617.373.2121 (nonemergency regular business)

Website (<https://nupd.northeastern.edu/>)

Public Safety Division Administrative Offices  
617.373.2696

Personal Safety  
617.373.2121

The Public Safety Division is committed to working with Northeastern faculty, students, staff, and neighbors to build relationships and keep our campus thriving. Our work extends far beyond Boston, as we support learners in their academic and experiential endeavors around the world. The Public Safety Division is comprised of three sections: Police Department, Emergency Management, and International Safety.

The Northeastern University Police Department (<https://nupd.northeastern.edu/>) (NUPD) is a full-service and accredited police agency that comprises patrol and investigative divisions providing 24-hour service. NUPD has developed robust crime-detection and prevention strategies centered on technology and campus community engagement. Our well-trained officers are ready and willing to assist all members of our community.

A personal safety escort (<https://nupd.northeastern.edu/our-services/safety-escort-services/>) can be provided from one on-campus location to another, any time of day, whenever personal safety is a concern. You'll need to provide your name, Northeastern ID number, and location.

Safety escorts usually arrive in 10 to 15 minutes. A special, nighttime off-campus escort service, called the RedEye, runs from dusk to dawn to transport students to their residence within two miles from the center of campus. Every night from 7 p.m. until 6 a.m., the RedEye van will pick students up at the Snell Library. In order to use this escort, you must book a ride in advance using the RedEye app, or you can book a ride at the RedEye dispatch center located at the Northeast Security office in the Ruggles Substation.

SafeZone (<https://nupd.northeastern.edu/safezone/>) is a mobile safety app that is unique to Northeastern University. SafeZone is a smartphone app that any student or staff member can download and use for free. This app will connect you directly to the Northeastern University Police Department should you need our assistance or emergency support while you are on campus.

NUPD encourages you to not only familiarize yourself with all of the services provided by NUPD but to also utilize the services and safety-related tips provided. If you see something that does not look or feel right, NUPD encourages you to say something by contacting NUPD at 617.373.2121 or utilizing the SafeZone app.

### LOST AND FOUND ([HTTPS://NUPD.NORTHEASTERN.EDU/OUR-SERVICES/LOST-AND-FOUND/](https://nupd.northeastern.edu/our-services/lost-and-found/))

If you have lost an item on Northeastern's Boston campus, call 617.373.3913. If your item has been turned in, we will contact you by telephone or email. If you have found an item on campus, return it to our headquarters located at 100 Columbus Place. If you suspect the item has been stolen, call the Northeastern University Police at 617.373.2121 to report the theft.

### UNIVERSITY EMERGENCY INFORMATION ([HTTP://WWW.NORTHEASTERN.EDU/EMERGENCY/](http://www.northeastern.edu/emergency/))

617.373.2000 (snow emergencies)  
617.373.3333 (police, medical, or fire emergencies)

Northeastern University is committed to providing members of its community with a safe and secure place in which to live, work, and study.

The university is prepared to respond to emergencies and urgent situations that require immediate action. A trained team of police officers, EMTs, health and counseling experts, student affairs and residential life staff, and other professionals form a coordinated group that is able to manage a wide range of potential situations.

NU ALERT, emergency broadcast communication messages, are sent to the email addresses and telephone numbers students, faculty, and staff have provided the university. For more information on NU ALERT and Emergency Planning, visit the NUPD website (<https://nupd.northeastern.edu/safety/emergency-planning/>).

## Housing and Residential Life

Website (<https://www.northeastern.edu/housing/>)  
617-373-2814  
[housing@northeastern.edu](mailto:housing@northeastern.edu)

Traditionally entering first- and second-year students are required to live in university housing. Housing and Residential Life is dedicated to working with Northeastern students to help build safe and inclusive living environments that support personal development and academic success. Our goal is to prepare students to become lifelong learners who are holistically formed, experience growth alongside others, and are responsible contributors to local and global communities. The Housing and Residential Life staff designs intentional experiences, programs, and activities to build a strong community environment that prioritizes this goal.

Each residential community is supervised by a professional building staff member and student resident assistants who work together to maintain close contact with students to help make their experience living in university housing a positive one. Housing and Residential Life staff are trained in facilities management, community engagement, crisis response, conflict resolution, and interpersonal communications.

A central component of the residential experience for first-year students is Living Learning Communities (LLCs). LLCs bring together students with a shared personal or academic interest to learn and grow as a community during their first year at Northeastern.

## Student Orientation

Website (<https://www.northeastern.edu/orientation/>)

800.696.6516  
[orientation@northeastern.edu](mailto:orientation@northeastern.edu)

Husky 101 Orientation (<https://www.northeastern.edu/orientation/>) hosted by the Office of Student Orientation and Family Programs is **mandatory for newly enrolled first-year and transfer undergraduate students** and highly encouraged for families.

Husky 101 connects students with classmates and their academic advising team, student clubs and organizations, and platforms to chart their Northeastern path with global, research, and experiential opportunities and programs.

Once a student officially commits to the university by paying the enrollment fee, they will receive communications to participate in Husky 101 Orientation.

## We Care

617.373.7591  
[wecare@northeastern.edu](mailto:wecare@northeastern.edu) ([we\\_care@northeastern.edu](mailto:we_care@northeastern.edu))

Website (<http://www.northeastern.edu/wecare/>)

We Care assists students who are experiencing unexpected challenges to maintain their academic progress. The staff works with students to coordinate among university offices, to offer appropriate referrals, and to help develop viable options to support their continued success at the university. We Care also provides guidance to faculty and staff in identifying Northeastern resources and policies to help students succeed.

## College Expenses

Student Financial Services is available to assist you in developing a plan for financing a Northeastern education. To learn more, visit the Student Financial Services website (<https://studentfinance.northeastern.edu/>).

- Financial Aid (p. 20)
- Bill Payment (p. 21)
- Financing Options (p. 23)
- Tuition, Room, Board, and Fees Per Semester (p. 23)

## Financial Aid

For many families, financial aid is a major element in making Northeastern University affordable. Student Financial Services provides a full range of options that help students establish a comprehensive plan to finance their education.

## How to Apply

To apply for federal financial aid, first-year and transfer students must submit the Free Application for Federal Student Aid (FAFSA) (<https://studentaid.gov/h/apply-for-aid/fafsa/>). Additionally, for institutional aid consideration, first-year and transfer students must also complete the CSS Profile (<https://cssprofile.collegeboard.org/>). Returning students must submit the FAFSA (<https://studentaid.gov/h/apply-for-aid/fafsa/>) each academic year.

Students are encouraged to submit their financial aid application materials by the priority filing deadline date to ensure that they are considered for all available financial aid programs for which they qualify. To view the priority filing deadline dates, visit the Student Financial Services website (<https://studentfinance.northeastern.edu/applying-for-aid/undergraduate/how-to-apply/>).

## Satisfactory Academic Progress (SAP)

### QUALITATIVE

Student grade-point averages (GPAs) are reviewed annually at the end of spring semester. First-year freshmen students must have at least a 1.800 GPA by the end of their first academic year and a 2.000 GPA or better thereafter to retain financial aid eligibility. For students completing their sophomore year and beyond, a GPA of 2.000 is required to retain eligibility.

### QUANTITATIVE

Students must also meet certain quantitative requirements. Completed credits are reviewed as a percentage of attempted credits after each academic year. Students must earn at least 67 percent of their

cumulative attempted credits to maintain satisfactory academic progress.

### APPEALS

Students who have lost their eligibility for financial aid due to failure to meet qualitative or quantitative SAP standards have the right to submit a letter of appeal to Student Financial Services. Approval of an appeal will be based on extenuating circumstances that had an impact on the student's ability to achieve the minimum standards of SAP and the assurance that these circumstances will not be present going forward. If approved, appeals require a contractual agreement that must be signed by the student and a Student Financial Services representative.

### Change in Enrollment Status

Students must notify Student Financial Services about any change in planned period of enrollment, whether due to withdrawal from a class, a leave of absence, a change in co-op or in class, an approved reduction in course load, or withdrawal from the university. Changes in enrollment may impact types and amounts of financial aid offered by Northeastern University.

It is highly recommended, whenever possible, that students discuss the impact of such changes with a Student Financial Services representative before making them.

### Outside Sources of Aid

Students must notify Student Financial Services of any aid received from outside sources, such as scholarships from outside organizations. A review and possible recalculation of a student's financial aid award will occur.

### Return of Title IV Aid

Northeastern is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out, are dismissed, or take a leave of absence prior to completing 60 percent of a term. Recalculation is based on the percentage of earned aid using the Federal Return of Title IV funds formula. Federal regulations require students to obtain at least an A, B, C, D, S, or F in at least one course for the term; students who receive all unsuccessful grades for a term (NE, W, I, U) will be considered unofficially withdrawn from the term. For unofficial withdrawals, the withdrawal date used for aid recalculation is the midpoint of the term.

### Verification

If a student is selected for verification, Student Financial Services may be required to collect additional financial documents, including tax returns and other financial documents, to verify the information provided on the FAFSA. Aid cannot be determined, finalized, or disbursed until this process is completed.

### Change in Circumstances

If a student believes that the aid process does not accurately reflect their financial situation, or if family circumstances change during the year, the student should notify Student Financial Services for further evaluation. For additional information, please refer to the Student Financial Services website (<https://studentfinance.northeastern.edu/policies-procedures/changes-in-financial-circumstances/>).

### Bill Payment

Full payment of tuition, residence hall fees, and other related charges are due prior to the start of the term as specified on the original bill. A past-due balance may result in late fees, prevention of registration, prevention

of grade release, prevention of participation in global study programs, or withdrawal from the university.

Tuition bills are only generated electronically and are available via the myNortheastern portal (<https://my.northeastern.edu/>). Paper bills are not generated. For additional information regarding the e-bill, please visit the Billing Frequently Asked Questions webpage (<https://studentfinance.northeastern.edu/billing-payments/billing-faq/>). For details on available payment methods, visit the Payment Methods webpage (<https://studentfinance.northeastern.edu/billing-payments/payment-methods/>).

### Payment of Tuition

Accepted methods of payment are:

- **Checks and e-checks:** Payments can be made online via NUPAY on the myNortheastern (<https://my.northeastern.edu/>) portal. Payments may also be sent by mail or you may pay in person at Student Financial Services. If you are paying with a check or money order, please ensure that it is made payable to Northeastern University.
- **International payments using Flywire:** Northeastern University has partnered with Flywire to streamline the international wire payment process to the university. This service provides students and their families a safe, cost-effective, and convenient method of making payments to Northeastern University in foreign currencies. To learn more about international payments through Flywire, visit the Student Financial Services website (<https://studentfinance.northeastern.edu/billing-payments/payment-methods/>).
- **Monthly payment plan:** For additional information regarding the monthly payment plan, which is administered through Nelnet Campus Commerce, visit the Student Financial Services website (<https://studentfinance.northeastern.edu/billing-payments/financing-options/>).
- **Supplemental student and parent loans:** There are a number of supplemental educational loan programs available to assist students and families in financing their education. Review options on the Student Financial Services website (<https://studentfinance.northeastern.edu/billing-payments/financing-options/>).

For additional information regarding available payment options, visit the Student Financial Services website (<https://studentfinance.northeastern.edu/billing-payments/payment-methods/>).

### Student Financial Responsibility Agreement

As compelled by federal law, all students who enroll in classes at Northeastern University are required to complete and accept the Student Financial Responsibility Agreement (SFRA) (<https://studentfinance.northeastern.edu/billing-payments/sfra/>). This agreement must be completed once per academic year and is located on the student's myNortheastern (<https://my.northeastern.edu/>) portal. Failure to complete the SFRA will result in a hold that prevents registration.

### VA Education Benefits

In accordance with Title 38 USC 3679 (e), covered individuals utilizing Chapter 31 or Chapter 33 education benefits at Northeastern University will not have any penalty imposed on their account nor will they be required to take out additional funding due to pending or late payments from the Department of Veterans Affairs as long as the Dolce Center for the Advancement of Veterans and Servicemembers (CAVS) has a current Certificate of Eligibility (COE) or VRE Authorization on file AND a Request

for VA Benefit Certification is submitted through the myNortheastern (<https://my.northeastern.edu/web/guest/>) portal.

COEs must be submitted before the start of the student's first term but do not need to be resubmitted unless entitlement information changes. Students are also required to complete the Request for VA Benefit Certification form through the myNortheastern (<https://my.northeastern.edu/web/guest/>) portal before the start of each term they wish to use VA benefits. Students may have a hold placed on the account if there is an outstanding balance after payment from the VA is received by Northeastern.

### Discrepancies in Your Bill

Discrepancies in billing statements should be addressed in writing by the student to the Office of Financial Services at [studentaccounts@northeastern.edu](mailto:studentaccounts@northeastern.edu). Include the student's name, NU ID, dollar amount in question, date of invoice, and any other information believed to be relevant.

Responses will be sent to the student's Northeastern email address. If there is a billing discrepancy, pay the undisputed portion of the bill to avoid responsibility for any late fees or financial holds.

### Overloads and Reduced Loads

Undergraduate day tuition is charged on a flat per-term basis that includes the cost of each student's normal academic curriculum requirements for that term.

Adjustments for reduced loads are made only when the Undergraduate Petition to Reduce Load is approved by the academic department and the Office of the University Registrar, usually only in the final term. International students who wish to drop below 12 credits during the semester must obtain authorization from the Office of Global Services (OGS) (<http://www.northeastern.edu/ogs/>). These students may be approved for a reduced course load of fewer than 12 credits but no fewer than 6 credits in accordance with federal regulations. Tuition adjustments will then be made if the course load falls below 12 credits during full semesters and 6 credits during summer half sessions (calculated at the per-credit-hour rate). To receive an adjustment, the Undergraduate Petition to Reduce Load must be submitted prior to the start of the term. No rebate or credit is granted when a student voluntarily drops a course.

Financial adjustments for coursework greater than the prescribed curriculum for the term is calculated at the per-credit hour rate for undergraduate full-time students. Students taking more than 8 credits (summer half session) or 16 credits (full semester) will be charged at the per-credit-hour rate.

Undergraduate full-time day students registered for co-op and taking a class will be billed at the per-credit-hour rate for the course. The flat undergraduate tuition rate will be charged for students on co-op enrolled in 12 credits or more.

Visit the Tuition and Fees webpage (<https://studentfinance.northeastern.edu/billing-payments/tuition-and-fees/>) for a full listing of tuition rates. Also see "Overload Policy (p. 35)" and "Reduced Load Policies (p. 35)."

### Delinquent Balances

In cases of student default on tuition payments, the student may be withdrawn from the university and is liable for the outstanding tuition, as well as for all reasonable collection costs and any legal fees incurred by the university during the collection process. Accounts may be subject to

monthly interest charges. *Transcripts and other academic records will not be released until all financial obligations to the university have been met.*

### Refunds on Credit Balances

To submit a request for a refund on a credit balance because of an overpayment, a Student Refund Request must be submitted. This form can be completed through the student's myNortheastern portal (<https://my.northeastern.edu/>), under "Services & Links."

Visit the Student Financial Services website (<https://studentfinance.northeastern.edu/policies-procedures/>) for additional information regarding Student Refund Requests.

### Refunds for Withdrawal from the University—General Information

Tuition refunds are granted based on the date of the official withdrawal processed by the Office of the University Registrar. Nonattendance does not constitute official withdrawal. Credit policies vary according to the duration of the course. Typical tuition adjustments are made according to the schedules shown below.

The first week of class is the week containing the "Classes Begin" date listed in the online academic calendar (<https://registrar.northeastern.edu/group/calendar/>).

Payment options and credit policies may vary for courses that follow a schedule different from the regular full or half-semester courses. If you are unsure about a course you are taking, contact the Office of Student Accounts.

Transcripts and other academic records will not be released until all financial obligations to the university have been met. All rates are subject to revision at the discretion of Northeastern University's Board of Trustees.

For information regarding policies that affect eligibility for federal grants and loans upon your withdrawal or adjustment to course enrollment, visit the Student Financial Services website (<https://studentfinance.northeastern.edu/>). Note that withdrawal policies vary for international study programs. For more information on study-abroad-related withdrawal policies, refer to the Global Experience webpage (<http://www.northeastern.edu/geo/studyabroad/>).

### Refunds for Course Withdrawals

Undergraduate day students should refer to the "Overload Policy (p. 35)" and "Reduced Load Policies (p. 35)" for information on adjustments for withdrawing from individual course(s). For withdrawals from a course after the third week of a full semester, contact [studentaccounts@northeastern.edu](mailto:studentaccounts@northeastern.edu).

### Refunds for Complete Withdrawal from the University

#### FULL SEMESTERS

Official withdrawal during the first week	100% refund
Official withdrawal during the second week	100% refund
Official withdrawal during the third week	100% refund
Official withdrawal during the fourth week	60% refund
Official withdrawal during the fifth week	40% refund

Official withdrawal after the fifth week	no refund
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### SUMMER HALF SEMESTERS

Official withdrawal during the first week	100% refund
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Official withdrawal during the second week	100% refund
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Official withdrawal during the third week	50% refund
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Official withdrawal during the fourth week	25% refund
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Official withdrawal after the fourth week	no refund
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### Disability Resource Center Adjustments

Students who are registered with Northeastern University's Disability Resource Center (<http://www.northeastern.edu/drc/>) are eligible to petition to the center for tuition adjustments directly related to their documented disability. Students who drop below 12 credit hours may be affected by the loss of full-time-student status. Further information is available from the Disability Resource Center.

## Financing Options

### Northeastern's Monthly Payment Plan

Northeastern University offers a monthly payment plan, administered through Nelnet Campus Commerce, which allows students and families to divide their educational costs each semester into smaller, more manageable installments. In using this plan, it can reduce your need to borrow, thereby reducing the overall cost of education. The monthly payment plan can be combined with awarded financial aid as well as other payment and financing options.

### Student and Parent Loans

There are a number of educational loan programs available to assist eligible students and families in covering expenses over and above any financial aid that may be awarded from Student Financial Services. Most private lenders have credit and income requirements that students and/or parents must meet before being approved for these programs. When researching the loan and lender that best meet your needs, make sure you take into consideration the interest rate; the quality of customer service; as well as any origination, disbursement, and/or repayment fees.

### Additional Information

To learn more about available financing options, including the monthly payment plan, the Federal Direct Parent PLUS Loan, and student or parent loans, visit the Student Financial Services website (<https://studentfinance.northeastern.edu/billing-payments/financing-options/>).

## Tuition, Room, Board, and Fees Per Semester

Annual costs for upperclass students participating in co-op vary depending on their pattern of attendance. See "Patterns of Attendance" section below. The number of semesters a transfer student spends in school depends on the curriculum of the student's college. You are advised to verify your curriculum with your academic advisor so that you may plan accordingly.

### Total Estimated Costs

The total, estimated costs for students living in university housing and enrolled in the 17-meal plan for the 2021–2022 academic year are as follows:

#### TUITION AND FEES

	Per Full Semester	Per Summer Half Semester
Tuition	\$28,250	\$14,125
Student Center Fee	\$70	\$35
Student Activity Fee	\$148	
Campus Recreation Fee	\$60	\$35
Undergraduate Student Fee	\$310	

#### ROOM, BOARD, AND FEES PER SEMESTER

	Per Full Semester	Per Summer Half Semester
Residential Student Fee	\$32	\$16
Housing	Rates begin at \$4,790 <sup>1</sup>	approximately 1/2 of semester rate <sup>1</sup>
17-Meal Plan <sup>2</sup>	\$3,955	\$1,978

<sup>1</sup> Rates vary depending on occupancy and assignment. Visit the Housing and Residential Life website (<http://www.northeastern.edu/housing/>) for a detailed list of housing rates.

<sup>2</sup> See "Dining Services" for additional meal plan options.

Undergraduate day students who take a graduate course as part of their undergraduate program will be charged the same rates that apply to undergraduate credits. (See "Overload Policy (p. 35)" and "Reduced Load Policies (p. 35).")

In addition to the expenses itemized above, families should plan on the normal costs of living that students incur for transportation, books, and personal expenses. While these expenses may vary, for the purpose of approximating a student budget, the university estimates these items at \$2,800 per year.

Tuition rates, room and board charges, and fees are subject to revision by the Northeastern University Board of Trustees at any time.

### Patterns of Attendance

To better plan for tuition and fees, students and parents should be aware that:

1. Tuition is charged when a student is taking classes/earning academic credit. Tuition is not charged for co-op; however, the student will pay room and board if they stay in a university residence hall while on co-op and will be assessed tuition if enrolled in a class.
2. Financial aid will be distributed to match the student's academic program and tuition bills.

Northeastern University's calendar enables students to participate in six-month co-op assignments. Each academic year has two full semesters (fall semester, September–December, and spring semester, January–April) and two half semesters of about seven weeks each (summer I, May–June, and summer II, July–August). The six-month co-op assignments generally span either the spring plus summer I terms or the summer II plus fall terms.

The co-op schedule is flexible, but generally, students alternate periods in class with periods on co-op. All students are required to complete



their program in the classroom, rather than on a co-op assignment, so their last semester will be in the classroom. For specific patterns of attendance for particular majors, consult the program plan for that major.

## Fees Required of All Students

The following fees are required of all students:

### APPLICATION FEE

A nonrefundable fee of \$75 must accompany an application for admission.

### ENROLLMENT DEPOSITS

A nonrefundable enrollment deposit, which is applicable toward the first semester's bill, is due by January 20, 2021, for students admitted for Early Decision I, by February 20, 2021, for students admitted for Early Decision II, and by May 1, 2021, from all other accepted freshman students entering the university in September 2021. Please note, enrollment deposit deadlines for students applying Early Decision I and Early Decision II may vary year to year. Students entering at other times of the year, and transfer students, should note the required deposit due date on their Application Status Check.

If you are an international student, your enrollment deposit includes a \$350 International Student Fee. This fee supports programs and services provided by the Office of Global Services (OGS) (<https://www.northeastern.edu/ogs/>) on campus.

### UNDERGRADUATE STUDENT FEE

The mandatory undergraduate student fee supports enrollment-related services throughout the student's first year, including new student orientation and welcome week activities. Beyond the first year, the fee supports enrollment services and costs related to ongoing communication to students and parents. The undergraduate student fee, in the amount of \$310 per full semester, is assessed each in-class or study-abroad term for undergraduate students. During the summer half semester, the fee is prorated.

### STUDENT FEES

Students pay a student center fee of \$70 per in-school full semester or \$35 per in-school summer half semester. This fee supports the Curry Student Center. An annual student activity fee of \$148 is charged to support student clubs.

### CAMPUS RECREATION FEE

All undergraduate students at Northeastern University will be assessed a campus recreation fee of \$60 per in-school full semester or \$35 per in-school summer half semester. This fee covers admission to home athletic events, use of the Marino Fitness Center, the SquashBusters athletic facility, and the Cabot Gym (fitness and pool). This fee will also support the future construction of athletic fields and facilities.

### HUSKY CARD (PHOTO-IDENTIFICATION CARD)

This card is issued to new students at orientation and registration. Students must have a valid Husky Card to use at most university facilities. A replacement card costs \$25.

## NORTHEASTERN UNIVERSITY STUDENT HEALTH PLAN (NUSHP)

### General Information

Since September 1989, Massachusetts law (M.G.L. c.15A, § 18) has required every full-time and part-time student enrolled in a certificate, diploma, or degree-granting program in a Massachusetts institution of higher learning to participate in a Student Health Plan or in a health benefit plan with comparable coverage.

The Student Health Plan defines a full-time student as having full-time student status and enrolled in any amount of credits of a full-time curriculum.

The Student Health Plan defines a part-time student as having part-time student status and enrolled in at least 75 percent of credits of the full-time curriculum (CPS undergraduate students 9 credits, CPS graduate students, 6 credits).

The health fee is assessed each term on a student's account based on these definitions unless the student has previously waived the health plan fee in the current academic year.

Students on co-op or on study abroad are considered active students and will be enrolled in and billed for NUSHP each year.

Students enrolled in online programs are not eligible for NUSHP. Courses that would normally be held in the classroom and are currently being offered online or remotely due to COVID-19 are considered in-classroom courses and may make students eligible for and assessed the NUSHP fee.

## Health Insurance Waiver

Eligible students are automatically enrolled in NUSHP each academic year and may waive NUSHP via myNortheastern once they have been billed for NUSHP. In addition, to be eligible to waive, comparable coverage must be effective from the beginning of the term the student meets Student Health Program requirements.

The burden of proof that the alternative insurance is adequate falls upon the student choosing to waive. By submitting the waiver form, the student will be accepting responsibility for all medical expenses incurred, and neither Northeastern University nor its Student Health Plan will be responsible for these expenses.

Northeastern University reserves the right to verify that the student's insurance meets the criteria indicated. Disciplinary action may be taken if a student knowingly waives NUSHP without comparable coverage.

Visit the NUSHP website (<https://www.northeastern.edu/nushp/>) for waiver deadlines.

## Additional Fees

Other fees may include the following:

### HOUSING APPLICATION/DEPOSIT

New students must submit a nonrefundable \$600 enrollment deposit along with a completed housing application form to complete the housing application process. University housing is required for all first- and second-year students entering as freshmen. The upperclass housing deposit is \$200 for each full semester and for each summer half semester.

### RESIDENCE HALL ACTIVITIES FEE

All students living in the residence hall system pay a full-semester \$32 fee or half-semester \$16 fee for activities sponsored by the Residence Student Association.

### LATE FEES

Late fees can be placed on accounts any time after the due date, if the account remains fully or partially unpaid. The university typically waits, however, until after the conclusion of the add/drop period, for

the specified semester, prior to assessment of late fees. These fees are based on the amount past due at the time of assessment and can range from \$75 to \$200. Late fees are assessed once per semester.

If a student or payer wishes to dispute a late fee assessment, they must do so, in writing, to [studentaccounts@northeastern.edu](mailto:studentaccounts@northeastern.edu). Please be sure to include the student's name, NU ID, and reason for the dispute in the email.

### INTERNATIONAL STUDENT FEE

A onetime fee of \$350 is charged to new undergraduate international students. The fee supports programs and services available at the Office of Global Services.

## Room and Board

### ROOM RATES PER SEMESTER

Visit the Housing and Residential Life website (<https://www.northeastern.edu/housing/>) for a complete display of room rates and residence halls.

Students are billed at the beginning of each term and must pay the full charge for the term in accordance with Student Financial Services policy.

The high demand for university housing makes it necessary for Housing and Residential Life to enforce its termination and cancellation policies strictly.

### TERMINATION CHARGE AND ROOM RATE ADJUSTMENTS

A student whose License Agreement is revoked due to a separation from the university is subject to the Termination Charge Policy and the financial assessments outlined below. All housing deposits on file will be forfeited. Students who are suspended or expelled from the university, or on a medical leave of absence or withdrawn from the university, will have their current and any active future License Agreements, as well as any housing applications, revoked. Upon reentry to the university, the student must reapply for housing and will be considered for housing accordingly, based upon eligibility and availability.

Students who withdraw from the university will have their meal plan charges prorated to the end of the week they complete the University Withdrawal form in the Office of the Registrar. Students must also remove all belongings from university housing and check out properly with Housing and Residential Life in order to be credited, if applicable.

#### Termination CHARGE Policy Fall and Spring Semesters

Official Withdrawal from University	Room Charge Credited
Week 1	100 percent <sup>1</sup>
Week 2	90 percent <sup>1</sup>
Week 3	80 percent <sup>1</sup>
Week 4	60 percent <sup>1</sup>
Week 5	40 percent <sup>1</sup>
After week 5 <sup>2</sup>	0 percent <sup>2</sup>

<sup>1</sup> This credit may be prorated based on the daily charges of time used.

<sup>2</sup> Students withdrawing after week 5 incur a 100 percent room charge for the term.

#### Summer Half Semesters

Official Withdrawal from University	Room Charge Credited
Week 1	100 percent <sup>1</sup>
Week 2	75 percent <sup>1</sup>
Week 3	50 percent <sup>1</sup>

Week 4	25 percent <sup>1</sup>
After week 4 <sup>2</sup>	0 percent <sup>2</sup>

<sup>1</sup> This credit may be prorated based on the daily charges of time used.

<sup>2</sup> Students withdrawing after week 4 incur a 100 percent room charge for the term.

### CANCELLATION Charge Policy

Cancellation charges apply if a student cancels or withdraws from a housing arrangement after the housing has been secured, as set forth in the tables below. Only students who are not required to live in university housing are permitted to cancel; first- and second-year students are required to live in university housing. Students who cancel because of co-op outside of the Boston area, study abroad, or a medical leave of absence can cancel housing without cancellation charges, subject to providing acceptable written verification; housing charges for time of occupancy may apply. If the cancellation deadline has passed, students who can demonstrate a significant change in academic, co-op, or financial circumstances may petition for a waiver of this charge. See the following cancellation charge schedule:

Amount Charged	For Fall Semester	For Spring Semester	For Summer 1	For Summer 2
Deposit refunded; no charge	Before 5/15/21	Before 10/1/21	Before 3/15/22	Before 4/15/22
\$1,000 (\$500 half summer) charge	After 5/15/21	After 10/1/21		After 4/15/22
\$2,000 (\$1,000 half summer) charge <sup>1</sup>	After 6/15/21	After 10/15/21	After 3/15/22	After 4/30/22
\$3,000 (\$1,500 half summer) charge <sup>1</sup>	After 7/15/21	After 11/1/21	After 4/1/22	After 5/15/22
100 percent of term room charge <sup>1</sup>	After 8/1/21	After 12/1/21	After 4/15/22	After 5/29/22

<sup>1</sup> The student's deposit for the term is applied to the cancellation charge assessed.

### DINING SERVICES

All students living in university meal-required residence halls are required to participate in the traditional Unlimited, 17-, or 12-meal plan operated by University Dining Services.

All freshmen living in university residence halls during their first two semesters as matriculated college students are required to have a traditional meal plan. They are required to have at least a 12-meal plan except for those living in university apartments with kitchen facilities. Freshmen living in university apartments with kitchen facilities are required to have at least a 7-meal plan.

Students living in a meal-required residence hall are automatically billed for the 17-meal plan but can increase to an Unlimited meal plan or decrease to a 12-meal plan. They will have until the second Friday of the semester to make any changes. All other students may choose to enroll in a meal plan via the "Services & Links" section on the (<http://www.myneu.neu.edu>)myNortheastern portal (<https://my.northeastern.edu/>).

Changes to the meal plan are made via the "Services & Links" section on the myNortheastern portal (<https://my.northeastern.edu/>). Deadlines apply. Visit the Husky Card website (<http://www.northeastern.edu/huskycard/>) for details.

For information about menus and dining locations, visit NU Dining Services (<http://www.nudining.com>).

The traditional meal plan rates for 2021–2022 are shown below. For more information about meal plan rates, visit the Tuition and Fees webpage (<https://studentfinance.northeastern.edu/billing-payments/tuition-and-fees/>).

Meals per Week	Full Semester	Summer Half Semester
Unlimited	\$4,245	\$2,123
17	\$3,955	\$1,978
12	\$3,470	\$1,735
7	\$2,330	\$1,165

### PROFILER MEAL PLANS

The nonrefundable profiler meal plan is a block of meals that are provided in lump sum and can be used at the student's discretion. Profiler options are available to all students. However, these plans cannot take the place of a required, traditional meal plan.

Profiler meal plans end in August at the end of summer 2 semester. Students are advised to pay close attention to the end dates, as unused meals do not roll over and will not be refunded. Please visit NU Dining Services (<http://www.nudining.com>) for the most up-to-date information as 2021–2022 dates and dining locations are to be determined.

*Note:* Dining locations are limited during the summer and during intersession breaks.

The profiler rates for 2021–2022 are shown below. For updated rates, visit the Tuition and Fees webpage (<https://studentfinance.northeastern.edu/billing-payments/tuition-and-fees/>).

Meals	Cost
25	\$475
50	\$920
86	\$1,555
110	\$1,955

**Profiler plans are nonrefundable and cannot be modified.**

### Husky Dollars

Students can deposit funds into a Husky Dollar account (<https://www.northeastern.edu/huskycard/husky-dollars/>) and access these funds using their Husky Card at many restaurants and retail locations on and off campus, including the university's bookstore.

## Academic Policies and Procedures

- Academic Appeals Policies and Procedures (p. 26)
- Academic Honors (p. 26)
- Academic Integrity Policy (p. 27)
- Academic Progression Standards (p. 27)
- Accommodations for Students with Disabilities (p. 27)
- Attendance Requirements (p. 28)
- Course Credit Guidelines (p. 28)
- Degrees, Majors, and Minors (p. 29)

- Family Educational Rights and Privacy Act (FERPA) (p. 31)
- Final Examinations and Related Policies on Other Exams and Final Term Papers/Projects (p. 32)
- Graduation Requirements (p. 32)
- Leaves of Absence and University Withdrawal (p. 32)
- Personal Information (p. 34)
- Registration and Taking Courses (p. 34)
- Student Bill of Academic Rights and Responsibilities (p. 36)
- Student Evaluation of Courses (TRACE) (p. 38)
- Student Records, Transcripts, and Related Policies (p. 38)
- Student Right-to-Know Act (p. 41)
- University-Sponsored Travel (p. 41)

## Academic Appeals Policies and Procedures

Appeals policies and procedures for undergraduates are found in the Undergraduate Student Handbook (<http://www.northeastern.edu/osccr/code-of-student-conduct/>), available on the Code of Conduct page (<http://www.northeastern.edu/osccr/code-of-student-conduct/>) at the Office of Student Conduct and Conflict Resolution.

## Academic Honors

### Dean's List

A dean's list, or honors list, is issued at the end of each fall and spring semester. Effective fall 2010, the requirements to be on the dean's list are a 3.500 grade-point average (GPA) or higher with no incomplete grade or grade below C-. Students who are on any form of probation, who are enrolled in a course on a pass/fail basis (except where there is no alternative or where required by the program), or who are not carrying a full load as determined by their undergraduate college are not eligible. With a few exceptions as approved by the respective colleges, a full load for fall and spring semesters is considered to be a minimum of four courses or 16 semester hours.

### Graduation with Honors

Graduation with honors and selection as the class marshal are reserved for undergraduates who have completed 64 semester hours in residence and meet the following GPA requirements to graduate with honors:

GPA	Honor Conferred
3.500–3.699	Graduate with honor (cum laude)
3.700–3.849	Graduate with high honor (magna cum laude)
3.850–4.000	Graduate with highest honor (summa cum laude)

*Note:* The university reserves the right to change these standards.

### Honors in the Discipline

Honors in the Discipline is earned by those students who successfully complete college-defined requirements, generally culminating in a junior/senior honors thesis or a junior/senior honors project. This distinction will appear on the transcript (for example, "Honors in Music" or "Honors in Chemistry"). Detailed information about Honors in the Discipline is provided under each college's website.

### University Honors Program Distinction

University Honors Program Distinction is earned by those students who have completed six honors courses, including an honors interdisciplinary

seminar, and who have maintained a cumulative GPA of 3.500. The honors course requirement is adjusted for students who join the University Honors Program as second-semester first-year students (five honors courses) or as rising/continuing sophomores (four honors courses). Entering first-year students are invited to join based on a combination of their high school academic preparation, SAT/ACT scores, and leadership/civic engagement record. Refer to the University Honors Program's website (<http://www.northeastern.edu/honors/>) to learn how continuing students may join.

### Academic Integrity Policy

*The following academic integrity policy was created in consultation with and approved by the Office of Student Conduct and Conflict Resolution, the Student Government Association, and the Faculty Senate.*

Visit the Office of Student Conduct and Conflict Resolution (<http://www.northeastern.edu/osccr/academic-integrity-policy/>) website's Academic Integrity Policy page for a full description of these policies and procedures.

### Honor Code

*The following honor code was designed and approved by the Student Government Association:*

On my honor, I pledge to uphold the values of honesty, integrity, and respect that are expected of me as a Northeastern student.

### Code of Student Conduct

The Code of Student Conduct (<http://www.northeastern.edu/osccr/code-of-student-conduct/>) is available online.

### Academic Progression Standards

#### Faculty Advisor Communication Tool (FACT)

FACT warns students and their advisors of difficulty in courses. This warning is important for students' success, especially for students with a cluster of academic problems. Faculty members are expected to submit warnings by the fifth week of the semester, early enough for correction of the performance or for withdrawal from the course, if appropriate. FACT warnings and/or progress reports for student-athletes are necessary for NCAA compliance.

#### Academic Status

Academic progress of all students is reviewed by academic advisors at the end of each semester. Students are notified soon after final grades are posted if there are concerns about academic progress in any or all of the following areas:

1. Overall grade-point average (GPA)
2. Semester hours successfully completed
3. Failing or near-failing grades in courses that are required for progress in the major

Students at Northeastern maintain good academic standing when they meet the following criteria:

1. Have an overall GPA of 1.800 at the end of each semester of their freshman year and a minimum cumulative GPA of 2.000 at the end of each semester thereafter
2. Earn at least 12 semester hours in the semester just completed

Individual colleges may have additional requirements that are specified in each college section that follows.

In addition, many programs require that specific courses be successfully completed to progress to the next year. Students who do not make satisfactory progress will not graduate with their class and may be withdrawn. For more information about additional academic progression standards for each college, program, or major, refer to the curriculum guidelines that can be found in the college sections of this catalog. See financial aid implications under Financial Aid (p. 20).

### Academic Probation

Full-time students who fail to meet the criteria for good standing described above will be placed on academic probation effective for the following semester. The action will appear on the internal record but not on the transcript.

### Academic Dismissal

Students who remain on probation after two full-term academic semesters may be dismissed from the university. This action may appear on the transcript at the end of the second probationary semester. In addition, students who have below a 1.000 GPA or fewer than 4 earned semester hours in any semester or cumulatively may be dismissed at the discretion of their college. Students may appeal this decision to the Academic Standing Committee of their college (see following section). International students must consult with an advisor in the Office of Global Services (OGS) (<http://www.northeastern.edu/ogs/>) to discuss the impact of an academic dismissal as it relates to nonimmigrant visa status.

### Academic Standing Appeals

Students may appeal academic standing status if they can provide evidence and/or reasons supporting an appeal. Generally, a student on probation may be granted no more than one additional full-term academic semester to meet the criteria for good academic standing. Students may appeal to the Academic Standing Committee of their college to review probation and dismissal cases.

### Academic Eligibility for Participating in Student Organizations and Athletics

All students must have a minimum 2.000 overall GPA to be eligible for an elected or appointed leadership position in any student organization. Athletes must adhere to NCAA standards.

### Repeating Courses to Clear Deficiencies

See Repeating Courses (p. 38) and Clearing an Academic Deficiency (p. 38)

### Definition of Freshman, Sophomore, Junior, and Senior

For undergraduate day students, freshman, sophomore, junior, and senior standing are determined by earned semester hours:

Freshman	Less than 32 semester hours
Sophomore	At least 32 but less than 64 semester hours
Junior	At least 64 but less than 96 semester hours
Senior	At least 96 semester hours

### Accommodations for Students with Disabilities

617.373.7800 (fax)

Website (<http://www.northeastern.edu/drc/>)

Northeastern University and the Disability Resource Center (DRC) are committed to providing disability services that enable students who qualify under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act Amendments Act (ADAAA) to participate fully in the activities of the university. To receive accommodations through the DRC, students must provide appropriate documentation that demonstrates a current substantially limiting disability. Accommodations are provided based on an evaluation of the information provided by students and their clinicians, on a case-by-case basis. These services are available for, but not limited to, students with the following diagnoses:

- Learning disabilities and/or AD(H)D
- Autism spectrum disorders
- Chronic or degenerative disorders
- Hearing loss
- Mobility impairments
- Psychiatric disorders
- Traumatic or acquired brain injury
- Vision impairments

Students should provide documentation to the DRC at their earliest convenience to allow for sufficient time for review. After the documentation has been reviewed, a disability specialist will contact the student regarding appropriate next steps. Visit the DRC website (<http://www.northeastern.edu/drc/>) for additional information or contact staff at 617.373.2675.

## Attendance Requirements

Class participation is essential to success no matter the course format or its delivery; therefore, attendance is mandatory. Individual instructors may have additional, course-specific, attendance policies. It is the student's responsibility to ascertain what each instructor requires. Failure to meet attendance requirements may force a student to drop the applicable courses. Students should not make conflicting commitments until the class schedules for each semester are final. Permission to make up work may be granted by instructors for reasonable cause. Requests must be made immediately upon a student's return to class. Laboratory work can be made up only during the hours of regularly scheduled instruction.

### Absence Because of University-Sponsored Activities

Participation in university-sponsored activities, where the students are representing their university, college, or department, may cause absences from class that qualify as excused absences. Excused absences, with appropriate prior arrangement, are not subject to penalty, and missed work may be satisfied through agreement between the student and the instructor. University-sponsored activities that may justify excused absences include athletic competition, performing arts events, and research or other presentations.

Students must discuss absence(s) with instructors at least two weeks in advance of the university-sponsored activity, or as soon as possible if the activity is at the beginning of the term or is the result of an unforeseen circumstance. Instructors may require a written statement from the administrator in charge of the activity. Instructors are expected to make reasonable accommodations for these class absences, including administration of makeup assignments and exams whenever possible. It is expected that students seeking an excused absence will develop a plan and timetable to make up the missed coursework with their instructor(s).

Note, however, that the requirements of some courses or programs may preclude such accommodations.

### Absence Because of Religious Beliefs

Any student who is unable, because of his or her religious beliefs, to attend classes or to participate in any examination, study, or work requirement should be provided with an opportunity to make up such examination, study, or work requirement that he or she may have missed because of such absence on any particular day, provided that such makeup examination or work does not create an unreasonable burden upon the university. Students should make appropriate arrangements with the instructor in advance of the absence, preferably at least two weeks before the religious observance.

### Absence Because of Jury Duty

Members of the university community are expected to fulfill their obligations to serve on a jury if called upon. A student selected for jury duty should inform his or her instructors. They will provide a reasonable substitute or compensatory opportunities for any required work missed. A student with such an absence will not be penalized in any way.

### Absence Because of Military Deployment

See "Leave of Absence Due to Military Deployment (p.       )."

### Other Absences

Unforeseen events or circumstances, including illness, may cause a student to be absent from class. Students must notify their instructors and academic advisor, as appropriate, as soon as possible to apprise them of the circumstances leading to their absence, as well as how much time will be missed. Students must work with their instructors to develop a plan, with a timetable, to make up missed coursework. Students cannot be required to provide medical documentation. (Faculty and students should note that the University Health and Counseling Services does not provide sick notes or medical excuses except for long-term illness.) Instructors are expected to make reasonable accommodations for warranted class absences, including administration of makeup assignments and exams, whenever possible.

### Extended Absences

A student who is absent from school for an extended period of time must inform his or her academic advisor by letter, email, or telephone. The expected length of the absence may determine whether the student should apply for a medical or emergency leave of absence (p.       ). It is strongly recommended that the student contact his or her academic advisor to discuss potential next steps, which could include incomplete grades; withdrawal from classes; or, in the event of an extended absence due to a chronic medical condition or disability, consultation with the Disability Resource Center to explore potential accommodation.

### Nonattendance

Nonattendance does not constitute official course dropping or withdrawal, which means the student is fully responsible for the academic and financial consequences. Like all grades for courses attempted and/or completed, a grade earned due to nonattendance impacts a student's academic progression, an international student's visa eligibility, and a federal financial aid recipient's aid eligibility and award.

## Course Credit Guidelines

### Guidelines for Assigning Credit to Courses

The primary standard for establishing course credit at Northeastern is the semester/quarter hour, or Carnegie Unit, the standard used by the federal

government. One hour of credit is awarded for a lecture/seminar class meeting 50 minutes each week during a 15-week semester or 12-week quarter and also requiring a minimum of two hours of outside preparation each week by the student. An hour of contact time in the rest of the document is based on this 50-minute session.

- 2 semester/quarter hours (100 minutes per week of instruction plus 4–6 hours homework, or equivalent)
- 3 semester/quarter hours (150 minutes per week of instruction plus 6–9 hours homework, or equivalent)
- 4 semester/quarter hours (200 minutes per week of instruction plus 8–12 hours homework, or equivalent)

The Office of the Registrar, 271 Huntington Avenue, maintains the official record for all courses. In the event of error in any publication, the academic record will reflect the correct semester/quarter hours applicable to any degree requirement.

On occasion, course titles change, while the course number remains the same. Despite such title changes, the course is still considered to be the same course. Students who have taken the course under the old title and then take the course again under the new title are considered to have repeated the course.

#### **NOTE ABOUT HOMEWORK AND STUDENT PREPARATION FOR CLASS**

The credit hour assumes a set proportion of two hours of student preparation or homework for every hour spent in class. Northeastern wishes to emphasize that the federal government has established this as the minimum amount of work expected, and assigning more work does not in itself justify an increase in the credit value of the course. We also wish to note that there is great variation in the amount of time each student will need to devote to each course or to a specific form of study (e.g., reading, writing, completing problem sets), and, therefore, it is not possible to enforce any exact accounting of student work outside of class.

#### **CREDIT ASSIGNMENT PROCESS**

Northeastern University uses the Carnegie Unit to determine class meeting time requirements. The actual amount of academic work that goes into a single credit hour is calculated as follows:

- One lecture (taught) or seminar (discussion) credit hour represents one hour per week (50 minutes) of scheduled class/seminar time and two hours of student preparation time.
- One laboratory or studio credit hour represents one hour per week of lecture or discussion time plus one to two hours per week of scheduled supervised or independent work, or a total of three hours in the lab or studio.

#### **DEFINED INSTRUCTIONAL METHODS**

- Traditional: meets fully on ground in a physical location with instructor present
- Hybrid: meets majority on ground in a physical location with instructor present with some online instructional component
- Live cast: meets fully on ground in a physical location with the instructor in a different location teaching synchronously and supported by an instructional assistant in the physical location
- Online: meets fully online

#### **FULL-TIME AND HALF-TIME EXPERIENCES**

Academic experiences integral to curriculum and requiring registration (but not credit bearing) have the following required hours of participation:

- Full-time experiences: 32–40 hours per week in a semester for a minimum of 11 weeks or 55 days, or in a quarter for 9 weeks or 45 days
- Half-time experiences: 16–31.99 hours per week in a semester for a minimum of 11 weeks or 55 days, or in a quarter for 9 weeks or 45 days (to achieve full-time status, graduate students must take 3 or more academic credits and undergraduate students must take 4 or more academic credits)
- Summer 1 or Summer 2 semester: minimum of 5 weeks or 25 workdays
- Summer quarter: 6 weeks or 30 workdays

International students must confer with the Office of Global Services to determine CPT requirements as appropriate.

## **Degrees, Majors, and Minors**

### **Declaring Majors and Minors**

Undergraduate students may declare their majors upon admission to the university or may elect to join programs for undeclared students before declaring a major. Students must declare a major no later than the end of the sophomore year. Majors and concentrations are described under the various schools and colleges in this catalog.

Students should declare a minor as early as possible and no later than the end of the junior year. Completion of the requirements of a major, minor, or concentration is noted on the transcript.

### **Changing Majors**

Undergraduate students enrolled full-time in one or more of the university's undergraduate schools or colleges may change their major if they meet one of the following transfer criteria:

- The student meets the criteria for immediate entry as defined by the receiving major.
- The student has a cumulative grade-point average (GPA) of 2.000 or greater and satisfactorily completes the transition criteria as defined by the receiving major. For GPA below 2.000, change of major is at the discretion of the receiving major.

Students who are considering a major change must discuss their change in person with an advisor in the receiving major. See the online list of advising offices (<https://registrar.northeastern.edu/article/changing-majors/>). The advisor will certify that the student meets the criteria for immediate entry to the major or will set up a transition term for the student to satisfy the change-of-major criteria. Advisors will discuss the student's ability to succeed in the desired program given the current academic record as well as the influence of changing major on the student's ability to obtain a degree in the desired program within the traditional eight-academic-term time frame.

Transition criteria are designed to help ensure that students who change major have a reasonable chance of academic success and program completion. A list of school and college transition criteria is maintained at the website of the respective school or college. Students wishing to join some majors must also audition or submit a portfolio, as indicated on the aforementioned webpage. Note also that some colleges have deadlines for applications to change major, also indicated on the aforementioned webpage.

International students must inform the Office of Global Services (OGS) (<http://www.northeastern.edu/ogs/>) of any change of major.

### Northeastern Explore Program

The Northeastern Explore Program provides support and guidance to first-year students who have not yet decided upon or officially declared a major. All students must declare a major no later than the end of the sophomore year. Undeclared students are strongly encouraged to declare a major by the beginning of their sophomore year if they are interested in highly structured programs or in maximizing their number of co-op placements within such a major. Admission to a particular major is dependent on the transfer criteria described above.

The D'Amore-McKim School of Business, the College of Engineering, and the Khoury College of Computer Sciences also each provide resources to facilitate a major choice for students who enter their respective colleges with undeclared majors.

### Double Major

Students may earn a double major by gaining admission to the second major and by completing all requirements for both majors. Because some double majors will have a significant overlap in courses, all double-major proposals must be approved by the home college of each major in the proposed double major. Students completing a double major receive one degree and one diploma. The two majors appear on the transcript. If the two majors are in different colleges, the degree is associated with the major in the home college.

### Second Northeastern University Bachelor's Degree

To earn a second bachelor's degree after earning a first bachelor's degree from Northeastern, a student must be granted admission to the second program, enroll at Northeastern, and complete all requirements for the second major that are not already on the student's transcript. Outdated coursework may not be accepted. Students must earn a minimum of 32 semester hours beyond those earned toward the first degree. A second diploma will be awarded and the second degree will be noted on the transcript.

Students must complete an application with the home college of the intended degree. Some programs may require prerequisites prior to admission. Students should apply by the normal transfer deadline to ensure timely consideration. The college makes the determination on admission; notifies the student of this decision; and, if the student is admitted, provides the student with a program of study and reactivates the student's record. International students must consult with an advisor in the Office of Global Services to request updated documentation reflecting engagement in the second bachelor's degree program.

### Combined Majors

Students with academic interests spanning two disciplines may choose to pursue a combined major. A combined major is one major that includes at least nine courses from each of the two participating disciplines. No more than two courses may count for both disciplines, i.e., there must be at least 16 courses in the combined major. At least one of the courses is an integrative course that acts as a bridge between the two majors being combined. The combined major should be declared by the end of the first semester of the junior year. It is generally advantageous to declare the combined major as early as possible, especially when highly structured disciplinary components are involved.

See the online list of current combined major program options. (<https://registrar.northeastern.edu/article/combined-majors/>) Students may request admission to a combined major by following the standard procedure for changing majors. A home college is designated, in which

the student will be registered and from which he or she will be graduated. Many combined majors allow the student to choose the home college. Upon graduation, students receive one major, one degree, and one diploma. The combined major and home college will appear on the transcript and diploma.

### Independent Majors

In the rare cases when students have academic interests that fall within the expertise of Northeastern faculty members and are not available in the large number of existing majors and combined majors, they may propose an independent major. Independent majors form a cohesive program focusing on some issue, theme, or subject area not available within the context of existing curricula. These programs should be equivalent in depth and coherence to existing majors. No student with less than a 3.250 grade-point average will be approved for an independent major. The proposal must be approved by the end of the first semester of the junior year. Proposals will not be considered before the end of the freshman year. For initial information and advice, interested students should consult their academic advisor.

The student assumes the initiative in formulating an independent major. High degrees of student initiative and self-reliance are also necessary for completion of this type of major. The student is responsible for securing the advice and approval of faculty mentors, at least one from each of the disciplines. These faculty mentors will help the student design the curriculum. The faculty mentors will guide the student's academic progress through the major. The student should select one of the faculty mentors as the primary mentor.

If the disciplines partnering in the independent major are in different colleges, the college of the primary mentor will be designated as the home college, in which the student will be registered and from which the student will be graduated. The student will enroll in the Approved Independent Studies major. Students completing an independent major receive one degree and one diploma. Upon graduation, a comment will be added to the transcript to reflect the title indicated on the approved independent major proposal. When the components of the independent major individually offer different degree designations, the degree designation that will appear on the transcript and diploma will be designated during the approval process.

The student, with the assistance of the faculty mentors, must formulate in writing and submit to the home college curriculum committee an Independent Major Approval form (<https://registrar.northeastern.edu/article/independent-majors/>) bearing the signatures of all faculty mentors and a proposal containing the following items:

- A statement of the central concept around which the independent major is organized and a rationale for the major, including a discussion of why existing programs are inadequate to the student's purpose and how the proposed major meets the student's educational, professional, or personal goals
- A list of courses—including names, numbers, prerequisites, and frequency of offering (if known)—and a breakdown of the introductory, intermediate, and advanced courses included in this list
- A statement of the manner in which the requirements of the university core are fulfilled (and, if applicable, BA core requirements (p. 49))
- A list of courses—including numbers, names, and grades—already taken that will apply to the major or to the university core (and BA core, if applicable) requirements
- A student transcript
- A calendar for completion of the degree

A meeting of all faculty mentors and the student must be held before college approval of the major program. In accepting the proposal, the home college dean's office certifies that the rules established for the independent major have been followed, and it assumes administrative responsibility by assigning an academic advisor to monitor the student's progress and clear the student for graduation. Any changes in the curriculum must be approved by the primary faculty mentor, and the home college advisor must be informed. Final approval of independent majors is granted by the University Undergraduate Curriculum Committee.

### PlusOne Bachelor's/Master's Programs

Northeastern University offers a number of PlusOne bachelor's/master's degree programs that allow students to accelerate the completion of the bachelor's degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Generally, both degrees may be earned in one more year than is the normal time allotted for completion of the bachelor's degree. See additional information on PlusOne Bachelor's/Master's programs (<http://www.northeastern.edu/plusone/>). (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>)

Northeastern University School of Law also offers students a PlusJD program (<https://www.northeastern.edu/law/admission/jd/apply/plusjd/>) that allows students to count their first year of law school toward their undergraduate degree.

### Minors

Minors offer an opportunity for students to complement their major with intensive study in another area. A minor consists of a minimum of four courses defined by a department or an interdisciplinary program. In some cases, background courses are also required. Unless otherwise indicated, minors are generally open to all university students. Minors appear on the transcript only after completion of requirements has been certified and the degree has been awarded.

## Family Educational Rights and Privacy Act (FERPA)

### FERPA for Students—General Information

FERPA is a federal law that applies to educational institutions. Under FERPA, schools must allow students who are 18 years or over or attending a postsecondary institution:

- Access to their education records
- An opportunity to seek to have the records amended (see the *Student Handbook* for this procedure)
- Some control over the disclosure of information from the records

### FERPA General Guidance for Parental Disclosure

When a student turns 18 years of age or attends a postsecondary institution, the student, and not the parent, may access, seek to amend, and consent to disclosures of his or her education records.

If you are an undergraduate day student and you choose not to share information with your parents, Northeastern will, if asked, indicate that you have restricted access to your records.

### Release of Directory Information

The primary purpose of directory information is to allow Northeastern University to confirm attendance for employers, health insurance companies, and loan agencies. Northeastern may disclose appropriately designated "directory information" without written consent, unless

you have advised the university to the contrary in accordance with the procedures below. If you choose not to release directory information, all communications with all third parties and agencies will need to be done through your written request to the university or in person.

As of June 30, 2016, Northeastern directory information includes:

- Student name
- Home address (city, state, country only)
- Major field of study
- College
- Class year
- Enrollment status (e.g., undergraduate or graduate, full-time or part-time)
- Dates of attendance
- Degrees, honors, and awards received
- Most recent educational agency or institution attended
- Sports activity participation, showing weight/height of members of athletic teams
- Participation in officially recognized activities

If Northeastern currently has permission to release data and you do not want the university to disclose directory information without your prior written consent, you must notify the university by coming to the Office of the Registrar, 271 Huntington Avenue.

### Notification of Rights under FERPA

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights are:

1. The right to inspect and review the student's education records within 45 days of the day the university receives a request for access. Students should submit to the registrar, dean, or head of the academic department (or appropriate official) written requests that identify the record(s) they wish to inspect. The university official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the university official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education record that the student believes is inaccurate or misleading. Students may ask the university to amend a record that they believe is inaccurate or misleading. They should write the university official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the university decides not to amend the record as requested by the student, the university will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interest. A school official is defined as a person employed by the university in an administrative, supervisory, academic, or support staff position (including law enforcement unit and health staff); a person or company with whom the university has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a person assisting another school official



in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the university to comply with the requirements of FERPA. At Northeastern, the Office of the University Registrar, 271 Huntington Avenue, administers FERPA.

### Additional Information

Additional information can be obtained at the U.S. Department of Education's website (<http://www.ed.gov/policy/gen/guid/fpco/ferpa/>) or by writing to:

Family Policy Compliance Office  
U.S. Department of Education  
400 Maryland Avenue, SW  
Washington, D.C. 20202-5920

### Final Examinations and Related Policies on Other Exams and Final Term Papers/Projects

- Final examinations are normally two hours in length and must be held when and where scheduled. Final exams are held during a designated final exam period at the end of the semester. An examination schedule is posted at the beginning of each semester at the Final Exam Information webpage (<https://registrar.northeastern.edu/article/final-exams/>).
- Students are responsible for knowing the time and location of their examinations. Final exam schedules are available to students online via the myNortheastern web portal (<https://my.northeastern.edu/>) under "My Schedule" in the "Self-Service" tab approximately the fourth week of the term.
- Students who have two examinations scheduled at the same time or three exams on the same day may complete and submit the Final Exam Conflict form (<https://registrar.northeastern.edu/article/final-exams/>) by the posted deadline.
- Instructors may not give more than 30 total minutes of examinations during the eight calendar days prior to the start of the final exam period.
- Students who have concerns about exams scheduled during the eight calendar days prior to the start of the final exam period, rescheduling of final examinations, or conduct during an examination should report their concerns to their college academic student services office.
- All final examinations, term papers, or projects must be returned to the student or be retained by the department for a period of one year.

### Graduation Requirements

To be eligible to receive degrees, graduating seniors must meet all academic and residency requirements. They must also clear all financial, experiential education, and disciplinary deficiencies.

In addition, each program of study has specific academic requirements. These are specified for each program under the various schools and colleges in this catalog.

Once they matriculate, students are expected to complete all coursework for their degree at Northeastern; or an entity in a formal contractual, consortial, or partnership relationship with Northeastern; or at an approved Northeastern University study-abroad program. In some cases, in order to clear a deficiency, to permit students access to courses deemed by their respective advisors and colleges to be important for

their educations but unavailable to them at Northeastern, or to remain on track for graduation, a student may petition their college for permission to take a course at another accredited institution. See also "Residency Requirement," below.

Prior to completion of their program, students are expected to complete a graduation degree audit at their college's academic student services office.

*Note:* Participation in study abroad in a student's final semester may result in a delay in graduation due to calendar discrepancies across institutions.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Residency Requirement

In addition to meeting all degree and major requirements, students must earn a minimum of 64 Northeastern University semester hours to receive a bachelor's degree. Established exchange programs, where students are earning two degrees, one from Northeastern University and one from another institution, require students to earn a minimum number of Northeastern University semester hours as specified by the exchange program. Specialized programs for students with preexisting credentials have specific residency requirements.

### Commencement

Attendance at Commencement is optional. Information concerning Commencement is provided to all graduating seniors during the spring semester. Seniors who have been removed from the graduation list are notified if they fail to qualify for their degrees. No special notice is sent to students who do qualify.

### Leaves of Absence and University Withdrawal

Students may request to take the following types of leaves of absence:

- Personal or Academic
- Medical or Emergency
- Military Deployment or Missionary Service

*Students in Pre-Matriculation and Pathway programs (including N.U.in, Foundation Year, NU Immerse, NU Bound) do not fall under the leave of absence policy below. Students in these programs with emergent, medical, or personal circumstances that require a conversation about their ability to continue with their program of study should reach out to We Care ([https://studentlife.northeastern.edu/we-care/#\\_ga=2260687946268200191621858812-17152695181613325628](https://studentlife.northeastern.edu/we-care/#_ga=2260687946268200191621858812-17152695181613325628)) for further guidance.*

### General Leave of Absence Policy

Students who wish to take a leave of absence should complete a request through the Student Hub web portal (or via University Health and Counseling Services (UHCS (<https://www.northeastern.edu/uhcs/forms/medical-leave-of-absence/>)) for a medical leave of absence, as described below) before the last day to drop without a W in a term. Please consult the Academic

Calendar ([https://registrar.northeastern.edu/group/calendar/#\\_ga=222318140315109033061621260160-17152695181613325628](https://registrar.northeastern.edu/group/calendar/#_ga=222318140315109033061621260160-17152695181613325628)) for the last day to drop without a W in the term.

Students can request a leave until the last day to drop with a W in a term but should review the financial implications of withdrawing from courses on the Student Financial Services website (<https://studentfinance.northeastern.edu/policies-procedures/withdrawalleave-of-absence/>).

Students can take up to one year of leave.

Any leave of absence type, if approved, is subject to the following conditions:

- International students must make an appointment with the Office of Global Services (OGS) (<https://international.northeastern.edu/ogs/>) to discuss leave of absence procedures in accordance with federal regulations.
- Students who do not return at the end of the leave will be withdrawn and must contact their college for reentry prior to the term start.
- Students must return to classes, not to co-op.
- Students must be currently enrolled in academic classes or co-op. If a student is withdrawn for personal reasons, the withdrawal can be reversed and a request for a leave of absence can only be processed if it is before the last day to drop without a W in a term. If the student has been administratively withdrawn, a request for leave of absence cannot be considered until the withdrawal is resolved.
- Students who receive financial aid should meet with a financial aid counselor before going on a leave. Please see Return of Title IV Aid (p. 20) for the possible financial aid impact of a leave of absence.
- Students in university housing should refer to the Office of Housing and Residential Life for policy information.
- A student's enrollment status cannot include more than one academic year of consecutive nonclass enrollments. Students on leave for more than one year will be withdrawn from the university.
- If a student has taken multiple leaves equating to one year, the next leave request will be processed as a withdrawal.
- Students are not allowed to take classes for credit toward their degree at Northeastern while on a leave of absence.

Students on a leave of absence are considered active students and are able to register for classes in an upcoming term in a leave status. If a student is unable to register because they are inactive, the student should contact their college for reentry at the time of registration for the return term. Students are expected to register for classes upon returning from a leave of absence.

### LEAVE OF ABSENCE FOR INTERNATIONAL STUDENTS

International students must discuss maintenance of U.S. immigration status with an advisor at OGS before requesting any type of leave of absence.

### PERSONAL OR ACADEMIC LEAVE OF ABSENCE

Personal leaves of absence are general leaves of absence that do not meet the criteria of more specific leaves outlined in the catalog. Academic leaves are applied to a student record in the rare cases when a student has fulfilled the last remaining requirements abroad, but final grades have been yet to be received at Northeastern; or are taking a leave of absence from Northeastern to pursue other academic work. A student interested in requesting a personal or academic leave of absence should speak with an academic advisor.

### MEDICAL OR EMERGENCY LEAVE OF ABSENCE

Medical leave is an option available to those Northeastern students who develop a major medical condition that precludes class attendance, completion of requirements, and/or participation in co-op. Medical leave requests must be initiated at UHCS (<https://www.northeastern.edu/uhcs/forms/medical-leave-of-absence/>). Students can request from their college an exception to take classes elsewhere while on a medical leave of absence based on extenuating circumstances.

Emergency leaves may be granted when a student cannot continue attending class after the start of the term due to life-changing situations beyond the student's control. Students interested in requesting emergency leave are encouraged to contact We Care (<https://studentlife.northeastern.edu/wecare/>). Students can request an Emergency Leave of Absence via the Student Hub.

Please consult Refunds for Withdrawal from the University—General Information (p. 21) concerning tuition charged for the term in which the leave has been granted. The student may appeal for consideration of their financial circumstances; appeal information can be found at Student Financial Services (<https://studentfinance.northeastern.edu/policies-procedures/withdrawalleave-of-absence/>). If the appeal is approved, housing and other fees will not be included in the appeal decision; please refer to the Residence Hall and Dining License Agreement (<https://www.northeastern.edu/housing/license-agreement/>). Outstanding balances (including unpaid balances) for the academic term in which the leave is taken are still due the university.

Financial aid recipients must contact their financial aid counselor to understand the effects on aid received.

If the leave extends more than six months, students who have taken loans for education expenses may be required to start repayment of those loans.

Students enrolled in the Northeastern University Student Health Plan (NUSHP) will remain enrolled in the plan for the plan year, ending August 31.

### LEAVE OF ABSENCE DUE TO MILITARY DEPLOYMENT OR MISSIONARY SERVICE

When a student is called to active duty or missionary service, they must request the leave by filling out the proper request form through the Student Hub. Proof of official deployment or call to service paperwork will be required as an attachment when filling out the leave of absence request.

When a student is called during the term, the university will:

- Excuse tuition for that term. Any payment made will be credited to the student's account.
- Post a leave of absence for the term to hold a place for the student when he or she returns.

If a student is called near the end of the term, the student and faculty members may determine that incomplete (I) grades are more appropriate. In this case, tuition will not be waived.

When a student returns to the university after completion, he or she will notify the college academic student services office if the leave was longer than one year; that office will in turn notify the Registrar's Office. The college academic student services office will assist the student with reentry and registration. If the leave was less than one year, the student should register for classes for the upcoming term prior to returning to campus.

International students who must take a leave of absence to engage in military service in their home country must also complete a form for leave of absence with OGS.

### RETURNING FROM A LEAVE OF ABSENCE

Students on a leave of absence are considered active students and are able to register for classes in an upcoming term in a leave status. If a student is unable to register because they are inactive, they should contact their college for reentry at the time of registration for the return term. Students are expected to register for classes upon returning from a leave of absence.

Students who are withdrawn and are applying for Commencement may be reentered on a leave of absence, pending the college's approval, prior to the term in which they will graduate. International students returning from a leave of absence should contact OGS regarding the Student and Exchange Visitor Information System (SEVIS) procedures three to four months prior to anticipated return date.

Students who wish to reenter the university following a medical leave must contact UHCS. Reentry from a medical leave requires receipt of all documentation delivered to UHCS on or around one month prior to the planned reentry to classes. Once all documentation is received by UHCS, it will be reviewed and the student will be notified of the decision. Students must be enrolled in Northeastern University classes for the term in which they wish to return from their medical leave of absence. More specific information about the reentry process can be found at the UHCS website (<https://www.northeastern.edu/uahcs/forms/medical-leave-of-absence/>).

### University Withdrawal

Students seeking to withdraw from the university for any reason should meet with their academic advisor before completing the university withdrawal form online. Students should review the financial implications of withdrawing from all classes on the Student Financial Services website.

Students may be withdrawn from the university for financial, disciplinary, or academic reasons. Students looking to withdraw for medical reasons, should reach out to UHCS ([mloa@northeastern.edu](mailto:mloa@northeastern.edu)) to review medical leave of absence.

## Personal Information

### Change of Name

Report all name changes to the Office of the Registrar immediately. Official documentation of the name change is required.

### Change of Address

Report all address changes via the myNortheastern web portal (<https://my.northeastern.edu/>) or in person at the Office of the Registrar or Office of Student Accounts. Both the permanent home address and the local address are required. International students must report any changes of address or phone number via the myNortheastern web portal (<https://my.northeastern.edu/>) within 10 days in order to ensure compliance with Student and Exchange Visitor Information System (SEVIS) requirements.

## Registration and Taking Courses

Students are expected to register for classes during the published registration times in the academic calendar. Freshmen may be preregistered for some or all of the courses they need. Most registration after the freshman year is accomplished through the myNortheastern

web portal (<https://my.northeastern.edu/>). Students must complete "I Am Here" registration just prior to the start of classes to remain enrolled. Class adds must be registered by the end of the seventh class day.

## Class Schedule

All classes start promptly according to the class schedule shown. Most classes at Northeastern are scheduled in the time periods listed.

Students are expected to be punctual. Students who are late for classes should attend for the balance of the class period. Instructors will not tolerate habitual tardiness.

Students may leave 15 minutes past the scheduled opening of class if the instructor is not present. In such cases, students should notify the department in which the course is offered that the instructor was not present.

Any change of regularly scheduled classes or examinations must have the unanimous consent of the students involved unless other mutually acceptable arrangements for students to attend the alternative class or examination are worked out between the faculty member and the student(s) involved. Final exams must be held during the final exam time period and may not be negotiated in accordance with the official policy.

During the terms when they are teaching, faculty members are expected to provide sufficient conference time to meet the instructional and advising needs of their students.

## Fall and Spring Schedule

Sequence 1	MWTh	8:00–9:05
Sequence 2	MWTh	9:15–10:20
Sequence 3	MWTh	10:30–11:35
Sequence 4	MWTh	1:35–2:40
Sequence 5	MWTh	4:35–5:40
Sequence 6	TuThF	11:45–12:50
Sequence 7	TuWF	3:25–4:30
Sequence A	MTh	11:45–1:25
Sequence B	MW	2:50–4:30
Sequence C	TuF	8:00–9:40
Sequence D	TuF	9:50–11:30
Sequence E	WF	11:45–1:25
Sequence F	TuF	1:35–3:15
Sequence G	TuF	3:25–5:05
Sequence H	Tu	11:45–1:25
	and Th	2:50–4:30
Sequence L	MWTh	8:00–11:35
Sequence M	MWTh	11:45–2:40
Sequence N	MWTh	2:50–5:40
Sequence P	MWTh	8:00–10:20
Sequence Q	MWTh	10:30–1:25
Sequence R	MWTh	1:35–5:40
Sequence S	MWTh	1:35–4:30
Sequence T	TuF	8:00–11:30
Sequence U	TuF	11:45–3:15
Sequence V	TuF	3:25–5:25
Sequence W	TuF	1:35–5:05

## Summer Schedule

Sequence 1	MTuWTh	8:00–9:40
Sequence 2	MTuWTh	9:50–11:30
Sequence 3	MTuWTh	1:30–3:10
Sequence 4	MTuWTh	3:20–5:00
Sequence 5	MTuWTh	11:40–1:20
Sequence A	MW	8:00–11:30
Sequence B	MW	1:30–5:00
Sequence C	TuTh	8:00–11:30
Sequence D	TuTh	1:30–5:00

## Course Syllabus

Faculty members are expected to distribute a syllabus at the start of each course. The syllabus should also be placed on the course Canvas site. The syllabus should include a schedule of topics, exam and assignment due dates, information on how to contact the faculty member, process for conference time, grading and attendance policies, and a reminder of the university's Academic Integrity Policy.

## Course Prerequisites

Students are expected to meet prerequisites as listed in the course description of each course in which they enroll. Grades of F, U, I, or W in prerequisite courses do not normally fulfill requirements. Exceptions must be authorized by the instructor teaching the course.

## Overload Policy

An overload occurs when a student is enrolled in more courses than prescribed by the program's curriculum. To register for an overload, students are advised to consult their academic advisor. Students who enroll in overload courses will be billed at the per-credit-hour rate, 1/16<sup>th</sup> of the full-semester tuition for that semester per semester hour. Undergraduate full-time day students may register for an additional music ensemble course from the list of courses without added charge as long as they are registered for a full course load.

## Reduced Load Policies

Undergraduate full-time student adjustments for reduced loads are made only when the Undergraduate Petition to Reduce Load is approved by the academic advisor and by the Office of the Registrar. Adjustments will then be made if the course load falls below 12 semester hours during full semesters and 6 semester hours during summer half semesters (calculated at the per-credit-hour rate). To receive an adjustment, the Undergraduate Petition to Reduce Load must be submitted prior to the start of the term.

No rebate or credit is granted when a student voluntarily drops a course. A reduced load may impact the student's housing, financial aid, visa status, and health insurance. Students should consult applicable departments before committing to a reduced load. Students who take a reduced load will be billed at the per-credit-hour rate, 1/16<sup>th</sup> of the full-semester tuition for that semester per semester hour.

International students must speak with an advisor at the Office of Global Services (OGS) (<http://www.northeastern.edu/ogs/>) prior to dropping a course. Permission to drop below full-time status is restricted according to federal regulations.

## Audit Policy

Full-time Northeastern students (16 credits at the undergraduate level and 8 credits at the graduate level, before the audit registration) may audit one class per term as an overload with no additional charge. Students are permitted to register from the end of the course-add period

to the end of the third week of classes. Registration is based on the availability of a seat in the class. Students must obtain advisor approval and meet the prerequisites and any other required approvals for the class. Instructor permission as well as approval by the associate dean of the college offering the course is required. The coursework required is at the discretion of the instructor. Once a student opts to audit a course, the audit status of the course cannot be changed. First-year students may not audit classes. A signed Petition to Audit (<http://www.northeastern.edu/registrar/form-petition-to-audit.pdf>) must be presented to the Office of the Registrar during the designated audit-add period. Excluded courses are co-op, labs, language courses, any off-campus course, any online course, and any course required for the major or degree. Audits carry no academic credit.

## Pass/Fail (S/U) System

The individual schools and colleges state how and when the pass/fail system may be used. An outline of the general system follows.

- Any student not on academic probation may register for one pass/fail course per semester if permission is granted by the college in which the student is enrolled and if the course is offered on a pass/fail basis.
- Pass/fail courses are normally restricted to electives outside the major, minor, or NUPATH requirements. The college faculty, however, may choose to adopt the pass/fail system of grading when it appears pedagogically sound for required courses within a major or minor.
- Before requesting a pass/fail grade from an instructor, students should meet with their academic advisor to determine whether doing so will disqualify the course from satisfying a program requirement or elective. In general, courses taken on a pass/fail basis can be used only to satisfy open electives.
- Individual faculty members may decide whether any of their courses may be taken on the pass/fail system of grading, except when uniformity is necessary. In such cases, the department and/or college faculty offering the course determine whether the pass/fail system is used.
- Grades recorded on the basis of the pass/fail system do not figure in the computation of the grade-point average. Satisfactory completion of all courses taken on the pass/fail system is designated on the student's permanent record by the letter S. Unsatisfactory work is designated by the letter U. Any unsatisfactory grade must be handled according to the existing policy of the college but must never be cleared through the election of the same course pass/fail, except when this system is the only one used by the college for grading the course.
- To use the pass/fail system, students must meet all prerequisites for the course and declare by the end of the second week of the semester their intention to receive a pass/fail grade. This deadline may be extended to the end of the eighth week of a full semester or the end of the fifth week of summer half semester at the option of the instructor.
- Students must submit a Petition to Elect Pass/Fail Grade (<http://www.northeastern.edu/registrar/form-passfail.pdf>), signed by the faculty member.

## Taking Courses while on Co-op

Students who wish to take more than 4 credits while on full-time co-op must complete the petition registration form with their college academic advising office before the term begins. Students who do not receive the approval of their academic advisor and co-op coordinator will be dropped from their preregistered courses. Students who take a course while on

co-op will be billed the per-credit-hour tuition rate. (See “Reduced Load Policies” above.)

### Transfer Credits for Current Students

Once they matriculate, students are expected to complete all coursework for their degree at Northeastern; or an entity in a formal contractual, consortial, or partnership relationship with Northeastern; or at an approved study-abroad program. In some cases, in order to clear a deficiency, to permit students access to courses deemed by their respective advisors and colleges to be important for their education but unavailable to them at Northeastern, or to remain on track for graduation, a student may petition their college for permission to take a course at another accredited institution.

With the approval of the college academic advisor and the graduate school offering the courses, students may take courses in Northeastern's graduate schools.

Students who wish to take courses at another institution and transfer the credit to Northeastern must obtain *prior* approval from the college academic advisor. The Office of the Registrar validates accredited institutions to ensure credit transferability. The student must earn a C (2.000) or better for a course to be considered for transfer. Students are responsible for providing documentation on the institution's accreditation, course grading, and course descriptions prior to approval.

### Special Students

Students who are not enrolled at Northeastern University may petition the college academic advising office to take courses on a semester-by-semester basis. Approval is based on the student's academic qualifications and on the availability of class space. The maximum cumulative credit hours for which a special student may register is 20 (not including related labs). Tuition is billed at the undergraduate per-credit-hour rate. If the college academic advising office approves the course enrollment, the student pays the bill and then returns the completed forms to the Office of the Registrar.

### Dropping Courses

Not attending class does not constitute withdrawal. Students receiving a grade of W or NE in any course are responsible for the costs associated with that course. Students must drop courses using processes described below:

#### IN FALL AND SPRING SEMESTERS

- Through the third week of the semester, students may withdraw without any grade being posted to the transcript. Courses may be dropped via the myNortheastern web portal (<https://my.northeastern.edu/>).
- Between the fourth week and the last day of classes, course withdrawals are indicated by a W on the student's record. Courses may be dropped via the myNortheastern web portal (<https://my.northeastern.edu/>). No financial adjustment is made for courses receiving a W grade.
- After the last day of classes, no withdrawals are accepted for any reason. A letter grade for the course will be posted on the transcript.
- Dropping below full-time enrollment (12 semester hours for fall and spring semesters) may affect financial aid, health insurance eligibility, and the maintenance of proper nonimmigrant visa status.

#### IN SUMMER HALF SEMESTERS

- Through the second week of the half semester, students may withdraw without any grade being posted to the transcript. Courses may be dropped via the myNortheastern web portal (<https://my.northeastern.edu/>).

- Between the third week and the last day of classes, course withdrawals are indicated by a W on the student's record. Courses may be dropped via the myNortheastern web portal (<https://my.northeastern.edu/>). No financial adjustment is made for courses receiving a W grade.
- After the last day of classes, no withdrawals are accepted for any reason. A letter grade for the course will be posted on the transcript.
- Dropping below full-time enrollment (8 semester hours for summer half semesters) may affect financial aid.

### Late Admission to a Course

Students may petition to register for a course after the normal “class add” period, seven class days. Permission may be granted if seats are available and at the discretion of the instructor. If students are not already registered for a full course load, late admissions may jeopardize full-time status.

The Late Course Registration form (<https://registrar.northeastern.edu/article/late-course-registration/>) is available online.

## Student Bill of Academic Rights and Responsibilities

*This bill was drafted by the Student Senate, the Vice President for Student Affairs, and members of the Faculty Senate. It was passed in the spring of 1992. It was then updated by the Student Body President, Vice President for Academic Affairs, and passed by the Student Senate in the Fall of 2017 and Faculty Senate in the Spring of 2018 for adoption in the Undergraduate Student Handbook (<http://www.northeastern.edu/osccr/code-of-student-conduct/>) for the 2018–2019 academic year.*

We, the students of Northeastern University, believe that a quality education is the paramount goal of all students. In order to fulfill this goal, the university recognizes certain rights and responsibilities, which follow below.<sup>1</sup> Northeastern University students recognize and accept that redress of complaints arising from these rights is limited to the procedures specified in “Student Academic Appeals Procedures”.<sup>2</sup>

### Course-Related Rights

#### Article 1

Students have the right to instructors who attend classes on time.

#### Article 2

Students have the right to receive grades and feedback in a timely manner, particularly in the case of sequentially related assignments. At least one summative assessment should be given and returned a week prior to the end of the withdrawal period. Students also have the right to view work they submit to satisfy course requirements after it is graded and receive their instructor's rationale for grades received on said work.

#### Article 3

Students have the right to adequate access to instructors. This includes instructors replying to communications from students in a timely manner, suggested to be within two business days, with the exception of during university recesses, as well as maintaining consistent office hours for in-person courses, occurring at the same time at least once a week. Instructors may change office hours by notifying students in a timely manner, suggested to be within two business days, barring extenuating circumstances.

#### Article 4

Students have the right to receive a course outline, which includes a fair and explicit grading policy, at the beginning of each course. Changes to the course outline that result in a deadline, assignment, major exam, or similar course event being introduced to or moved earlier in the schedule shall be communicated to students in a timely manner, suggested to be at least 10 business days prior to the new deadline.

#### Article 5

Students have the right to instructors who communicate the material pertaining to the course effectively in the English language except in the case of foreign language instruction.

#### Article 6

Students have the right to participate in and have access to Student Government Association teacher/course evaluations.

#### Article 7

Students have the right to have a list of all course materials that must be purchased. Possible substitutions for said course materials, (i.e., acceptable previous editions of textbooks, digital versions, library owned resources, etc.) should be made available to students at least a week prior to the start of the academic term.

#### Article 8

Students have the right to alternative grading arrangements if they are unable to attend a graded activity that takes place outside the scheduled class time.

### **Rights to University Academic Services**

#### Article 9

Students have the right to adequate access to effective academic services, including academic and co-op advising, as described in the student handbook and other university publications, provided by the university.

#### Article 10

Students have the right<sup>3</sup> to an environment conducive to learning and to faculty who respect students' academic freedom<sup>4</sup> in the classroom. When exercising academic freedom, students are expected to comply with all applicable university ethics, anti-harassment, and nondiscrimination policies.

#### Article 11

Students have the right to access university health resources provided by University Health and Counseling Services (<https://www.northeastern.edu/uahcs/>) (UHCS), and in accordance to Massachusetts State Law, to have access to a medical plan that they can purchase (Northeastern University Student Health Plan (<http://www.northeastern.edu/nushp/>)).

#### Article 12

Students have the right to access university resources provided by the university's Disability Resource Center in accordance with the Policy on Equal Opportunity ([http://www.northeastern.edu/policies/pdfs/Policy\\_on\\_Equal\\_Opportunity.pdf](http://www.northeastern.edu/policies/pdfs/Policy_on_Equal_Opportunity.pdf)). Students have the right to pursue informal and formal grievances through the procedures (<http://www.northeastern.edu/drc/getting-started-with-the-drc/grievance-procedure/>) outlined by the Disability Resource Center.

### **Scheduling Rights**

#### Article 13

Students have the right to final exam schedules in accordance with established university policy, including non-conflicting final exam schedules.

#### Article 14

Students have the right to attend any course session held prior to the end of the add/drop period so long as permission from the instructor is obtained in advance and all duly registered students have proper access to seating and other course resources.

#### Article 15

Students will not be penalized for excused absences, with the understanding that students may need to make up for the academic commitment from which they were excused. Reasons for an excused absence include religious, medical issues, jury duty, bereavement, and military service. See the course catalog (p. 28) and other applicable policies ([http://gonu.com/sports/2013/7/15/SASS\\_0715134535.aspx?path=sass](http://gonu.com/sports/2013/7/15/SASS_0715134535.aspx?path=sass)) for the full attendance and excusal policy.

### **General Academic Rights**

#### Article 16

Students have the right to be informed, in a timely fashion, of proposed action to be taken against them.

#### Article 17

Students have the right to the redress of academic grievances through the processes provided by the university.

#### Article 18

Students have the right to university support and resources, such as the Office of Global Services (<https://www.northeastern.edu/ogs/>), with regard to their visa status.

#### Article 19

In accordance with the Northeastern University's Nondiscrimination Policy ([https://www.northeastern.edu/policies/pdfs/Policy\\_on\\_Equal\\_Opportunity.pdf](https://www.northeastern.edu/policies/pdfs/Policy_on_Equal_Opportunity.pdf)), students have the right to a learning environment free of discrimination or harassment, including as provided for in Northeastern University's Title IX Policy (<http://www.northeastern.edu/titleix/title-ix-policy-2/>).

#### Article 20

Northeastern University's policy on student produced intellectual property can be found on page 54 under *Copyrightable Materials* of the *Undergraduate Student Handbook*.

#### Article 21

Students have the right of access to their academic and financial aid records and maintenance of the privacy of these records, as provided by the Family Educational Rights and Privacy Act.

### **Student Responsibilities**

#### Article 1

Contribute to a climate of open inquiry and honesty in all aspects of the university's academic life. This includes reviewing, and

becoming familiar with, the Academic Integrity Policy on the OSCCR website.

#### Article 2

Commit sufficient time and effort for study and for use of library, studio, laboratory, and computational facilities, as appropriate for each course.

#### Article 3

Contribute to the classroom/laboratory/studio learning environment through discussion and active participation.

#### Article 4

Acquire the necessary prerequisites for full participation in each academic course.

#### Article 5

Attend scheduled classes regularly and on time, and arrive to class prepared, having completed all the readings and other assignments.

#### Article 6

Seek out faculty and teaching assistants outside of class time, to obtain help with problems encountered in a given course.

#### Article 7

Respect the academic freedom<sup>4</sup> of each faculty member and student.

#### Article 8

Assist the university in its various self-evaluations (e.g., TRACE, surveys) by responding honestly and conscientiously.

#### Article 9

Maintain effective communication with the university by providing permanent and local address information to the university through a system designated by the university, and by reading university email on a frequent and consistent basis.

#### Article 10

Act as positive representatives and genuine ambassadors of the university when studying and working in domestic and international settings associated with Northeastern University.

#### Article 11

Complete an entry (including itinerary, accommodation information, and contact information) using 'My Travel Plans,' located on the Services and Links tab in the myNortheastern Student Portal, or other system as required by the university, prior to all university-sponsored travel outside of Massachusetts, including but not limited to: Study Abroad, Dialogues of Civilization, Foreign Exchange Programs like BSIB, Alternative Spring Break, Engineers without Borders, Co-op Placements outside of Massachusetts, etc.

#### Article 12

Complete all required activities prior to attending classes for their entrance date (including alcohol education, violence prevention programming, required reading, etc.).

#### Article 13

Have in their possession at all times the officially approved and properly validated photo identification card.

Students who fail to comply with these responsibilities could lose certain student privileges as well as face possible disciplinary sanctions under the Code of Student Conduct.

<sup>1</sup> The student rights, through their representatives in the Student Government Association (SGA), described in these sections arise from faculty and staff employment responsibilities and obligations to the university. Northeastern University students recognize and accept that it is the sole prerogative of the university to enforce these obligations and responsibilities and to determine whether and to what extent they are being carried out or violated in specific instances. Northeastern University students recognize and accept that their ability to effect redress of complaints arising from these rights is limited to the procedures specified in the current *Undergraduate Student Handbook*.

<sup>2</sup> The articles shall be interpreted by the Office of the Provost in conjunction with the Office of the Vice President for Student Affairs, and shall be monitored by the Student Government Association. Further, should any student discover that they have been subject to any violation of the principles stated herein, the student should follow the appropriate complaint resolution procedure in the *Undergraduate Student Handbook* (<http://www.northeastern.edu/osccr/code-of-student-conduct/>). The Student Government Association, if requested by the student, will monitor the progress of any student academic grievances.

<sup>3</sup> Because the university operates on a twelve-month calendar in an urban environment, many construction, remodeling, renovation, and repair projects must take place while the university is in session, and other potential distractions from the learning process arise from the surrounding urban environment on which it is dependent but over which it exerts little or no control. Thus, though the university is committed to maintaining an appropriate learning environment for its students, Northeastern University students recognize and accept, as part of their relationship with the university, that the conditions described above may cause occasional disturbances to that environment.

<sup>4</sup> For more on academic freedom, please refer to the AAUP's definition (<https://www.aaup.org/report/1940-statement-principles-academic-freedom-and-tenure/>).

### Student Evaluation of Courses (TRACE)

Students play a critical role in the university's commitment to quality teaching and academic excellence when they participate in the evaluation of courses through TRACE (Teacher Rating And Course Evaluation), a survey developed collaboratively by the Student Government Association and the Faculty Senate. TRACE data are important in the process of course design and improvement, as well as in the process of faculty evaluation. Students are expected to participate in TRACE with constructive feedback that is relevant to teaching and course content. TRACE results from previous terms can be found on the myNortheastern web portal (<https://my.northeastern.edu/>).

### Student Records, Transcripts, and Related Policies

#### Grade Table

Grades are officially recorded by letters, evaluated as follows:

Letter Grade	Numerical Equivalent	Explanation
A	4.000	Outstanding achievement
A–	3.667	
B+	3.333	
B	3.000	Good achievement
B–	2.667	
C+	2.333	
C	2.000	Satisfactory achievement
C–	1.667	
D+	1.333	Undergraduate only
D	1.000	Undergraduate only/ Poor achievement
D–	0.667	Undergraduate only
F	0.000	Failure
I		Incomplete
IP		In progress
CR		Credit (School of Law only)
HH		High Honor (School of Law only)
H		Honor (School of Law only)
P		Pass (School of Law only)
NE		Not enrolled
NG		Grade not reported by faculty
S		Satisfactory (pass/fail basis; counts toward total degree requirements)
U		Unsatisfactory (pass/fail basis)
X		Incomplete (pass/fail basis)
L		Audit (no credit given)
T		Transfer
W		Course withdrawal

An I, IP, or X grade shows that the student has not completed the course requirements.

The IP grade is intended for courses that extend over several terms. The time restrictions on the incomplete grade do not apply to the IP grade. While the IP grade is left unchanged, it is not included in computing the grade-point average. If the IP grade is never changed, the course does not count toward graduation requirements.

### Course Comments

The following notations may also appear on the student's transcript:

E	Course excluded from GPA
HON	Honors-level course
I	Course included in GPA

## Northeastern University Course Numbering

0001–0999	<b>Orientation and basic</b>
	No degree credit
<b>UNDERGRADUATE</b>	
1000–1999	<b>Introductory level (first year)</b>
	Survey, foundation, and introductory courses, normally with no prerequisites and designed primarily for students with no prior background
2000–2999	<b>Intermediate level (sophomore/junior year)</b>
	Normally designed for sophomores and above but in some cases open to freshman majors in the department
3000–3999	<b>Upper-intermediate level (junior year)</b>
	Designed primarily as courses for juniors; prerequisites are normally required, and these courses are prerequisites for advanced courses
4000–4999	<b>Advanced level (senior year)</b>
	Designed primarily for juniors and seniors; also includes specialized courses such as research, capstone, and thesis
<b>GRADUATE</b>	
5000–5999	<b>First-level graduate</b>
	Courses primarily for graduate students and qualified undergraduate students with permission
6000–6999	<b>Second-level graduate</b>
	Generally for master's and clinical doctorate only
7000–7999	<b>Third-level graduate</b>
	Master's- and doctoral-level courses; includes master's thesis
8000–8999	<b>Clinical/research/readings</b>
	Includes comprehensive exam preparation
9000–9999	<b>Doctoral research and dissertation</b>

### Clearing an Incomplete or Changing Other Grades

The period for clearing an incomplete grade or for changing a grade other than an incomplete or failure (F or U) is restricted to one calendar year from the date it is first recorded on the student's permanent record. An incomplete grade may be reported by the instructor when a student has failed to complete a major component of a required course, such as homework, a quiz or final examination, a term paper, or a laboratory project. Students may make up an incomplete grade by satisfying the requirements of the instructor or, if the instructor is absent, the chair of the department. Be aware that instructors' policies on the granting of incomplete grades may vary and that the final decision on an incomplete grade is up to the instructor.

To request an incomplete grade, the student must obtain and complete in consultation with the instructor an Incomplete-Grade Contract (<https://>



registrar.northeastern.edu/article/incomplete-grade-contract/) on which the precise agreement for clearing an incomplete grade is specified and which is signed by the student and the instructor. Copies of the form are kept by the student, the instructor, and the Office of the Dean of the college in which the course is offered. Any exception to this policy on change of grades must be recommended by the Academic Standing Committee (ASC) of the college in which the course was offered and must be forwarded in writing by the ASC to the registrar for implementation. (Finishing the agreed-upon coursework must be completed within one calendar year from the end of the term in which the course was offered.)

University policy states that any grade outstanding for 12 or more months cannot be changed. Any exception to this policy on change of grades must be recommended by the ASC of the college in which the course was offered and must be forwarded in writing by the dean to the Office of the Registrar for implementation.

## Repeating Courses

When the appropriate course is available, students may repeat a course to earn a better grade. In all cases, the most recent grade earned in a course is the one used in calculating the overall grade-point average; however, previous grades remain on the transcript followed by the word "Repeat." Consult your academic advisor before repeating a course. Students are required to pay normal tuition for all repeated coursework.

## Substituting Courses

In some cases, it may not be possible to repeat a course if a student wishes to do so. In unusual circumstances, students may petition to substitute one course for another they have already taken, as long as the subject matter of both courses is substantially alike. With the approval of the student's academic advisor and the agreement of the department that offered the first course taken, a grade received in the new course will be labeled "Substitute" on the transcript and will be treated in the grade-point-average calculation as a "repeat" grade, as described above. The original grade will remain on the student's Northeastern transcript. Students should consult with their academic advisor before enrolling in any proposed substitute course. Students are required to pay normal tuition charges for all substitute coursework.

## Clearing an Academic Deficiency

An academic deficiency occurs when a student fails to complete a course with a satisfactory grade. The deficiency may occur because the student has failed the course or because the student has passed the course but with a grade that does not meet the minimum required by the student's program.

Students who have academic deficiencies may be required to clear them before progressing within the curriculum, especially if a given course is a prerequisite for future coursework. Deficiencies may affect the student's expected year of graduation.

With the approval of the appropriate program faculty and/or academic advisor, students can clear deficiencies in the following ways:

1. Repeat the same course at one of Northeastern's colleges, which will result in a "repeat" grade (see "Repeating Courses" policy above).
2. Substitute a comparable course at one of Northeastern's colleges, which will result in a "repeat" grade (see "Substituting Courses" policy above).
3. Under special circumstances, if the course is not currently offered at Northeastern University, a student may be advised to take a preapproved course at another institution outside Northeastern University. The original grade will remain on the student's

Northeastern transcript and will still be used in the calculation of the grade-point average.

## Appeal of Final Grades

Under certain circumstances, students have the right to appeal final grades given by either academic faculty or cooperative education coordinators. Criteria and procedures for such appeals are available as follows:

- For undergraduate day students: the *Undergraduate Student Handbook* (available at this site (<http://www.northeastern.edu/osccr/code-of-student-conduct/>))
- For College of Professional Studies undergraduate students: the Student Academic Appeals Procedures page (<http://catalog.northeastern.edu/professional-studies/academic-policies-procedures/student-appeals/>) within the CPS Undergraduate section of this catalog
- For graduate students: the Academic Appeals Policies and Procedures page (<http://catalog.northeastern.edu/graduate/academic-policies-procedures/appeals/>) within the graduate section of this catalog.

## Grade-Point Average (GPA)

Numerical equivalents for scholastic averages are weighted according to the number of hours the course carries. For example, suppose a student receives a grade of B in a course carrying 4 semester hours and a grade of A in a course carrying 1 semester hour. The weightings for these example courses are as follows:

Grade	Numerical Equivalent	Semester Hours	Weight
B	3.000	4	12
A	4.000	1	4
Totals:		5	16

The GPA for both courses would then be the total weight (16) divided by the total semester hours (5), or 3.200. Grades of I, IP, S, U, and X are not included in the calculation of the GPA. See Grade Table (p. 38) for a complete list of grades and numerical equivalents.

## Grade Reports

Grades are available to students approximately three days after the end of each term via the myNortheastern web portal (<https://my.northeastern.edu/>). A missing grade means that none was received from the instructor. Grades received late from faculty are processed as they are received.

## Transcripts

Currently enrolled students may obtain unofficial transcripts from the myNortheastern web portal (<https://my.northeastern.edu/>) and may also order official transcripts through myNortheastern. For further information on transcript requests, visit the transcript request webpage ([http://www.northeastern.edu/registrar/trans\\_request.html](http://www.northeastern.edu/registrar/trans_request.html)). All questions concerning transcript requests should be directed to 617.373.2300,

TTY 617.373.5360

## Pass/Fail System

The individual schools and colleges state how and when the pass/fail system may be used. An outline of the general system follows.

- Any student not on academic probation may register for one pass/fail course per semester if permission is granted by the college in

which the student is enrolled and if the course is offered on a pass/fail basis.

- Pass/fail courses are normally restricted to electives outside the major, minor, or NUPath requirements. The college faculty, however, may choose to adopt the pass/fail system of grading when it appears pedagogically sound for required courses within a major or minor.
- Before requesting a pass/fail grade from an instructor, students should meet with their academic advisor to determine whether doing so will disqualify the course from satisfying a program requirement or elective. In general, courses taken on a pass/fail basis can be used only to satisfy open electives.
- Individual faculty members may decide whether any of their courses may be taken on the pass/fail system of grading, except when uniformity is necessary. In such cases, the department and/or college faculty offering the course determine whether the pass/fail system is used.
- Grades recorded on the basis of the pass/fail system do not figure in the computation of the grade-point average. Satisfactory completion of all courses taken on the pass/fail system is designated on the student's permanent record by the letter S. Unsatisfactory work is designated by the letter U. Any unsatisfactory grade must be handled according to the existing policy of the college but must never be cleared through the election of the same course pass/fail, except when this system is the only one used by the college for grading the course.
- To use the pass/fail system, students must meet all prerequisites for the course and declare by the end of the second week of the semester their intention to receive a pass/fail grade. This deadline may be extended to the end of the eighth week of a full semester or the end of the fifth week of summer half semester at the option of the instructor.
- Students must submit a Petition to Elect Pass/Fail Grade (<http://www.northeastern.edu/registrar/form-passfail.pdf>), signed by the faculty member.

### Student Right-to-Know Act

For information about the Student Right-to-Know Act, visit the Office of the University Registrar's website. (<https://registrar.northeastern.edu/article/student-right-to-know-act/>)

### University-Sponsored Travel

#### University Travel

Northeastern University is committed to the health, safety, and security of its students and all other members of the university community. As a global institution, our university members undertake university travel around the world in pursuit of teaching, research, consulting, service, cocurricular activities, and work intended to advance learning and the interests of the university. The university supports standards and expectations associated with travel that are designed to reduce personal and university risk.

To enhance the health and safety of our students, you are required to comply with the university travel policies when undertaking university travel.

In order to provide assistance and support to you while traveling abroad, the university maintains a travel registry. In advance of planned university travel, students are required to enter their travel plans along with other requested information into the travel registry. To access the registry, go

to the myNortheastern web portal (<http://myneu.neu.edu/>), "Services and Links," and navigate to My Travel Plans to register your travel.

Students are responsible for familiarizing themselves with the university travel policies and are encouraged to visit the university's travel support website for guidance. If you have questions related to travel or travel support, please email [mytravelplans@northeastern.edu](mailto:mytravelplans@northeastern.edu). If you need assistance during university travel, please call the university's 24-hour travel assistant line at +1.857.214.5332.

### University Academics

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### Army, Air Force, and Navy Reserve Officers' Training Corps (ROTC) Programs

#### Army ROTC Program

Lieutenant Colonel David Mun  
Professor and Chair, Department of Military Science

335A Huntington Avenue  
617.373.2376  
617.373.8677 (fax)  
Army ROTC website (<http://www.northeastern.edu/neurotc/>)  
Scott Lyons, Enrollment and Scholarship Officer,  
[sc.lyons@northeastern.edu](mailto:sc.lyons@northeastern.edu)

The Department of Military Science offers the Army Reserve Officers' Training Corps (ROTC) program. The goal of the program is to develop leadership potential in men and women and to prepare them for an officer's commission in the Active Army, Army Reserve, or Army National Guard. The curriculum teaches principles of leadership and personnel management and seeks to develop leadership traits such as teamwork, responsibility, initiative, self-confidence, and discipline.

The Army ROTC program is conducted at Northeastern University. For more information, write:

Department of Military Science  
Northeastern University  
335A Huntington Avenue  
Boston, MA 02115

or call 617.373.2376

Completion of the Army ROTC program will lead to a commission as a second lieutenant in the Army, Army Reserve, or the Army National Guard. The program consists of the basic course (freshman and sophomore years) and advanced course (junior and senior years). The program does not conflict with co-op schedules.

Enrollment in the basic course is voluntary and is open to all full-time students. However, only cadets formally enrolled in ROTC may participate in leadership labs, physical training, and practical field exercises. Students in the basic course do not incur a military obligation. Check with your academic department to ensure credits are accepted.

The advanced course is open to all qualified students who have basic course credit or equivalent military experience, as well as meet the Army's physical, medical, and age requirements. Contracted students (advanced course and/or scholarship) receive a monthly cash stipend while in school. Scholarship students also receive full tuition and fees as well as \$1,200 per year for books. Scholarships are merit based and are awarded as four-year, three-year, or two-year benefit packages.

### Army Nurse Corps ROTC Program

ROTC provides an opportunity for college nursing students to receive practical, hands-on leadership experience. The courses provide a chance for students to develop management, communication, and decision-making skills. ROTC also provides nursing cadets an opportunity to participate in the Nurse Summer Training Program (NSTP). NSTP is a paid, three-to-four-week, hands-on clinical elective for Army ROTC nurse cadets. This elective is conducted at more than 20 U.S. Army hospitals in the continental United States, Hawaii, and Germany. During the NSTP clinical elective, the cadet receives experience under the direct supervision of a preceptor—an Army Nurse Corps officer who works with the cadet one-on-one. Scholarship nurse cadets receive a monthly cash stipend while in school as well as full tuition and fees and \$1,200 per year for books.

### Navy ROTC Program

The Navy ROTC unit is a six-school consortium that includes students from Boston University, Boston College, Northeastern, Tufts, Harvard, and MIT. All Navy ROTC scholarships assigned to Northeastern (NEU) are for nursing majors only. The scholarship covers full tuition, mandatory fees, a \$375-per-semester book stipend, and a living stipend valued at \$250 per month that increases by \$50 each year up to \$400. Room and board are not included in the scholarship. For students on Northeastern's five-year program, the Navy grants "Fifth Year Benefits," which mirror those of the fourth year. Upon graduation, students must fulfill a four-year active-duty commitment.

Navy ROTC nursing students are required to take four naval science classes in addition to their regular coursework and attend a weekly leadership laboratory as well as group physical fitness session.

All classes, labs, and group workouts are conducted at Boston University. Students typically spend a total of six to eight hours per week participating in Navy ROTC-related activities. Additionally, Navy nurses complete two summer training "cruises" prior to graduation, each of which lasts approximately four weeks. One cruise is conducted with a medical unit at sea (on a Navy ship) and the other at a land-based naval hospital. All lodging, transportation, meals, and uniforms are covered by

the Navy during summer training sessions. For more information, contact the recruiting officer at 617.353.0474 or navyrotc@bu.edu.

### Air Force ROTC Program

Air Force ROTC is an educational and leadership program designed to give men and women the opportunity to become an Air Force and Space Force officer while completing a bachelor's degree.

Through a cross-enrolled program with Boston University, interested Northeastern University students may participate in the Air Force Reserve Officers' Training Corps Program. The requirements include aerospace studies classes, leadership laboratory classes, and physical fitness training. The mandatory weekly commitments range from five to seven hours per week.

In addition to the leadership and management training that cadets receive, they also benefit from several scholarship programs. *High school seniors* can apply for four-year scholarships. The scholarships range from \$18,000 per year (capped at \$9,000 per semester) all the way up to full tuition. Scholarship winners will also receive a monthly stipend, a book allowance, and uniforms. Applications for scholarships are due by January 17 of senior year. Apply at the Air Force ROTC website (<http://www.AFROTC.com>).

*Freshmen and sophomores already in college* can compete for three- or three-and-a-half-year scholarships, some of which cover full tuition, while others cover \$18,000 per academic year. All scholarship winners will receive a monthly stipend, a book allowance, and uniforms.

However, eligible students may pursue a commission through Air Force ROTC without a scholarship. Air Force ROTC-contracted cadets will receive a monthly stipend. For more information, call 617.353.6316 or 617.353.4705.

## Cooperative Education

Website (<http://www.northeastern.edu/coop/>)

Cooperative education (co-op) is the cornerstone of Northeastern University's experiential learning approach, in which on-campus study is enhanced by real-world experience through full-time employment at locations all over the world. Through co-op, students alternate periods of academic courses with periods of employment in positions related to their academic or career interests. This combination provides an integrated learning experience that enhances both in-class studies and career development.

### General Requirements

- Be a full-time student to participate in co-op.
- Complete all pre-co-op requirements as established by the college of the student.
- Make satisfactory progress toward degree completion, including grade-point average requirements, as defined by the university, the colleges, and the major program curricula.
- Have accurate information about the co-op placement in the university's official co-op placement system, including specific start and end dates and meeting the minimum hour and day requirements.
- Not participate in co-op in the final term unless it is specified in the curriculum requirements of the program in the catalog.

- Resolve any previous disciplinary or academic probation issues, or have the cooperative education coordinator approve a plan to resolve these issues prior to applying for co-op jobs.
- Have any self-developed co-op approved by the cooperative education coordinator before accepting the position.
- Comply with any preemployment checks required by the employer, such as drug testing, credit checks, physical examinations, security clearance, and criminal record checks.
- Participate in Title IX training, as required.
- Complete any additional requirements (<https://careers.northeastern.edu/students/student-co-op/global-co-op/>) if participating in a global co-op.
- Work with the cooperative education coordinator if an Unsatisfactory (U) grade has been received for a past co-op to reestablish eligibility in accordance with the policies and requirements of the college.

### TRANSFER AND INTERNATIONAL STUDENTS:

- Transfer students from other universities must have met the same requirements in their major's co-op program as nontransfers and must have completed at least one semester of classes before starting co-op.
- International students must attend one academic year, or its equivalent, and obtain proper authorization from the Office of Global Services before engaging in co-op.

### Academic Requirements

1. **Be full-time while on co-op. Full-time status for co-op is defined as either:**
  - a. one full-time co-op job; 32-40 hours per week, or
  - b. two simultaneous half-time co-op jobs; 16-31.99 hours each, or
  - c. one half-time co-op job; 16-31.99 hours with graduate students taking 3 or more academic credits or undergraduate students taking 6 or more academic credits.
    - i. Undergraduate students on co-op in a Summer 1 or Summer 2 term may be registered for one half-time co-op without acquiring a second job or taking an accompanying class.
2. **Meet the minimum length requirements for an academic term:**
  - a. Semester full-term: minimum of 11 weeks or 55 workdays
  - b. Quarter full-term: minimum of 9 weeks or 45 workdays
  - c. Summer 1 or Summer 2 term: minimum of 5 weeks or 25 workdays
3. **Receive a grade of Satisfactory or Unsatisfactory for the co-op experience.**

### Registration for Co-op

Students are registered for co-op based on a complete job placement in the university's official co-op placement system with accurate start and end dates and meet the minimum hour and day requirements. Registration into the co-op experience class occurs one month before the term. Students need to be placed for co-op by the end of the add period, or they should be registered for classes if still searching for a job by this deadline. All co-op placements need to be approved by a co-op coordinator and entered into an official co-op placement system by the last day to drop without a W.

### Co-op Financial Planning

- No tuition is charged while a student is on co-op only (students will pay room and board if they stay in university housing).
- If a student takes a credit-bearing class while on co-op, tuition will be charged at the per-credit rate.

- Students who wish to register for more than 4 credits while on full-time co-op must complete the Petition Registration form (<https://registrar.northeastern.edu/wp-content/uploads/sites/9/form-pet-reg.pdf>).
- Financial aid will be distributed to match the student's tuition bill and other allowable expenses.
- Students on co-op are required to maintain the same health insurance coverage (either through a private provider or through the university program) as they would while attending classes.

### Further Information

For more detailed information about co-op policies and procedures, see the *Cooperative Education Student Handbook* on the Cooperative Education website (<https://www.northeastern.edu/coop/>).

### Education

Website (<http://www.cps.neu.edu/discover/schools-institutes/school-of-education.php>)

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Northeastern University's Graduate School of Education offers a Master of Arts in Teaching (MAT) PlusOne program (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>). The program provides a pathway for undergraduate students who aspire to be elementary or secondary classroom teachers.

### Experiential Learning

Website (<http://www.northeastern.edu/experiential-learning/>)

Experiential learning is critical to Northeastern's education model. It offers the opportunity for a rich and meaningful education, providing students with experiences that add depth to their classroom studies and enable them to explore and transform their lives. Experiential learning is tightly integrated with our course curriculum and is supported by advising in the majors as well as advising in the experiential learning group.

The primary ways in which the experiential learning requirement may be satisfied are:

- Cooperative education
- Research or creative activity
- Service-learning
- Global experience

Only one learning experience outside the classroom is required for NUpath. However, students have many additional opportunities for further experiential learning.

Integration of coursework and experiential learning occurs throughout the major curriculum as well as in the required capstone course.

## Explore Program

Website (<http://www.northeastern.edu/undeclared/>)

**Kim Irmiter, MA**

Director

617.373.2306

The Explore Program welcomes entering students who would like to explore their academic interests before choosing a major and introduces them to the university's broad range of disciplines. Working closely with a combination of faculty, academic advisors, and undergraduate peer mentors, undeclared students at Northeastern are engaged in personal and meaningful discovery. They are not just seeking a major; they look for clues to the future and find answers to the question: "How will I make my impact?"

Undeclared students enroll in a small-cohort first-year seminar taught by a Northeastern academic advisor and two student leaders. In this seminar, students develop strategic exploration plans to ensure they are able to take full advantage of the vast array of academic and experiential opportunities offered at Northeastern. Students will also attend exploratory programs where they engage with faculty and students in majors to gain an informed understanding of the disciplines that interest them most.

Students may declare a major at any time but are expected to do so by the end of sophomore year. Admission to a particular major is dependent on satisfying the criteria described under "Changing Majors (p. 29)."

## General Studies Program

Website (<http://www.northeastern.edu/gsp/>)

**Lynn Dornink, MA**

Director

617.373.2306

The General Studies Program (GSP) is a first-year program that provides students with personalized support and guidance in order to ensure their academic success. Program benefits include a low student-advisor ratio, fall and spring seminars taught by the student's GSP advisor, a writing-intensive curriculum, and access to a nationally certified peer tutoring program. All majors have defined entrance requirements; therefore, beginning in September, GSP advisors work closely with students to guide them toward meeting their intended majors' requirements. Upon completing their two semesters in General Studies, and meeting the requirements for their intended major, students transition to one of Northeastern's seven undergraduate colleges with sophomore status. Those students who have not met the academic progression standards for transitioning by the end of two semesters may continue in the GSP for an additional semester.

## Academic Progression Standards

In order to transition to sophomore standing, GSP students must:

1. Earn an overall grade-point average (GPA) of at least 2.000 (GPA requirements for specific majors may be higher)
2. Earn at least 28 semester hours of credit (32 recommended)
3. Complete college/major transition requirements

For more details about transitioning to individual colleges, see below.

## Transitioning to Major

For information about transitioning to majors across the university, see "Changing Majors (p. 29)."

## Academic Probation

Same as university standards.

## University Withdrawal, Low Scholastic Performance

Same as university standards.

## Global Experience

Website (<http://www.northeastern.edu/studyabroad/>)

**Marina Markot, PhD**, Executive Director

Global Experience Office

617.373.5276

[geo@northeastern.edu](mailto:geo@northeastern.edu)

Northeastern University is committed to global experience as an important dimension of learning. To foster this, it maintains the Global Experience Office (GEO), which has developed a variety of programs tailored to the interests and needs of Northeastern University students. Global experiences provide students with opportunities to deepen their knowledge of the world and their chosen field of study, develop intercultural sensitivity, utilize and strengthen foreign language skills, and explore global career options. Many Northeastern students participate in multiple global experiences during their time at the university. Northeastern encourages students to engage with the GEO as early as possible—global experiences are within reach for all students, with careful planning and collaboration.

## Global Learning

While studying abroad in a Northeastern-sponsored program, Northeastern students maintain full-time status and earn Northeastern credits. Upon completion of a program, grades are calculated in the student's grade-point average (GPA). To participate in GEO programs, students should be in good academic and disciplinary standing and have no registration-blocking holds. Study-abroad programs require a GPA of at least 2.500. Some programs may have additional eligibility criteria. Students must also meet the requirements of the host institution abroad. Full information and application deadlines are posted on the GEO website (<http://www.northeastern.edu/studyabroad/>).

## Types of Programs

Northeastern University offers different types of study-abroad programs, with multiple options within each type. This robust program portfolio contains global experiences for any major on campus. Students are able to participate in multiple programs during their time at Northeastern.

1. **Study Abroad.** Northeastern offers a rich array of study-abroad programs during semester and summer terms. Students join a partner institution for a semester or summer, where they attend classes, participate in student activities, and organize their extracurricular schedules just as they would on campus at Northeastern. Some examples include University of Sydney in Sydney, Australia; Technion: Israel Institute of Technology in Haifa, Israel; Universidad del Salvador in Buenos Aires, Argentina; London School of Economics in England, United Kingdom; and the University of Tokyo in Tokyo, Japan. In addition to regular coursework while on global experiences, students can also incorporate:
  - **Research.** Students may opt to engage in a research project while studying abroad. In most cases, the study-abroad program

organizes small group seminars and field trips that are designed to help students learn about their international environment and focus on a research topic. Students spend three to four weeks toward the end of the semester working on their individual projects. Examples of projects could be studying tropical biology in Costa Rica, history and culture in Vietnam, or oceanography while sailing in the Atlantic/Pacific cruise track of the SEA Semester Program.

- **Internship.** Internship programs offer a combination of classes and related work experience for which students earn academic credit. Examples of internships students have held in the past include accounting at Morningstar in Sydney, Australia, as well as internships in various European parliaments such as Brussels, London, and Dublin.
2. **Semester in.** Drawing on its network of regional and international campuses, Northeastern offers a set of signature programs, which contextualize, enrich, and enhance student learning. The Semester in program is currently offered at Northeastern campuses in San Francisco and London. The GEO continues to expand programs throughout the Northeastern network, which includes campuses in Charlotte, North Carolina; London, UK; Portland, Maine; San Francisco, California; San Jose, California; Seattle, Washington; Toronto, Ontario; and Vancouver, Canada.
  3. **Dialogue of Civilizations.** The Dialogue of Civilizations (DOC) are faculty-led study-abroad programs that build upon and enhance students' academic studies and training. DOC programs allow students to engage with course content in different national, cultural, political, and social contexts. The programs foster meaningful conversations between Northeastern students and people around the world, including their peers.
  4. **Global Engagement Program.** The Global Engagement Program (GEP) is an invitation-only program offered to select high-talent students in specific academic disciplines. GEP provides these students a truly interdisciplinary global undergraduate experience by creating a learning environment that spans multiple cultures and continents. Students begin their experience at NCH at Northeastern in London and continue to move between Northeastern's Boston campus, global network, and global partners over four years. Each year and experience is associated with a particular theme connected to the development of a global mindset.
  5. **Global Quest.** Global Quest is a Northeastern student's first opportunity to study abroad. This full-year experience begins with a fall semester on the Boston campus, where students live with their cohort and engage in programming to prepare for studying abroad. In the spring semester, Global Quest students study abroad with members of their cohort in a select location based on their major.
  6. **Specialized entry programs.** Specialized entry programs are unique programs through which students can matriculate into Northeastern. These include programs such as N.U.*in*, NU Bound, and NU Immerse. More information about these programs is available on the Specialized Entry Programs website (<https://www.northeastern.edu/admissions/academics/specialized-entry/>).

Visit the GEO website (<http://www.northeastern.edu/studyabroad/>) to see a complete list of program options and descriptions.

## Embedded Global Programs

Embedded programming incorporates global experiences into courses taught at Northeastern's Boston campus and provides students with the opportunity to spend 7 to 10 days in a global setting to further punctuate and underscore the subject matter in a meaningful way.

## Global Co-op

The Global Cooperative Education Program provides opportunities for Northeastern students to participate in co-ops on all seven continents with international and multinational employers, U.S. employers doing business abroad, and other international organizations. Students may apply for existing positions or work with a co-op counselor to develop their own. All majors are welcome to apply. International students participating in co-op abroad must consult with the Office of Global Services (OGS) in advance of departure to ensure reentry to the United States in proper nonimmigrant visa status. The Presidential Global Scholars Program (<https://studentfinance.northeastern.edu/applying-for-aid/undergraduate/types-of-aid/scholarships/presidential-global-scholars-program/>) provides financial support for international co-op.

## Engage with GEO

The GEO offers many opportunities for students to explore global programs and learn more about the possibilities.

**Social media platforms:** Students can engage with GEO through social media platforms such as Twitter, Facebook, and Instagram. Students are welcome to participate in preparatory webinars, join staff and alumni Q & A, and envision their experience through dynamic photo, video, and written recollections of student experiences.

GEO events (<https://www.northeastern.edu/geo/events/>): GEO offers a range of events throughout the year to help students answer questions and concerns about the study-abroad experience, from the application logistics of a specific program, to navigating questions of identity while abroad. Please refer to the GEO events calendar on the GEO website for the list of upcoming fairs, workshops, and info sessions.

**Meet with Global Experience peer advisors** (<https://www.northeastern.edu/geo/contact/>): As GEO program alumni, Global Experience peer advisors provide the unique lens of recent global program participation. They help students navigate the variety of available programs and refine their goals for the experience. Peer advisors are available to meet with students during office hours, without an appointment needed.

**Meet with Global Experience advisors** (<https://www.northeastern.edu/geo/contact/>): Global Experience advisors provide expertise and assistance to students from the moment students are ready to select programs, to their return from the experience. Global Experience advisors meet with students by appointment and advise by global region. The list of Global Experience advisors and the different regions that they advise is available on the GEO website.

After choosing a program, students should consult with their departmental or college advisors. International students must also consult with the OGS (<http://www.northeastern.edu/ogs/>) to determine if an updated I-20 for re-entry may be needed. Note that studying abroad in a student's final semester may result in a delay in graduation due to calendar discrepancies across institutions.

## Living and Learning Communities

Website (<https://www.northeastern.edu/housing/living-learning-communities/>)

All first- and second-year students are required to live in university housing. Housing and Residential Life is dedicated to working with Northeastern students to help them build strong community living environments that support personal development and academic success.

The residential experience created for both first- and second-year students has two main goals: to create opportunities for social connection, support, and belonging and to provide opportunities for learning and development. The core outcome is to prepare students to become lifelong learners who are holistically formed, experience growth alongside others, and are responsible contributors to local and global communities. A central component of the residential experience for first-year students is Living Learning Communities (LLCs). LLCs bring together students with a shared personal or academic interest to learn and grow as a community during their first year at Northeastern.

## NUpaht

### Learning, Knowing, Doing, Leading

NUpaht is Northeastern University's set of institution-wide general education requirements for all students in all majors. The goal of NUpaht is to develop in our students the knowledge and skills to be lifelong learners with success in many careers, to be thoughtful global citizens, and to be fulfilled human beings. It offers students the flexibility to integrate general education learning into their individual educational journeys while maintaining the rigor of high standards through defined learning outcomes, making NUpaht a unique tool for personalized enrichment. NUpaht is competency based rather than course based. It is built around essential, broad-based knowledge and skills—such as understanding societies and using and analyzing data—integrated with specific content areas and disciplines.

NUpaht requirements are met throughout a student's program of study. NUpaht requirements are not restricted to specific colleges or departments and can be fulfilled through major, minor, or concentration requirements as well as through general electives. NUpaht courses may not be taken pass/fail. NUpaht is required for all freshmen who entered in fall 2016 and later. It does not apply to students already admitted with a different set of core requirements or to transfer students whose entry year was earlier than the fall of 2016.

- Requirements (p. 46)
- Learning Goals (p. 46)
- Writing-Intensive Courses (p. 49)
- Additional Requirements for BA Students (p. 49)

## NUpaht Requirements

NUpaht requirements are a set of eleven competencies designed to prepare students for personal success in an ever-evolving global society regardless of their chosen field of study. NUpaht requirements are as follows:

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Engaging Differences and Diversity
- Employing Ethical Reasoning

- Writing across Audiences and Genres
- Integrating Knowledge and Skills through Experience
- Demonstrating Thought and Action in a Capstone

Because NUpaht is competency based rather than course based, students have many options of courses to fulfill the requirements. Students can use the Dashboard tool (<https://www.northeastern.edu/core/dashboard/>) to find courses both in and beyond their major requirements that satisfy NUpaht. Courses that meet major, minor, or concentration requirements can also meet NUpaht requirements. There are no level restrictions or semester-hour restrictions. No course taken as pass/fail can be used to satisfy a NUpaht requirement. A single course can count for up to two of the following requirements:

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Engaging Differences and Diversity
- Employing Ethical Reasoning

The three additional requirements (writing-intensive in the major, capstone, and experiential) are not limited. So, for example, a course may have two out of the first list (such as Differences and Diversity and Societies and Institutions) and *also* fulfill writing-intensive in the major and capstone.

Transfer credit and placement tests can also be used to meet the NUpaht attributes of the Northeastern course equivalents. Up to five of the following eight requirements can be met by transferred or placement test credits:

- Engaging with Natural and Designed World
- Exploring Creative Expression and Innovation
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Engaging Differences and Diversity
- Employing Ethical Reasoning

Transfer credits cannot be used to fulfill the capstone or experiential requirements. Of the writing requirements (p. 49), only the first-year writing requirement can be met by transferred or placement test credits.

## NUpaht Learning Goals

Established and assessed learning goals ensure rigorous opportunities for students to achieve the essential skills and competencies of NUPath regardless of the context or course within which the learning occurs. Any course that meets a NUPath requirement incorporates the learning goals of that requirement. The requirement short name and/or user code is what will appear in course descriptions and student audits.

## Engaging with the Natural and Designed World

**Short Name: Natural and Designed World**

**User Code: ND**

Students study and practice scientific investigation and/or engineering design in order to understand the natural world and to effect changes in it to meet human and societal needs and wants. They learn critical thinking and analytical problem solving; the biological, chemical, and/or physical principles that govern the natural world; and the efforts that underlie the origins, development, acceptance, and applications of those principles.

### LEARNING GOALS

By the end of the course, students should be able to:

- A. Formulate a question that can be answered through investigation or a challenge that can be addressed through research or design.
- B. Develop and use models based on evidence to predict and show relationships among variables between systems or components of systems in the natural and/or designed world.
- C. Use and question scientific principles and practices to evaluate issues raised by the interplay of science, technology, and society.

## Exploring Creative Expression and Innovation

**Short Name: Creative Expression/Innovation**

**User Code: EI**

Students study and practice creative expression and innovation. They learn about traditions of creative expression and innovation in any of a number of modes (texts, image, sounds, design, etc.) and products (poems, paintings, prototypes, business plans, games, apps, medical devices and procedures, etc.) and develop their own creative processes and products as a means of seeing and experiencing the world in new ways and communicating those experiences to others.

### LEARNING GOALS

By the end of the course, students should be able to:

- A. Describe creative processes in one or more disciplines (e.g. art, business, writing, science, engineering).
- B. Generate an artifact (e.g., design, poem/essay, application, visualization, musical composition, product, prototype) through a creative process.
- C. Evaluate experimentation, failure, and revision in the creation of innovative projects.

## Interpreting Culture

**Short Name: Interpreting Culture**

**User Code: IC**

Students study and analyze cultural practices, artifacts, and texts (e.g., visual art, literature, theatrical performances, musical compositions, architectural structures). They learn critical reading and observation strategies and how traditions of theoretical,

aesthetic, and/or literary criticism provide different lenses for the interpretation of cultural objects and practices.

### LEARNING GOALS

By the end of the course, students should be able to:

- A. Recognize and identify a variety of cultural practices and creations, their forms of production, and development over time.
- B. Acquire and assess techniques of interpretation (including critical reading and observation techniques); criticism; and analysis of cultural practices, texts, and/or artifacts.
- C. Formulate arguments for and against different theories and interpretations of cultural practices, texts, and/or artifacts.

## Conducting Formal and Quantitative Reasoning

**Short Name: Formal/Quantitative Reasoning**

**User Code: FQ**

Students study and practice systematic formal reasoning using either the symbolic languages of mathematics and logic or the combinations of text and symbols characteristic of computer software. They learn when and how to apply formal reasoning to particular problems and subject matters.

### LEARNING GOALS

By the end of the course, students should be able to:

- A. Recognize when examination of a phenomenon or situation can benefit from problem-solving techniques and analyses that use formal reasoning.
- B. Use their expertise in some applications of formal reasoning and know when to call upon domain experts when a problem is beyond their personal expertise.
- C. Generate artifacts that require formal reasoning and planning. These artifacts might include logical proofs, mathematical computations, software, simulations, problem solutions, or plans/analyses in a variety of disciplines that require a formal, systematic component.

## Understanding Societies and Institutions

**Short Name: Societies and Institutions**

**User Code: SI**

Students study and practice social science, historical, and/or literary methods of inquiry and theories in order to understand human behavior and cultural, social, political, and economic institutions, systems, and processes. They learn theories of social behavior as they relate to phenomena such as globalization, social change, and civic sustainability.

### LEARNING GOALS

By the end of the course, students should be able to:

- A. Describe current theories of how social, political, or economic institutions, systems, and processes work.
- B. Explain the historical and cultural contingency of many descriptions and explanations of human behavior, institutions, systems, and processes.
- C. Evaluate social, political, or economic theories by applying them to local and global phenomena.



## Analyzing and Using Data

**Short Name: Analyzing and Using Data**

**User Code: AD**

Students study and practice methods and tools of data analysis and use. Students learn about the structure and analysis of at least one type of data (e.g., numbers, texts, documents, web data, images, videos, sounds, maps) and acquire the skills to examine, evaluate, and critique such data; extract patterns; summarize features; create visualizations; and provide insight not obvious from the raw data itself. Students also learn to be sensitive to ethical concerns associated with data: security, privacy, confidentiality, and fairness.

### LEARNING GOALS

By the end of the course, students should be able to:

- A. Describe how data may be acquired, stored, transmitted, and processed.
- B. Analyze at least one important type of data and summarize the results of an analysis in ways that provide insight.
- C. Use mathematical methods and/or computational tools to perform analysis.
- D. Evaluate and critique choices made in selection, analysis, and presentation of data.

## Engaging Differences and Diversity

**Short Name: Differences and Diversity**

**User Code: DD**

Students study and practice methods for recognizing and understanding human diversity of various kinds in global, local, and organizational contexts. They learn theories and perspectives of human difference; civic sustainability and multiculturalism; how social arrangements shape and are shaped by difference; and the histories, cultures, and interactions of diverse groups.

### LEARNING GOALS

By the end of the course, students should be able to:

- A. Describe how notions of human difference have changed over time and across local and global contexts.
- B. Discuss the value in recognizing, respecting, and embracing human diversity and how diversity contributes to culture and society, including civic sustainability.
- C. Evaluate and compare two or more theories of human difference and approaches to cultivating and leveraging diversity.
- D. Connect theories of human difference and approaches to diversity to one's own experience.

## Employing Ethical Reasoning

**Short Name: Ethical Reasoning**

**User Code: ER**

Students study and practice methods of analyzing and evaluating the moral dimensions of situations and conduct. They learn ethical theories and frameworks; explore how conceptions of morals and ethics shape interpretation of concepts such as justice, fairness, rights and responsibilities, virtue, and the good life; and apply these

to personal, professional, social, political, historical, or economic questions and situations.

### LEARNING GOALS

By the end of the course, students should be able to:

- A. Describe the moral and ethical elements of an issue, problem, or situation.
- B. Explain at least two key ethical theories.
- C. Apply ethical theories to moral dilemmas and personal positions.

## Writing Across Audiences and Genres

**Short Name: Writing Across Audiences/Genres**

**User Code: WF/WD/WI**

**Note: This requirement is met by four courses. See more details under Writing-Intensive Courses (p. 49).**

Students study and practice writing for multiple public, academic, and professional audiences and contexts. They learn to use writing strategies, conventions, genres, technologies, and modalities (e.g., text, sounds, image, video) to communicate effectively.

### Learning goals for first-year writing:

- A. Adapt writing for multiple academic, professional, and public occasions and audiences.
- B. Identify and practice writing conventions of various genres.
- C. Identify credible, relevant sources and engage and cite them appropriately in their written work.
- D. Draft, revise, and edit their writing using feedback from readers.

### Learning goals for Advanced Writing in the Disciplines:

- A. Adapt writing for multiple academic, professional, and public occasions and audiences.
- B. Display familiarity with the writing conventions of genres in an academic field or profession.
- C. Identify credible, relevant sources and engage and cite them appropriately in their written work.
- D. Draft, revise, and edit their writing using feedback from readers.

### Learning goals for writing-intensive courses in the major:

- A. Demonstrate facility with the writing conventions of genres in the academic field or profession.
- B. Identify credible, relevant sources and engage and cite them appropriately in their writing work.
- C. Draft, revise, and edit their writing using feedback from readers.

## Integrating Knowledge and Skills Through Experience

**Short Name: Integration of Experience**

**User Code: EX**

Students study and practice the principles and strategies of experiential learning. Through direct experience and reflection on that experience, they learn to recognize and articulate their knowledge and skills, to apply the knowledge and skills they learn in

one context to another context, and to determine what knowledge and skills they need to develop to meet their goals.

**Learning Goals: By the end of the course, students should be able to:**

- A. Apply knowledge and skills in new, authentic contexts.
- B. Gain new knowledge and develop new skills to successfully engage in unfamiliar tasks and activities.
- C. Integrate and use the deepened knowledge and skills as well as the newly gained knowledge and skills to continue to learn in their academic programs.
- D. Articulate how and what one learns across a range of contexts.

## Demonstrating Thought and Action in a Capstone

**Short Name: Capstone Experience**

**User Code: CE**

Each student must take at least one course designated as a capstone experience. Capstone courses may be designed for a specific degree program, for a department, or for a college. The learning goals for a capstone will be developed by the unit that is designing the capstone. Students must complete a capstone in their major. In cases where a student has multiple majors (such as in a combined or double major), the units may specify in which major to take the capstone or may leave the choice to the student.

## Writing-Intensive Courses

The faculty expects all students to become effective writers and achieve the learning goals of the "Writing across Audiences and Genres" NUpath attributes. To this end, students are given opportunities to improve their writing throughout their curriculum.

### First-Year Writing Requirement

All first-year students must satisfy a first-year writing requirement in one of the following ways:

Code	Title	Hours
ENGW 1111	First-Year Writing	4
ENGW 1110 and ENGW 1111	Introductory First-Year Writing and First-Year Writing	8
ENGW 1102	First-Year Writing for Multilingual Writers	4

Depending on performance in Introductory First-Year Writing (ENGW 1110), the second half of the two-course sequence may be waived, as determined by the Department of English. Students must earn a C or better in the required writing course to satisfy the first-year writing requirement.

The First-Year Writing Program conducts a version of "guided self-placement" and requires students bring an essay to the first class meeting; see the guided self-placement (<https://www.northeastern.edu/writing/first-year-writing/guided-self-placement/>) page for details.

For more information about the Writing Program, visit the Writing Program webpage (<http://www.northeastern.edu/writing/>).

### Advanced Writing Requirement

Advanced Writing in the Disciplines (AWD) is the second course of the university-wide requirement. Students are eligible to enroll in

AWD once they satisfy the first-year requirement, earn a minimum of 64 semester hours of academic credit (this number includes the semester in which students enroll in AWD), and have at least junior or senior standing. Students are encouraged to take AWD before they have accrued 96 semester hours. A variety of AWD sections are offered, including Advanced Writing in the Technical Professions, Advanced Writing in the Sciences, and Advanced Writing in the Health Professions, among others. A small number of online sections and sections for non-native speakers of English are also offered. Students should consult with their advisors to choose the section that best suits their needs. Transfer credit cannot be used to satisfy this requirement. Students must earn a C or better to satisfy the advanced writing requirement.

For more information about the Writing Program, visit the Writing Program webpage (<http://www.northeastern.edu/writing/>).

## Writing-Intensive Courses in the Major

Each major includes at least two additional writing-intensive courses. These courses are characterized by:

- A significant amount of writing, as appropriate to the discipline
- Multiple opportunities to write, including informal writing-to-learn activities and formal learning-to-write projects
- Opportunities for students to move through all phases of the writing process, from drafting through final editing
- Instruction in writing, including feedback from the instructor (and perhaps others) that students can use to draft, revise, and edit their written work

## Additional Requirements for BA Students

In addition to successfully completing the university requirements of NUpath (p. 46), students pursuing a Bachelor of Arts (BA) degree must fulfill the BA core requirements as outlined below.

### Language Requirement for BA Students

Each BA student must complete the language requirement by demonstrating proficiency at the elementary level and satisfying an intermediate-level requirement as described below.

#### ELEMENTARY-LEVEL PROFICIENCY

Satisfy one of the following requirements:

1. Complete elementary-level two (course number 1102) of a language with grades of C or better in all coursework (pass/fail grades cannot be used to satisfy this proficiency requirement).
2. Earn a 4 or 5 score on an Advanced Placement (AP) exam in one of the languages offered or receive transfer credit for the equivalent of elementary-level two (course number 1102). Students who have AP or transfer credit must also receive a satisfactory rating in a language-specific interview administered by the World Languages Center upon matriculation.
3. Receive a satisfactory score (as determined by the World Languages Center) on a standardized placement exam and a satisfactory rating in a language-specific interview administered by the World Languages Center upon matriculation.

#### INTERMEDIATE-LEVEL REQUIREMENT

Satisfy one of the following requirements:

1. Complete a course at the intermediate level (course number 2101 or higher) in the language taken at the elementary level.

2. Complete a course in which the subject matter focuses on some aspect of the culture, history, or society of a part of the world where the language taken at the elementary level is spoken or used by a significant portion of the population. For a course list, visit the myNortheastern web portal (<https://my.northeastern.edu/>), click on the "Self-Service" tab, then on "My Degree Audit."
3. Demonstrate proficiency by successfully completing a proficiency interview (scheduled through the World Languages Center). This option is available only for heritage speakers of a language or for students who have completed the elementary-level language requirement through one of the following:
  - a. Advanced placement
  - b. Standardized placement exam as outlined above

## PreMed and PreHealth Advising

Website (<https://undergraduate.northeastern.edu/prehealth/>)

### PreMed and PreHealth Studies

The PreMed and PreHealth Advising Program provides support for Northeastern students who are planning to pursue training in medicine, including allopathic medicine (MD), osteopathic medicine (DO), dentistry, optometry, physician assistant studies, podiatric medicine, and veterinary medicine.

Academic course requirements for health professional programs may be integrated into any major at Northeastern. Health professional school admission committees generally give no preference to any particular undergraduate major. As such, students should focus on meeting the course requirements of their chosen field of study, together with their health professional school requirements, with demonstrated academic rigor and excellence. For some majors it may be necessary to complete additional credit hours of coursework, with associated tuition, to fulfill all premed/prehealth course requirements.

### Prerequisite Courses

Most health professional schools require a common set of courses. The courses listed below meet the course requirements of many health professional programs. These are intended to provide a foundation in subject areas relevant to the student's intended health professional program and its corresponding entrance exam. It is the student's responsibility to research the academic requirements for specific schools of interest and work with their advisors to determine an appropriate course of study.

*Note:* Corequisite laboratories are required for most science courses.

#### BIOLOGY

Two semesters

#### GENERAL CHEMISTRY

Two semesters (or a combined general chemistry course)

#### ORGANIC CHEMISTRY

Two semesters

#### PHYSICS

Two semesters

#### MATHEMATICS

One semester each of calculus and statistics

#### ENGLISH COMPOSITION/Writing-INTENSIVE

Two semesters

### BEHAVIORAL SCIENCES

One semester each of psychology and sociology (for MCAT preparation)

### ADDITIONAL SCIENCE COURSEWORK

*The following coursework is required or recommended by many programs and necessary for MCAT preparation:*

- Genetics and molecular biology
- Biochemistry

### Supporting Information

Academic policies and course requirements are school specific. Students should research requirements and plan a program of study as early as possible in consultation with both their major and premed/prehealth advisor to determine the best way to successfully complete their required coursework. Please refer to the relevant information and website(s) below, as well as official admissions guidebooks, for detailed requirements.

### STUDY ABROAD/FOREIGN COURSEWORK

Not all health professional schools will accept core science (biology, chemistry, math, or physics) prerequisite coursework taken outside of the United States or Canada.

If you are planning to take core science prerequisite coursework abroad, it is recommended you enroll in an American college overseas (i.e., American College of Thessaloniki, John Cabot University in Rome, Italy, etc.). Despite the fact these institutions are physically located outside of the United States, these schools have received accreditation from the Council for Higher Education Accreditation and are treated like any other U.S. or Canadian school.

If you are considering attending a foreign institution outside of the United States or Canada, please contact the schools you are interested in applying to before going overseas to ensure that your coursework will be accepted.

### AP/IB CREDIT

Each school will have their own policy regarding AP/IB credit, and it is best to consult with their website or admissions office to find out more about their policy. Generally, students may use AP and IB credit toward prerequisite courses. However, AP/IB credit often does not reduce the required coursework needed at the college level. Applicants may be expected to take the equivalent number of upper-level courses within the discipline if students have been granted AP/IB credit.

### RESOURCES

- Medical School Admissions Requirements (AAMC) (<http://www.aamc.org/>)
- Osteopathic College Information Book (AACOM) (<http://www.aacom.org/>)
- Official Guide to Dental Schools (ADEA) ([http://www.adea.org/GoDental/Application\\_Preparation/The\\_Application\\_to\\_Dental\\_School\\_ADEA\\_AADSAS/Fee\\_Assistance\\_Program.aspx](http://www.adea.org/GoDental/Application_Preparation/The_Application_to_Dental_School_ADEA_AADSAS/Fee_Assistance_Program.aspx))
- Schools and Colleges of Optometry Admissions Requirements (ASCO) (<http://www.optomed.org/>)
- Physician Assistant Education Association Program Directory (PAEA) ([http://directory.paeaonline.org/?\\_ga=2.173258531.1419961704.1539625485-711010794.1539625485](http://directory.paeaonline.org/?_ga=2.173258531.1419961704.1539625485-711010794.1539625485))
- Podiatric Medical College Information Book (AACPM) (<http://www.aacpm.org/>)
- Veterinary Medical School Admissions Requirements (AAVMC) (<https://www.aavmc.org/data/files/vmcas/prereqchart.pdf>)

## Pre-Law Advising

Website (<http://www.northeastern.edu/prelaw/>)

Located in Employer Engagement and Career Design, Pre-Law Advising at Northeastern enables current students and alumni/ae to explore the legal field as a career path and helps them navigate the law school application process. Since most law school admission committees give no special preference to any particular undergraduate major, Northeastern encourages students to pursue the undergraduate major of your choice, supplemented with robust co-op, leadership, and service experiences. Academically, we guide students to enroll in challenging courses that develop core skills and values, such as analytical and problem-solving skills, research, critical reading, oral and written communication, organization and project management, public service, and promotion of justice.

In addition, Northeastern offers the PlusJD program. Designed for academically outstanding, motivated, and resourceful students, the PlusJD—Northeastern’s Fast Track to Law School program—selects highly qualified Northeastern University students to begin their first-year law school courses during their last year of undergraduate study. Credits earned in the shared year are applied toward both their bachelor’s and law degrees. As a result, students can complete both degrees in as little as six years, saving a full year of time and tuition.

Please visit the School of Law for more information about the PlusJD program (<https://www.northeastern.edu/law/admission/jd/apply/plusjd/>).

## Research and Creative Activity

Website (<https://undergraduate.northeastern.edu/research/>)

Northeastern University’s thriving culture of scholarly and creative innovation provides students with many opportunities to create and disseminate new knowledge, practices, and solutions to pressing global challenges. Research and creative endeavors are key components of Northeastern’s experiential learning model. Experiences can range from laboratory bench work to the analysis of big data to archival research to collaborative theatre productions. This work can take place in a variety of contexts and formats, including the following:

- Courses, which generally fulfill major elective requirements
- Labs or centers
- Research or creative-based co-ops or internships
- Community-based research or creative endeavor
- Research or creative-based activity as the option for work-study work
- Research or creative endeavor as a service activity
- Junior/senior honors projects

The Office of Undergraduate Research and Fellowships, along with other offices and programs on campus, support students through workshops, mentoring, and consultation on applications for distinguished fellowships and advanced study; funding through the university-wide Project-Based Exploration for the Advancement of Knowledge, or PEAK Experiences Awards; and much more. Northeastern undergraduates are an important part of Northeastern’s research culture, and they frequently present their findings at national and international conferences; in scholarly journals; and at the university’s annual Research, Innovation, and Scholarship Expo. We believe that the best answers—and the best questions—are born out of bringing diverse perspectives, experiences, and knowledge into conversation with one another. Therefore, we believe that a diverse

and inclusive community of researchers, creative practitioners, and fellowship applicants not only fosters innovation and creativity but is a precondition of the excellence for which we strive.

## Service-Learning

Website (<http://www.northeastern.edu/servicelearning/>)

Community engagement is an integral part of Northeastern’s mission. But more than good works, collaborating with the community through structured service-learning courses is an academically rigorous educational experience that allows students to broaden their knowledge and skills through service that supports our partnerships with Boston schools, neighborhood agencies, health clinics, and nonprofit organizations.

Service-learning is integrated by educators in a way designed to meet needs and goals identified by the community while being intricately linked with learning objectives and outcomes. Before, during, and after their service, students also engage in structured reflection to help them gain further insight into course or program content, a broader appreciation of their academic disciplines, and a greater sense of civic responsibility.

## Undergraduate Degrees

Listed below are the degrees conferred by the undergraduate full-time day colleges at Northeastern University.

### College of Arts, Media and Design

- Bachelor of Arts
- Bachelor of Fine Arts
- Bachelor of Landscape Architecture
- Bachelor of Science

### D’Amore-McKim School of Business

- Bachelor of Science in Business Administration
- Bachelor of Science in International Business
- Bachelor of Science (combined majors only)

### Khoury College of Computer Sciences

- Bachelor of Arts in Computer Science
- Bachelor of Science in Computer Science
- Bachelor of Science in Information Science
- Bachelor of Science (combined majors only)

### College of Engineering

- Bachelor of Science in Bioengineering
- Bachelor of Science in Chemical Engineering
- Bachelor of Science in Civil Engineering
- Bachelor of Science in Computer Engineering
- Bachelor of Science in Electrical Engineering
- Bachelor of Science in Environmental Engineering
- Bachelor of Science in Industrial Engineering
- Bachelor of Science in Mechanical Engineering

### Bouvé College of Health Sciences

- Bachelor of Science
- Bachelor of Science in Nursing
- Bachelor of Science in Rehabilitation Science

- Doctor of Pharmacy (six-year program)
- Doctor of Physical Therapy (six-year program)

### College of Science

- Bachelor of Arts
- Bachelor of Science

### College of Social Sciences and Humanities

- Bachelor of Arts
- Bachelor of Science

## Undergraduate Internships

An undergraduate internship is defined as an unpaid opportunity for supervised practical experience related to the student's academic area of study. Internships must be correlated to program curriculum, approved by an academic entity, and supervised by a faculty member. Students must work at least 12 hours per week to earn academic credit for an internship in a term, as equated to the course credit guidelines.

## University Honors Program

### Laurie Kramer, PhD

Director

617.373.2333  
617.373.5300 (fax)  
honors@northeastern.edu

The University Honors Program values integrated, student-directed, and experiential learning that is personalized to meet students' individual goals and interests. Our community of intellectually engaged students, faculty, and advisors are committed to engagement in scholarship that will enable students to confront critical societal issues and make a difference at home and in the world. Students benefit from unique and enriched educational options that include stimulating courses, opportunities for research and creative endeavors, global experiences, service-learning, mentoring, and the development of competencies that will position them for lifelong learning and personal and professional success. Throughout their undergraduate experience, Honors students are guided and supported as they chart their unique educational plans through personalized advising, engagement in diverse competency-based learning experiences, and participation in a set of networked communities that include Honors Living Learning Communities.

All applicants seeking freshman entry at Northeastern University (for fall semester entry) are considered for admission into the University Honors Program and are notified of their selection in their letter of admission. There is no separate application. Continuing students in their first, second, or third semesters who wish to be considered for entry may consult the University Honors Program's website (<http://www.northeastern.edu/honors/>) for application instructions.

## University-Wide Requirements

*Note:* Individual program requirements may exceed the following minima.

Minimum 128 total semester hours required

Minimum 2.000 GPA required

Students must earn a minimum of 64 Northeastern University semester hours in order to receive a bachelor's degree.

## World Languages Center

### Stacey Katz Bourns, PhD

Director

617.373.3131  
Stacey Katz Bourns, Director, [s.bourns@northeastern.edu](mailto:s.bourns@northeastern.edu)

The primary goal of the World Languages Center (WLC) is to offer a variety of language/culture classes and to ensure that students will be able to take at least two years of instruction (four semesters) in any language offered by the WLC and up to three years of instruction (six semesters) in many of the languages offered.

### Placement Assessment

Students with prior experience in French or Spanish must take the online written placement exam if they wish to enroll in a French or Spanish language class. The link for this exam can be found on the WLC website. Students with prior experience in any other language must contact the WLC to make an appointment for a placement assessment interview. Results of a student's online placement or interview assessments are valid for one year only.

Any student with prior experience in a language who registers for a language course without taking the WLC online placement test or a WLC placement assessment will not receive a letter grade for the course.

### Attendance in Language Classes

The development of competence in a language requires regular and structured interaction opportunities. Thus, the WLC takes attendance in language classes very seriously. Each missed class will have specific consequences, including a negative impact on a student's final grade. If students believe they have been inappropriately placed in a language class, they should contact the WLC immediately.

### Auditing Language Classes

Auditing language classes is not permitted. Students who are not on the official roster of a class may not sit in on the class.

### Immersion Language Classes

The WLC offers off-campus language immersion classes in a variety of languages during the summer 1 and summer 2 terms. Some of these courses may count toward fulfillment of the BA language requirement or a language minor, assuming a student receives a grade of C or better.

### Study-Away/Abroad Classes

The WLC will authenticate credit-bearing language classes taken in study-away/abroad programs at accredited institutions in fulfillment of and as equivalent to WLC language classes numbered 1101, 1102, 2101, or 2102. Students must receive approval of language course equivalence from the WLC before embarking on a study-away/abroad program. Failure to do so may mean that the courses taken away/abroad will not be accepted in lieu of on-site Northeastern language courses and thus may not satisfy the language requirement. Credit is granted only for successful completion of the course.

## College of Arts, Media and Design

Website (<https://camd.northeastern.edu/>)

**Elizabeth Hudson, PhD**, Dean

**Andrea Raynor, MFA**, Associate Dean for Undergraduate Programs

**Jane Amidon, MLA**, Senior Associate Dean for Graduate Programs and Strategic Initiatives

**Matthew McDonald, PhD**, Associate Dean for Academic Affairs, Faculty and Research

**Thomas Michael, MBA**, Associate Dean for Administration and Finance

**Katherine Calzada, MEd**, Assistant Dean for Research Development

**Adam Smith, MS, MBA**, Assistant Dean for Academic Programs

617.373.3682

617.373.5084 (fax)

camd@northeastern.edu

In today's global economy, the disciplines within the College of Arts, Media and Design are powerful drivers of growth and innovation. Creative fields and evolving technology make it possible to connect people and ideas as never before, serving as strong catalysts for change and expanding the understanding of our shared humanity.

The college integrates programs of study in architecture, art and design, communication studies, game design, journalism, media and screen studies, music, and theatre with meaningful experiential learning opportunities, enabling students to explore their passions and prepare for postgraduate opportunities in their chosen fields.

The college offers Bachelor of Arts, Bachelor of Science, and Bachelor of Fine Arts degrees in a number of majors, as well as interdisciplinary combined majors with every college across the university, and offers opportunities for nonmajors to engage in the college through NUPath and an extensive offering of minors. Opportunities available to students in the College of Arts, Media and Design include national and international programs for study and experience; programs in field settings, both local and abroad; and programs involving affiliations in such areas as professional performing arts organizations and media organizations. The college also emphasizes experiential learning through cooperative education; service-learning; and other kinds of internships, student-faculty research collaborations, and study abroad.

Students have a variety of experiential learning options that can be completed in four years. Each plan offers co-op opportunities, typically in an area related to the student's chosen academic area. Students are normally eligible to participate in co-op as early as the second semester of their sophomore year.

Many programs are flexible enough to allow students to pursue a PlusOne, a double major, a major and a minor, or one of the college's combined majors. The college also offers students the opportunity to create an independent major in cases where their interests and goals are not met by an existing major program.

## Academic Advising

The College of Arts, Media and Design has an academic advising (<https://camd.northeastern.edu/undergraduate-students/undergraduate-advising/>) system that consists of academic advisors located in the Academic Advising and Cooperative Education office and faculty mentors located in the college's academic schools and departments. Detailed advising information is available on the college website (<https://camd.northeastern.edu/undergraduate-students/undergraduate-advising/>). Prelaw advising (<https://careers.northeastern.edu/article/pre-law/>) and premedical/prehealth advising (<https://undergraduate.northeastern.edu/prehealth/>) are also available. We can

be reached by phone at 617.373.5583, by fax at 617.373.8719, or by email at [camdadvising@northeastern.edu](mailto:camdadvising@northeastern.edu).

## Academic Progression Standards

The College of Arts, Media and Design adheres to the university's academic progression standards (p. 27). Some programs have additional specific requirements in order to progress from year to year or to graduate from that program. This information can be found on each program's page.

## Graduation Clearance Process

Students in the College of Arts, Media and Design are required to meet with their assigned academic advisor to determine their remaining graduation requirements. Some departments also require a meeting with a faculty mentor. The graduation clearance process should be completed in the junior year to facilitate planning of all remaining requirements.

## College Requirements

All students in the College of Arts, Media and Design must successfully complete the university requirements of NUPath (p. 46). In addition, students pursuing a Bachelor of Arts degree (BA) must fulfill the BA requirements (p. 49).

## School of Architecture

Website (<http://camd.northeastern.edu/architecture/>)

### Dan Adams

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Architecture and landscape architecture are the context for civic life. In an age of increasingly rapid technological and social change, these fields forge connections between our past and our future. This involves critical thinking about many complex contemporary issues, such as the relationship of public and private life; the interaction between formal and political ideas in cities; and the role of technology in the design, construction, and management of contemporary spaces. Because the process of design involves the synthesis of disparate elements, it can also translate into strategies for approaching a wide range of other problems not traditionally understood to be "architecture." At Northeastern, we connect specific problem solving inherent to architectural and landscape architectural understanding with the larger context of contemporary cities.

The curriculum teaches students to conceptualize, synthesize, and represent complex architectural, urban, and environmental issues. The program focuses on core skills and critical thinking as preparation for both professional practice and advanced study. The curriculum in the design studio encompasses two major themes: First, the studio projects focus on the art of building and environmental performance, and second, the projects explore how designed environments—from buildings to regional infrastructures—affect urban conditions. The art of building includes the study of construction and technology, as well as the cultural messages created by the expression of material, structure, and form. Environmental performance includes imagining how we can live more sustainably by developing innovative design solutions for synthesizing natural and urban conditions. The contemporary city is our laboratory. This urban focus requires that students integrate their own creative impulses with the future of the society of which they will be a part. By building on the practical and technical training afforded by co-op to develop core professional skills, the curriculum focuses on architecture

and landscape architecture's fundamental aesthetic, technological, social, and political aspects.

With the effective synthesis of the art of building and environmental performance with urban issues, Northeastern's programs in architecture and landscape architecture are becoming a leader in identifying opportunities for civic representation, urban development, and neighborhood design. Northeastern's students are in demand because of their combination of professional competence and fluency in urban architectural and environmental design issues. There are opportunities for interdisciplinary cooperation in urban-oriented research and creative work in areas such as the economics of urban redevelopment; the design and planning of resilient food, water, energy, transit, and industrial systems; urban public policy; and new forms of spatial and visual communication. Additionally, Northeastern's urban focus is applied globally in the semester abroad.

### External Transfers

Full-time architecture faculty members may evaluate nonstudio courses for conformity with NU requirements using transcripts and course descriptions. Any student seeking studio course credit (drawing, technology, or design) must present a portfolio for review and evaluation.

*Portfolios are optional, though encouraged, for freshman applicants.*

### Academic Progression Standards

A minimum grade-point average (GPA) of 2.500 is required to remain in the majors of architecture or landscape architecture. Students below this average will not be allowed to continue in these majors.

A minimum GPA of 2.000 is required to remain in the major of architectural studies. Students below this average will not be allowed to continue in the major.

To graduate, a student must have a 2.500 GPA in architecture or landscape architecture.

### Programs

#### Bachelor of Science (BS)

- Architecture (p. 54)
- Architectural Studies (p. 56)
- Architectural Studies and Design (p. 58)
- Architecture and English (p. 60)
- Civil Engineering and Architectural Studies, BSCE (p. 62)
- Environmental and Sustainability Sciences and Landscape Architecture (p. 65)
- Environmental Engineering and Landscape Architecture, BSEnVE (p. 67)

#### Bachelor of Landscape Architecture (BLA)

- Landscape Architecture (p. 70)

### Minors

- Architectural and Urban History (p. 71)
- Architectural Design (p. 71)
- Architectural Science and Systems (p. 72)
- Urban Landscape Studies (p. 72)

## Architecture, BS

Website (<https://camd.northeastern.edu/architecture/academic-programs/architecture/>)

The curriculum pairs studio courses with relevant architecture history and technology courses to support the comprehensive learning experience of the student. Students engage in intensive studio projects that encourage them to seek prototypical solutions to problems in the modern city. Instruction takes place in the studio with one-on-one consultations with faculty, critiques with classmates, and formal reviews. Visiting critics participate in reviews, and there is a lecture series that brings prominent professionals on campus to discuss the work they are doing in the field.

As part of their studies, students are enrolled in two six-month co-ops (<https://camd.northeastern.edu/architecture/experiential-learning-co-op-co-op/>). This allows students to gain real-world experience in architecture that aids them in both their academic development and in professional advancement. Co-op experience can often be applied to one's AXP (<http://www.ncarb.org/Experience-Through-Internships.aspx>) credits.

The School of Architecture offers a NAAB (<http://www.naab.org/>)-accredited one-year program to our students who have successfully completed the BS degree in architecture. This allows our own students to achieve a master's degree in an efficient and timely manner.

Applicants should note that the BS degree in architecture is not sufficient by itself to meet the academic requirement to sit for state licensure. (Most undergraduate architecture degrees are not accredited.) Students who graduate with the BS degree have the option to apply to the one-year NAAB-accredited Master of Architecture (<https://camd.northeastern.edu/architecture/academics/graduate/>) degree that is open to our BS graduates in good standing.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath attributes Natural and Designed World (ND), Creative Expression and Innovation (EI), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Societies and Institutions (SI), Analyzing and Using Data (AD), and Difference and Diversity (DD) are met through the major course requirements.

In order to graduate, students must complete Ethical Reasoning (ER) in their electives.

### Architecture Major Requirements

Code	Title	Hours
<b>SEMESTER 1</b>		
ARCH 1000	Architecture at Northeastern	1

ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
<b>SEMESTER 2</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
Architecture History Elective 1		4
Choose any course in the range of ARCH 2300 to ARCH 2399		
<b>SEMESTER 3</b>		
ARCH 2130	Site, Space, and Program	6
ARCH 2240	Architectonic Systems	4
Architecture History Elective 2		4
Choose any course in the range of ARCH 2300 to ARCH 2399		
<b>SEMESTER 4</b>		
ARCH 2140	Urban Institutions	6
ARCH 2340 and ARCH 2341	Modern Architecture and Recitation for ARCH 2340	4
ARCH 3210 and ARCH 3211	Environmental Systems and Recitation for ARCH 3210	4
ARCH 3450	Advanced Architectural Communication 1	4
<b>SEMESTER 5</b>		
Abroad:		
ARCH 3155	Studio Abroad	4.8
ARCH 3361	Architecture and Urbanism Abroad	3.2
ARCH 3363	Field Study Topics Abroad	1.6
ARCH 3363	Field Study Topics Abroad	1.6
ARCH 3440	Workshop Topics Abroad	1.6
<b>SEMESTER 6</b>		
ARCH 3170	Architecture, Infrastructure, and the City	6
ARCH 5230 and ARCH 5231	Structural Systems and Recitation for ARCH 5230	4
<b>SEMESTER 7</b>		
ARCH 3370	Advanced Topics in Architectural History	4
ARCH 5115	Option Studio	6
ARCH 5310	Design Tactics and Operations	4
<b>SEMESTER 8</b>		
ARCH 5120	Comprehensive Design Studio	6
ARCH 5220	Integrated Building Systems	4

<sup>1</sup> Please note: Advanced Architectural Communication (ARCH 3450) may also be taken in Summer 2 after year two or year four.

## Supporting Courses

Code	Title	Hours
<b>SEMESTER 1</b>		
ENGW 1111	First-Year Writing	4
MATH 1241	Calculus 1	4
<b>SEMESTER 2</b>		
PHYS 1141	General Physics	4
EEAM 2000	Professional Development for Co-op	1
<b>SEMESTER 6</b>		

ENGW 3314	Advanced Writing in the Arts, Media, and Design	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Cooperative Education

Architecture majors are required to complete two six-month co-ops.

COOP 3945 Co-op Work Experience

## Important Note

When registering for classes, note additional electives are required. If you are taking less than 18 semester hours during fall or spring semesters, verify with your adviser that you have registered for all required electives.

## Major GPA Requirement

Minimum 2.500 GPA required

## Architecture Major Credit Requirement

Complete 96 semester hours in the major.

## Program Requirement

142 total semester hours required

## Plan of Study

### Five Years, Two Co-ops in Summer 2/Fall

#### Division A—Last Name Begins with A–L

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 1000	1	ARCH 1110	4	Vacation	0	Vacation	0
ARCH 1310 and ARCH 1311	4	ARCH 1120	6				
ENGW 1111	4	EEAM 2000	1				
MATH 1241	4	PHYS 1141	4				
Elective	4	Architecture History Elective (1 of 2)	4				
		17		19		0	

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 2130	6	ARCH 2140	6	Vacation	0	Co-op	0
ARCH 2240	4	ARCH 2340 and ARCH 2341	4				
Architecture History Elective (2 of 2)	4	ARCH 3210 and ARCH 3211	4				
Elective	4	ARCH 3450	4				
		18		18		0	

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ARCH 3155	4.8	Vacation		Vacation	
		ARCH 3361	3.2				
		ARCH 3363	1.6				
		ARCH 3363	1.6				
		ARCH 3440	1.6				



Humanities elective	1.6			
Language elective	1.6			
05.999999999999998		0		0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARCH 3170	6 ARCH 5115	6 Vacation	Co-op	0
ENGW 3314 or 3315	4 ARCH 3370	4		
ARCH 5230 and ARCH 5231	4 ARCH 5310	4		
Elective	4 Elective	4		
18		18	0	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 ARCH 5120	6
	ARCH 5220	4
	Elective	4
	Elective	4
0		18

Total Hours: 142

### Five Years, Two Co-ops in Spring/Summer 1

#### Division B—Last Name Begins with M–Z

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARCH 1000	1 ARCH 1110	4 Vacation	0 Vacation	0
ARCH 1310 and ARCH 1311	4 ARCH 1120	6		
ENGW 1111	4 PHYS 1141	4		
MATH 1241	4 EEAM 2000	1		
Elective	4 Architecture History Elective (1 of 2)	4		
17		19	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARCH 2130	6 ARCH 2140	6 Vacation	0 Vacation	0
ARCH 2240	4 ARCH 2340 and ARCH 2341	4		
Architecture History Elective (2 of 2)	4 ARCH 3450	4		
Elective	4 ARCH 3210	4		
18		18	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARCH 3155	4.8 Co-op	0 Co-op	0 Vacation	
ARCH 3361	3.2			
ARCH 3362	1.6			

ARCH 3363	1.6		
ARCH 3363	1.6		
ARCH 3440	1.6		
Language elective	1.6		

15.999999999999998

0

0

0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARCH 3170	6 Co-op	0 Co-op	0 Vacation	
ENGW 3314 or 3315	4			
ARCH 5230 and ARCH 5231	4			
Elective	4			
18		0	0	0

**Year 5**

Fall	Hours Spring	Hours
ARCH 5115	6 ARCH 5120	6
ARCH 3370	4 ARCH 5220	4
ARCH 5310	4 Elective	4
Elective	4 Elective	4
18		18

Total Hours: 142

## Architectural Studies, BS

Website (<https://camd.northeastern.edu/architecture/academic-programs/bs-architectural-studies/>)

The Bachelor of Science in Architectural Studies teaches students the rigorous design methods of architecture while also offering a flexible curriculum focused on key contemporary topics related to the built environment. After a common sequence of design, history, and technology courses, students may choose from a rich array of electives in the School of Architecture and throughout the university. The culmination of the major is a single capstone course required for all students.

Students will emerge with a strong portfolio, a foundational grounding in architectural design, and will be well equipped for further graduate education or work experience in design-related fields and creative industries. The Bachelor of Science in Architectural Studies can be completed in four years. Students in this major participate in one six-month co-op and have the option of a second four-month summer co-op. Students also have the option to study abroad for a semester.

Students may choose from one of three areas of emphasis—real estate; sustainability; or history, theory, and culture—or work with the department to put together a customized plan of study.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath Requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

NUpath Requirements Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Ethical Reasoning (ER) must be met through electives.

## Architectural Studies Major Requirements

Code	Title	Hours
<b>Architecture at Northeastern</b>		
ARCH 1000	Architecture at Northeastern	
<b>General Architecture and Studio</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
ARCH 2130	Site, Space, and Program	6
ARCH 2140	Urban Institutions	6
ARCH 3170 or ARCH 3155	Architecture, Infrastructure, and the City Studio Abroad	6
<b>Technology</b>		
ARCH 2260	Introduction to Building Systems	4
<b>History</b>		
ARCH 1310	Buildings and Cities, A Global History	4
ARCH 2340 and ARCH 2341	Modern Architecture and Recitation for ARCH 2340	4
<i>Architecture History Electives</i>		
Choose any course in the range of ARCH 2300 to ARCH 2399.		4
<b>Capstone</b>		
ARCH 4960	Architectural Studies Capstone	4

## Major Electives

Students who wish to be considered for Northeastern's two-year Master of Architecture degree should take ARCH 2240 and ARCH 5230.

Code	Title	Hours
Complete six of the following elective courses. Please note: At least four courses must be taken in the School of Architecture. At least two must be above the 2000 level.		
Any ARCH or LARC course		
<i>Real Estate</i>		
ENTR 2206	Global Social Enterprise	
ENTR 2301	Innovation!	
ENTR 2303	Marketing Strategies for Startups	
ENTR 3330	Lean Design and Rapid Prototyping	
ENTR 4501	Advanced Studies in Entrepreneurial Startups	
MKTG 2209	Introduction to Marketing	
<i>Sustainability</i>		

ENVR 3200	Water Resources
CIVE 1200	How Cities Work: Experiencing Urban Infrastructure
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability
CIVE 4566	Design for Sustainable Transportation: Netherlands
SBSY 5100	Sustainable Design and Technologies in Construction
SBSY 5200	Sustainable Engineering Systems for Buildings
PHIL 1180	Environmental Ethics
<i>History, Theory, and Culture</i>	
ARTH 1100	Interactive Media and Society
ARTH 2215	History of Graphic Design
ARTH 5902	Special Topics in Art and Design History
ARTG 5110	Information Design History

\*Please be aware: Not all courses are available every semester and some have prerequisites.

## Optional Preparation for Two-Year Master of Architecture

**Code**                      **Title**                                      **Hours**

If students wish to be eligible for the two-year Master of Architecture program at Northeastern, they should take the four courses listed here. ARCH 2240 and 5230 may count as electives toward the major:

MATH 1241	Calculus 1
PHYS 1141	General Physics
ARCH 2240	Architectonic Systems
ARCH 5230	Structural Systems

## Architectural Studies Major Credit Requirement

Complete 72 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 1000	1	ARCH 1110	4	Elective	4	Vacation	
ENGW 1111	4	ARCH 1120	6	Elective	4		
ARCH 1310	4	EEAM 2000	1				
Elective	4	Architecture History Elective (1 of 2)	4				
Elective	4	Elective	4				
		17			19		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 2130	6	ARCH 2340 and ARCH 2341	4	Optional Summer Co-op	4	Optional Summer Co-op	4

ARCH 2330 and ARCH 2331	4	ARCH 2140	6		
ARCH 2260	4	ENGW 3314	4		
Architecture History Elective (2 of 2)	4	Elective	4		
	18		18	0	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Semester in Segovia (or Boston)	Co-op	0	Co-op	0	Vacation
ARCH 3155 or 3170	3.2				
ARCH 3361 (or Elective in Boston)	3.2				
ARCH 3362 (or Elective in Boston)	3.2				
ARCH 3363 (or Elective in Boston)	1.6				
ARCH 3363 (or Elective in Boston)	1.6				
ARCH 3440 Language elective	1.6				
	16		0	0	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Elective	4	ARCH 4960	4	Vacation	Vacation
Elective	4	Elective	4		
Elective	4	Elective	4		
Elective	4	Elective	4		
	16		16	0	0

Total Hours: 128

## Architectural Studies and Design, BS

Students integrate the study of architecture with strategies of graphic and information design, interaction design, or experience design. A flexible curriculum focused on key contemporary topics related to the built environment is combined with a broad understanding of the principles and systems of perception, communication, and action. Students integrate text and image to visualize concepts and data, create navigable interfaces and systems that allow audiences to take an active role to achieve meaningful goals, and take a holistic and integrative approach that focuses on the quality of the human experience in concrete situations. Successful students emerge with a strong portfolio suited to further graduate education or experience in architecture and design-related fields.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses

where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath attributes Engaging with the Natural and Designed World (ND), Exploring Creative Expression and Innovation (EI), Interpreting Culture (IC), Analyzing and Using Data (AD), Understanding Societies and Institutions (SI), and Engaging Differences and Diversity (DD) are met through the major course requirements.

In order to graduate, students must complete Formal and Quantitative Reasoning (FQ) and Ethical Reasoning (ER) in their electives.

*\*Please Note: We suggest students who wish to be eligible for the two-year Master of Architecture degree take the following courses: ARCH 2240, ARCH 3170, ARCH 5230, along with calculus and physics.*

### Architectural Studies Courses

Code	Title	Hours
<b>Required Courses</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
ARCH 1120	Fundamental Architectural Design	6
ARCH 2130	Site, Space, and Program	6
ARCH 2260	Introduction to Building Systems	4
ARCH 3450	Advanced Architectural Communication	4
<b>Architecture History Elective</b>		
	Either ARCH 1370 or any ARCH 2300-level history course	4
<b>Electives</b>		
	Complete two of the following:	8
ARCH 1370	Special Topics in Architectural History	
ARCH 1450	Understanding Design	
ARCH 2140	Urban Institutions	
	Any second ARCH 2300-level history course	
ARCH 3351	Architecture Topics Abroad: Theory	
ARCH 3352	Architecture Topics Abroad: Drawing	
ARCH 3370	Advanced Topics in Architectural History	
ARCH 4850	Urban and Architectural History Abroad	
ARCH 5310	Design Tactics and Operations	

### Design Requirements

Code	Title	Hours
<b>Art + Design Fundamentals Required</b>		
ARTF 1122	Color and Composition	4
<b>Art + Design Fundamentals Elective</b>		
	Complete one of the following:	4-5
ARTF 1121	Conceptual Drawing	

ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional 2224)	

**Design Required**

ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4

**Design Elective**

Complete any one ARTG design elective course, as long as prerequisites have been met. 4

**Art + Design History Elective**

Complete any one art history course within the ARTH subject code. 4

**Art + Design Elective**

Complete any one ARTG, ARTE, ARTD, ARTH, ARTS, or GAME course as long as prerequisites have been met. 4

**Degree Capstone Project**

ARTG 4550	Design Degree Project 1	4
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**Design Option**

Code	Title	Hours
Complete one of the following options:		8

**Interaction Design Option**

ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3700	Interaction Design 2: Mobile	

**Graphic and Information Design Option**

ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	

**Experience Design Option**

ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

**Integrative Requirement**

Code	Title	Hours
ARTG 4550	Design Degree Project 1	

**Program Requirement**

132 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops in Summer 2/Fall**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ARTF 1000 or ARCH 1000	1	ARCH 1110	4	Elective	4
ARCH 1310 and ARCH 1311	4	ARCH 1120	6	Elective	4
				Vacation	0

ARTF 1122 (with optional ARTF 1123)	4	Architecture history elective	4		
ARTG 1250	4	Art + Design fundamentals elective	4		

ENGW 1111	4				
	17	18	8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 2130	6	ARCH 2340 and ARCH 2341	4	Elective	4	Co-op	0

ARCH 2260	4	ARCH 3450	4	Elective	4		
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ARTG 2250 (with optional ARTG 2251)	4	ARTG 3350	4				
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Architecture elective	4	Design option 1	4				
		EEAM 2000	1				

	18	17	8		0
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**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Architecture elective	4	Elective	4	Co-op	0

ENGW 3314 or 3315 (online)	4	Art + Design history elective	4	Elective	4		
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		ARTG 3451	4				
		Design option 2	4				

	4	16	8		0
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**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	Architecture elective	4

Elective (online)	4	ARTG 4550	4
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		Art + Design elective	4
		Design elective	4

	4	16			
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Total Hours: 134

**Sample Five Years, Two Co-ops in Spring/Summer 1**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ARTF 1000 or ARCH 1000	1	ARCH 1110	4	Vacation	0
ARTF 1122 (with optional ARTF 1123)	4	ARCH 1120	6		

ARTG 1250	4	Architecture history Elective	4		
ARCH 1310 and ARCH 1311	4	Art + Design fundamentals elective	4		
ENGW 1111	4				
	17		18	0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 2130	6	ARCH 2340 and ARCH 2341	4	Vacation	0	Vacation	0
ARTG 2250 (with optional ARTG 2251)	4	ARCH 3450	4				
Art + Design history elective	4	Design option 1	4				
ARCH 2260	4	Design elective	4				
	18		16	0	0	0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Architecture elective	4	Co-op	0	Co-op	0	Vacation	0
ARTG 3350	4						
Design option 2	4						
ENGW 3314 or 3315	4						
EEAM 2000	1						
	17		0	0	0	0	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Architecture elective	4	Co-op	0	Co-op	0	Vacation	0
ARTG 3451	4						
Elective	4						
Elective	4						
	16		0	0	0	0	0

**Year 5**

Fall	Hours	Spring	Hours
Art + Design elective	4	ARTG 4550	4
Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 134

**Architecture and English, BS****Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

NUpath attributes Natural and Designed World (ND), Creative Expression and Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

In order to graduate, students must complete Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Ethical Reasoning (ER) in their electives.

**Architecture Requirements**

Code	Title	Hours
<b>Required Courses</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
ARCH 1310	Buildings and Cities, A Global History	4
ARCH 1320		4
ARCH 1450	Understanding Design	4
ARCH 2130	Site, Space, and Program	6
ARCH 2240	Architectonic Systems	4
ARCH 2330	Architecture and the City in the Nineteenth Century	4

**Electives**

Complete two of the following courses:	8
ARCH 3370	Advanced Topics in Architectural History
ARCH 3450	Advanced Architectural Communication
ARCH 5310	Design Tactics and Operations

**English Requirements**

Code	Title	Hours
<b>English Course-Level Requirement</b>		

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

**Introduction to College**

ENGL 1000	English at Northeastern	1
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**Foundational Courses**

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	

**Diversity**

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below: 4

ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450		
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2460		
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3676		
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	

**Pre-Nineteenth-Century Literature**

Complete one of the following: 4

ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2240		
ENGL 2296	Early African-American Literature	
ENGL/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000		
ENGL 4020		

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040		
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	

**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	

ENGL 3700	Narrative Medicine	
ENGL 4400		
ENGL 4410	Research in Rhetoric and Writing	
LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	

**Comparative Literature**

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503		
ENGL 2150	Literature and Digital Diversity	
ENGL 2380		
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450		
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2460		
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
ENGL 3487	Film and Text (Abroad)	
ENGL 3582		
ENGL 3663	The African American Novel	
ENGL 3676		

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Writing Seminar	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

**English Electives**

Complete two additional ENGL electives.	8
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**Integrative Requirement**

Code	Title	Hours
ARCH 2330	Architecture and the City in the Nineteenth Century	4
or ARCH 2340	Modern Architecture	
ENGL 3375	Writing Boston	4

**Program Requirement**

128 total semester hours required

## Civil Engineering and Architectural Studies, BSCE

Civil engineering and architecture are two important disciplines that deal with the process of creating the built environment to satisfy societal needs. Both professions have critical functions that are essential in the development of society in terms of planning cities and designing more resilient infrastructure and rely on one another to accomplish it. The combination of these two professions creates great synergy as architects focus more on the functional and human aspects of development, while civil engineers concentrate on the structural elements of the design, ensuring durable structures that perform under normal and extreme loads.

Students successfully completing the program receive a rigorous engineering training education, enabling a high level of engineering knowledge as well as exposure to a broad range of architectural topics and design experiences.

Students also have the opportunity to undertake a co-op experience consistent with the policies and opportunities offered within the College of Engineering.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

For this combined major, Nupath requirements are satisfied in several courses across the program and by required courses in the combined major.

**Engineering Requirement**

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5

CIVE 2320 and CIVE 2321	Structural Analysis and Recitation for CIVE 2320	4
CIVE 2324	Concrete Structure Design	4
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340	5
GE 3300	Energy Systems: Science, Technology, and Sustainability	4

**Civil Engineering Project Elective**

Complete one of the following:		4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 5536	Hydrologic and Hydraulic Design	

**Senior Design Project**

CIVE 4767	Senior Design Project—Structural	5
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**Civil Engineering Technical Electives**

Complete one of the following:		4
CIVE 3425	Steel Structure Design	
CIVE 5522	Structural Systems Modeling	

**Supplemental Credit**

1 semester hour from the following course counts toward the engineering requirement:		1
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

**Architecture Requirements**

Code	Title	Hours
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
ARCH 2130	Site, Space, and Program	6
ARCH 2140	Urban Institutions	6
ARCH 2340 and ARCH 2341	Modern Architecture and Recitation for ARCH 2340	4
ARCH 3210 and ARCH 3211	Environmental Systems and Recitation for ARCH 3210	4

**Architectural Electives**

Complete two of the following:		8
ARCH 3370	Advanced Topics in Architectural History	
ARCH 3351	Architecture Topics Abroad: Theory	
ARCH 3352	Architecture Topics Abroad: Drawing	
ARCH 3450	Advanced Architectural Communication	
ARCH 4850	Urban and Architectural History Abroad	

ARCH 5115	Option Studio
ARCH 5220	Integrated Building Systems
ARCH 5310	Design Tactics and Operations

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
Complete one of the following:		5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
<b>Science Elective</b>		
Complete one of the following:		4-5
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	
BIOL 1141	Microbes and Society	
BIOL 1143	Biology and Society	
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	
CHEM 3410	Environmental Geochemistry	
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	
EEMB 1450	Introduction to Marine Biology	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 2515	Sustainable Development	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	
ENVR 5350	Sustainable Energy and Climate Solutions	
PHYS 1111	Astronomy	
PHYS 1125	Introduction to Network Science: From the Human Cell to Facebook	
PHYS 1132	Energy, Environment, and Society	

PHYS 1155 and PHYS 1156	Physics for Engineering 2 and Lab for PHYS 1155
PHYS 4623	Medical Physics

### Supplemental Credit

3 semester hours from the following course count toward the mathematics/science requirement:		3
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

### Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

### Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Integrative Courses

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
CIVE 4767	Senior Design Project—Structural	

### Engineering GPA Requirement

Minimum 2.000 GPA required in all Engineering courses

### Architecture GPA Requirement

Minimum 2.000 GPA required in all Architecture courses

### Program Requirements

141 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

Note:

1. Students who wish to be considered for the two-year Master of Architecture Program at Northeastern **SHOULD** take ARCH 3450



as an elective and **SHOULD NOT** take ARCH 5115 or ARCH 5220 as architectural electives.

2. Students who wish to be considered for the two-year Master of Architecture Program at Northeastern MUST have satisfied the Structural Systems (ARCH 5230) requirement. This requirement is achieved in this combined major by taking the following three courses, as follows:

- CIVE 2221 Statics and Solid Mechanics (including recitation CIVE 2222)
- CIVE 2320 Structural Analysis (including recitation CIVE 2321)
- And at least one design course from the following:
  - CIVE 2324 Concrete Structure Design
  - CIVE 3425 Steel Structure Design

## Plan of Study

### Four Years, 1 Co-op in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 ARCH 1110 (EI)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 ARCH 1120 (ND, EI)	6 PHYS 1151 (ND)	3	
ENGW 1111 (WF)	4 GE 1502 (ER)	4 PHYS 1152 (AD)	1	
GE 1000	1 MATH 1342 (FQ)	4 PHYS 1153	1	
GE 1501	4			
MATH 1341 (FQ)	4			
	17	18	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARCH 1310 (IC, DD)	4 ARCH 2340 (IC, SI, WI)	4 CIVE 2324	4 Co-op	
ARCH 1311	0 ARCH 2341	0 GE 3300	4	
ARCH 2130	6 CIVE 2260	4		
CIVE 2221	4 CIVE 2261 (AD)	1		
CIVE 2222	0 CIVE 2320	4		
MATH 2341	4 CIVE 2321	0		
	CIVE 2334	4		
	ENCP 2000	1		
	18	18	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ARCH 2140	6 Vacation	Vacation	
	ARCH 3210 (ND, AD)	4		
	ARCH 3211	0		
	CIVE 2331	4		
	CIVE 2340	4		
	CIVE 2341	1		
	0	19	0	0

### Year 4

Fall	Hours Spring	Hours
CIVE 3464	4 CIVE 4767 (EI, WI, CE)	5
ENCP 3000	1 Architectural Elective	4
ENGW 3302 or 3315 (WD)	4 Architectural Elective	4
Civil Project Elective (WI)	4 Science Elective	4
Civil Technical Elective (CIVE 3425 or CIVE 5522)	4	
	17	17

Total Hours: 141

### Five Years, 3 Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 ARCH 1110 (EI)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 ARCH 1120 (ND, EI)	6 PHYS 1151 (ND)	3	
ENGW 1111 (WF)	4 GE 1502 (ER)	4 PHYS 1152 (AD)	1	
GE 1000	1 MATH 1342 (FQ)	4 PHYS 1153	1	
GE 1501	4			
MATH 1341 (FQ)	4			
	17	18	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARCH 1310 (IC, DD)	4 CIVE 2260	4 Vacation	Co-op	
ARCH 1311	0 CIVE 2261 (AD)	1		
ARCH 2130	6 CIVE 2320	4		
CIVE 2221	4 CIVE 2321	0		
CIVE 2222	0 CIVE 2334	4		
MATH 2341	4 ENCP 2000	1		
	GE 3300	4		
	18	18	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ARCH 2340 (IC, SI, WI)	4 CIVE 2324	4 Co-op	
	ARCH 2341	0 ENGW 3302 or 3315 (WD)	4	
	CIVE 2331	4		
	CIVE 2340	4		
	CIVE 2341	1		

	Civil Technical Elective (CIVE 3425 or CIVE 5522)	4			
		0	17	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	ARCH 2140	6 Vacation	Co-op		
	ARCH 3210 (ND, AD)	4			
	ARCH 3211	0			
	CIVE 3464	4			
	ENCP 3000	1			
	Civil Project Elective (WI)	4			
		0	19	0	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	CIVE 4767 (EI, WI, CE)	5			
	Architectural Elective	4			
	Architectural Elective	4			
	Science Elective	4			
		0	17		

Total Hours: 141

### Environmental and Sustainability Sciences and Landscape Architecture, BS

The Department of Marine and Environmental Sciences and the program in landscape architecture provide an education in basic environmental and sustainability sciences and landscape-architecture-related disciplines. This combined major provides students the opportunity to obtain the fundamental scientific background and practical training to tackle environmental and landscape-related issues. The program seeks to prepare students for advanced studies or careers in fields of urban planning, urban design, sustainable development, environmental consulting, and/or other fields focusing on the interactions among landscapes, the built environment, human societies, and overall climate impacts.

#### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

#### Environmental and Sustainability Sciences Requirements

Code	Title	Hours
<b>Environmental and Sustainability Sciences Required Courses</b>		
<i>Core Courses</i>		
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 1200 and ENVR 1201 or ENVR 2200	Dynamic Earth and Lab for ENVR 1200 and Earth's Changing Cycles	4
ENVR 2515	Sustainable Development	4
Complete one course from each category:		
<i>Skills</i>		4-5
ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3555	Networks and Natural Systems	
<i>Earth, Oceans, and Environmental Change</i>		4-5
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 3600	Oceanography	
ENVR 3125	Global Oceanic Change	
ENVR 5150	Climate and Atmospheric Change	
<i>Conservation, Restoration, and Management</i>		4
EEMB 2400	Introduction to Evolution	
EEMB 3460	Conservation Biology	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 5220	Ecosystem-Based Management	
<i>Sustainable Planning and Development</i>		4
ENVR 3200	Water Resources	
ENVR 3150	Food Security and Sustainability	
ENVR 5210	Environmental Planning	
ENVR 5350	Sustainable Energy and Climate Solutions	
<i>Environment and Society</i>		4
ENVR 5450	Applied Social-Ecological Systems Modeling	
POLS 2395	Environmental Politics and Policy	
PPUA 5260	Ecological Economics	
SOCL 2485	Environment, Technology, and Society	

#### Landscape Architecture Requirements

Code	Title	Hours
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
LARC 2130	Sustainable Urban Site Design	6

LARC 2230	Introduction to Sustainable Site Planning and Design	4
LARC 2330	Cities, Landscape, and Modern Culture	4
LARC 2340	Cities, Landscape, and Contemporary Culture	4
LARC 2430	Plants, People, and Landscape Change	4

### Landscape Architecture Electives

Code	Title	Hours
Complete three of the following: 12-14		
LARC 2240	Sustainable Site Construction and Detailing	
LARC 2440	Planting Design	
LARC 3170	Landscape Planning and Urbanism Studio	
ARCH 3370	Advanced Topics in Architectural History	
ARCH 3450	Advanced Architectural Communication	
LARC 5210	Landscape Ecology	
LARC 5220	Sustainable Landscape Practices	
LARC 5310	Urban Landscape Seminar	
SUEN 6210	Implementation and Visualization for Urban Environments 1	
SUEN 6220	Implementation and Visualization for Urban Environments 2	
ARCH 3352	Architecture Topics Abroad: Drawing	
ARCH 3351	Architecture Topics Abroad: Theory	
ARCH 4850	Urban and Architectural History Abroad	

### Capstone/Integrative Course

Code	Title	Hours
Complete one of the following: 4		
ENVR 4997	Senior Thesis	
LARC 5120	Comprehensive Design Studio	
LARC 5210	Landscape Ecology	
ENVR 4050	Solving Emerging Environmental Challenges through Capstone	

### Environmental and Sustainability Sciences and Landscape Architecture Major Credit Requirement

Complete a minimum of 84 semester hours in the major.

### Program Requirements

132 total semester hours required

### Plan of Study

#### Four-Years, Two Co-ops

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LARC 2430	4 ARCH 1110	4 Elective	4 Elective	4
ENVR 1400 and ENVR 1401	5 ARCH 1120	6 ENGW 1111	4 Elective	4
ENVR 2200	4 EEMB 2302 and EEMB 2303	5		

Elective	4	EEAM 2000	1		
	17		16	8	8
Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
LARC 2130	6 LARC 2340	4 Elective	4 Co-op	0	
LARC 2230	4 ENVR 3300 and ENVR 3301	5 Elective	4		
LARC 2330	4 LARC elective	4			
ENVR elective	4 Elective	4			
	18	17	8	0	
Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	0 ENVR elective	4 ENGW 3314	4 Co-op	0	
	ENVR elective	4 Elective	4		
	ENVR elective	4			
	LARC elective	4			
	0	16	8	0	
Year 4					
Fall	Hours Spring	Hours			
Co-op	0 ENVR 2515	4			
	Capstone	4			
	ENVR elective	4			
	LARC elective	4			
	0	16			

Total Hours: 132

### Five-Years, Two Co-ops

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LARC 2430	4 ARCH 1110	4 Vacation	Vacation	0
ENVR 1400 and ENVR 1401	5 ARCH 1120	6		
ENVR 2200	4 EEMB 2302 and EEMB 2303	5		
ENGW 1111	4 EEAM 2000	1		
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LARC 2130	6 LARC 2340	4 Vacation	0 Vacation	0
LARC 2230	4 LARC elective	4		
LARC 2330	4 Elective	4		
Elective	4 Elective	4		
	18	16	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 3300 and ENVR 3301	5 Co-op 1	Co-op 1	0 Vacation	0
ENGW 3314	4			
ENVR elective	4			
Elective	4			
	17	0	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LARC elective	4 Co-op 2	Co-op 2	0 Vacation	0
ENVR 2515	4			
ENVR elective	4			
Elective	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
ENVR elective	4 Capstone	4
ENVR elective	4 ENVR elective	4
Elective	4 LARC elective	4
Elective	4 Elective	4
	16	16

Total Hours: 132

## Environmental Engineering and Landscape Architecture, BSEnVE

Environmental engineering and landscape architecture are two important disciplines that deal with the complex interaction between the natural and the built environment. Both professions have critical functions that are essential in the development of society in terms of planning and designing more sustainable cities. The combination of these two professions creates great synergy and seeks to expose engineering students to the conceptual and practical content of landscape planning. Successful graduates from this degree are prepared to imagine and create projects that can be translated into reality providing solutions to address the world's growing challenges by designing clean and sustainable environments and green infrastructure.

Students completing the combined major Bachelor of Science in Environmental Engineering and Landscape Architecture receive a rigorous engineering training education, enabling a high level of engineering knowledge as well as exposure to a broad range of landscape architectural topics and design experiences.

Students will also have the opportunity to undertake a co-op experience consistent with the policies and opportunities offered within the College of Engineering.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

For this combined major, Nupath requirements are satisfied in several courses across the program and by required courses in the combined major.

### Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4
GE 3300	Energy Systems: Science, Technology, and Sustainability	4

#### Senior Design Project

CIVE 4765	Senior Design Project—Environmental	5
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#### Supplemental Credit

1 semester hour from the following course counts toward the engineering requirement: 1

CIVE 3464	Probability and Engineering Economy for Civil Engineering	
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3 semester hours from the following course count toward the engineering requirement: 3

CIVE 2335	Environmental Engineering Chemistry	
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3 semester hours from the following course count toward the engineering requirement: 3

CIVE 3430	Engineering Microbiology and Ecology	
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2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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### Landscape Architecture Requirements

Code	Title	Hours
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6

ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
ARCH 2340 and ARCH 2341	Modern Architecture and Recitation for ARCH 2340	4
LARC 2230	Introduction to Sustainable Site Planning and Design	4
LARC 2240	Sustainable Site Construction and Detailing	4
LARC 2430	Plants, People, and Landscape Change	4
LARC 2440	Planting Design	4
LARC 5420	Professional Practice in Landscape Architecture	4
or LARC 2340	Cities, Landscape, and Contemporary Culture	

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
Complete one of the following:		5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	

### Science Elective (Earth)

Complete one of the following:		4-5
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	

### Supplemental Credit

3 semester hours from the following course count toward the mathematics/science requirement:		3
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 2335	Environmental Engineering Chemistry	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 3430	Engineering Microbiology and Ecology	

1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

### Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

### Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Integrative Courses

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
CIVE 4765	Senior Design Project—Environmental	

### Engineering GPA Requirement

Minimum 2.000 GPA required in all major courses

### Landscape Architecture GPA Requirement

Minimum 2.500 GPA required in all major courses

### Program Requirements

136 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Plan of Study

#### Four Years, 1 Co-op in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ARCH 1110 (EI)	4	MATH 2321 (FQ)	4	Vacation	
CHEM 1153	0	ARCH 1120 (EI, ND)	6	PHYS 1151 (ND)	3		
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1152 (AD)	1		
GE 1000	1	MATH 1342 (FQ)	4	PHYS 1153	1		

GE 1501	4			
MATH 1341 (FQ)	4			
	17	18	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2334	4 ARCH 1310 (IC, DD)	4 CIVE 2221	4 Co-op	
LARC 2230 (ND)	4 ARCH 1311	0 CIVE 2222	0	
LARC 2430 (ND)	4 CIVE 2260	4 GE 3300	4	
MATH 2341	4 CIVE 2261 (AD)	1		
	CIVE 2335	4		
	CIVE 3430	4		
	ENCP 2000	1		
	16	18	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ARCH 2340 (IC, SI, WI)	4 Vacation	Vacation	
	ARCH 2341	0		
	CIVE 2331	4		
	LARC 2240	4		
	LARC 2440	4		
	0	16	0	0

Year 4		
Fall	Hours Spring	Hours
CIVE 3435	4 CIVE 4765 (EI, CE, WI)	5
CIVE 3464	4 CIVE 5300	2
CIVE 4534 (WI)	3 CIVE 5301	2
CIVE 4535	1 LARC 5420 or 2340 (IC, SI, WI)	4
ENCP 3000	1 Science Elective (Earth)	4
ENGW 3302 or 3315 (WD)	4	
	17	17

Total Hours: 136

### Five Years, 3 Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 ARCH 1110 (EI)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 ARCH 1120 (EI, ND)	6 PHYS 1151 (ND)	3	
ENGW 1111 (WF)	4 GE 1502 (ER)	4 PHYS 1152 (AD)	1	
GE 1000	1 MATH 1342 (FQ)	4 PHYS 1153	1	

GE 1501	4			
MATH 1341 (FQ)	4			
	17	18	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2334	4 ARCH 1310 (IC, DD)	4 CIVE 2221	4 Co-op	
LARC 2230 (ND)	4 ARCH 1311	0 CIVE 2222	0	
LARC 2430 (ND)	4 CIVE 2260	4 GE 3300	4	
MATH 2341	4 CIVE 2261 (AD)	1		
	CIVE 2335	4		
	CIVE 3430	4		
	ENCP 2000	1		
	16	18	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CIVE 2331	4 Vacation	Co-op	
	CIVE 3435	4		
	LARC 2440	4		
	Science Elective (Earth)	4		
	0	16	0	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ARCH 2340 (IC, SI, WI)	4 Vacation	Co-op	
	ARCH 2341	0		
	CIVE 4534 (WI)	3		
	CIVE 4535	1		
	ENCP 3000	1		
	ENGW 3302 or 3315 (WD)	4		
	LARC 2240	4		
	0	17	0	0

Year 5		
Fall	Hours Spring	Hours
Co-op	CIVE 3464	4
	CIVE 4765 (EI, CE, WI)	5
	CIVE 5300	2
	CIVE 5301	2
	LARC 5420 or 2340 (IC, SI, WI)	4
	0	17

Total Hours: 136

## Landscape Architecture, BLA

Website (<https://camd.northeastern.edu/architecture/academic-programs/architecture-urban-landscape/>)

Northeastern University offers a Bachelor of Landscape Architecture. This new major reflects a growing public interest in making our cities more sustainable and in bringing the insights of landscape architects to join those of urban designers and architects. This hybrid field has deep roots in design, ecology, planning, and aesthetics. In the past 15 years, it has come to play an evermore important role in the design of new places, as well as the retrofitting of our older, postindustrial landscapes. An inherently interdisciplinary program, urban landscape will involve collaborations with other academic units on campus.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Societies and Institutions (SI), Analyzing and Using Data (AD), and Difference and Diversity (DD) are met through the major course requirements.

NUpath requirement Ethical Reasoning (ER) must be met through general electives.

### Landscape Architecture Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ARCH 1000	Architecture at Northeastern	1
<b>Calculus</b>		
MATH 1241	Calculus 1	4
<b>Environmental Geology</b>		
ENVR 2200	Earth's Changing Cycles	4
<b>Foundation Courses</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
<b>History/Theory Courses</b>		
ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
LARC 2330	Cities, Landscape, and Modern Culture	4
LARC 2340	Cities, Landscape, and Contemporary Culture	4
LARC 5310	Urban Landscape Seminar	4
<b>Technology/Science Courses</b>		

ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
LARC 2230	Introduction to Sustainable Site Planning and Design	4
LARC 2430	Plants, People, and Landscape Change	4
LARC 2240	Sustainable Site Construction and Detailing	4
LARC 5210	Landscape Ecology	4
LARC 5220	Sustainable Landscape Practices	4
LARC 5420	Professional Practice in Landscape Architecture	4

### Design

LARC 2130	Sustainable Urban Site Design	6
LARC 2140	Designed Urban Ecologies	6
LARC 2440	Planting Design	4
LARC 3170	Landscape Planning and Urbanism Studio	6
LARC 5110	Advanced Design for Urban Environments Studio	6
LARC 5120	Comprehensive Design Studio	6

### Professional Development

EEAM 2000	Professional Development for Co-op	1
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### Cooperative Education

Urban landscape majors are required to complete one six-month co-op.		0
COOP 3945	Co-op Work Experience	

### Major GPA Requirement

Minimum 2.500 GPA required

### Major Credit Requirement

Complete 98 semester hours for the major.

### Program Requirement

142 total semester hours required

### Plan of Study

#### Four Years, One Co-op in Spring/Summer 1

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ARCH 1000	1	ARCH 1110	4	Elective	4
ARCH 1310 and ARCH 1311	4	ARCH 1120	6	Elective	4
MATH 1241	4	ENGW 1111	4		
ENVR 2200	4	EEAM 2000	1		
Elective	4	Elective	4		
		17		19	
				8	
				0	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
LARC 2130	6	LARC 2140	6	Optional Summer Co-op	Optional Summer Co-op
LARC 2430	4	LARC 2240	4		
LARC 2330	4	LARC 2440	4		

LARC 2230	4	LARC 2340	4		
	18		18	0	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
LARC 3170	6	Co-op		Co-op 1	Elective
ENGW 3314	4				Elective
LARC 5210	4				
ENVR 3300 and ENVR 3301	5				
	19		0	0	8

**Year 4**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
LARC 5110	6	LARC 5120	6
LARC 5220	4	LARC 5420	4
LARC 5310	4	Elective	4
Elective	4	Elective	4
	18		18

Total Hours: 143

## Architectural and Urban History, Minor

Website (<https://camd.northeastern.edu/architecture/academic-programs/architectural-history/>)

The four-course minor introduces students to the study of architectural history, paying particular attention to the relationship between buildings and their larger urban, cultural, economic, and social environments. The minor includes one general survey class that covers a variety of different cultures and geographic contexts over time. Students may then choose from a suite of architectural history courses to fulfill the remaining 12 credits of this minor.

Please note: This minor is not available to students in the BS Architecture or BS Architectural Studies major. BLA Landscape Architecture students may double count at most one course with this minor.

### Minor Requirements

Note: This minor is not available to students in the BS in architecture or BS in architectural studies major. BLA in landscape architecture students may double count at most one course with this minor.

### Required Courses

Code	Title	Hours
<b>Architectural History Core</b>		
ARCH 1310	Buildings and Cities, A Global History	4
<b>Electives</b>		
Complete three of the following:		12
ARCH 1350	American Architecture	
ARCH 1370	Special Topics in Architectural History	
<i>Any course from the ARCH 2300 series, including:</i>		
ARCH 2310	History of Chinese Architecture	
ARCH 2315	East Asian Architecture: History from a Global Perspective	
ARCH 2320	Modern Chinese Architecture	
ARCH 2330	Architecture and the City in the Nineteenth Century	

ARCH 2335	Architecture and Politics
ARCH 2340	Modern Architecture
ARCH 2345	Contemporary Architecture
ARCH 2350	American Architecture
ARCH 3361	Architecture and Urbanism Abroad
ARCH 3370	Advanced Topics in Architectural History
ARCH 4850	Urban and Architectural History Abroad

### GPA Requirement

2.000 GPA required in the minor

## Architectural Design, Minor

This minor introduces students to the breadth of architecture and the three-legged stool of designing architecture: design, history, and technology. Indeed, building technology and contextual and historical understanding are essential ingredients of architectural design. The minor is structured to ensure that all students take at least one fundamental class in each of these three "legs." Students may then shape the minor to align their interests with their choices of the architectural design course and elective.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any recitations where specified. Please note: This minor is not available to students in the Bachelor of Science in Architecture or Bachelor of Science in Architectural Studies major. Bachelor of Landscape Architecture students may double count at most one course with this minor.

### Requirements

Code	Title	Hours
<b>Required Foundation Course</b>		
ARCH 1110	Fundamental Architectural Representation	4
<b>Required Architecture Design</b>		
Complete one of the following:		4-6
ARCH 1450	Understanding Design	
or ARCH 1120	Fundamental Architectural Design	
<b>Required Technology Course</b>		
ARCH 2260	Introduction to Building Systems	4
<b>Required History Elective</b>		
Complete one of the following:		4
ARCH 1310	Buildings and Cities, A Global History	
ARCH 1370	Special Topics in Architectural History	
ARCH 2310	History of Chinese Architecture	
ARCH 2315	East Asian Architecture: History from a Global Perspective	
ARCH 2320	Modern Chinese Architecture	
ARCH 2330 and ARCH 2331	Architecture and the City in the Nineteenth Century and Recitation for ARCH 2330	
ARCH 2335	Architecture and Politics	
ARCH 2340 and ARCH 2341	Modern Architecture and Recitation for ARCH 2340	
ARCH 2345	Contemporary Architecture	
ARCH 2350	American Architecture	



ARCH 2355	Architecture Conservation: Intervention, Transformation, and Reuse
ARCH 2370	Topics in Architectural History
ARCH 3352	Architecture Topics Abroad: Drawing
ARCH 3351	Architecture Topics Abroad: Theory
ARCH 4850	Urban and Architectural History Abroad
Any course within the ARCH 2300–2399 range	

### GPA Requirement

2.000 GPA required in the minor

### Architectural Science and Systems, Minor

The Minor in Architectural Science and Systems is a four-course curriculum that combines a comprehensive exploration of the full range of building systems with a thorough understanding of the physical phenomena to which they respond. Students investigate the primary component systems of buildings and their synergistic integration, including site, structure, enclosure, environmental comfort, and passive and active energy systems. While technical topics form the core content of these courses, systems thinking is the critical and analytical bond among them.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Only one course can be double counted toward any other major or minor.

### Requirements

Code	Title	Hours
<b>Building Systems Required Course</b>		
ARCH 2260	Introduction to Building Systems	4
<b>Building Systems Core</b>		
Complete two of the following:		8
ARCH 2240	Architectonic Systems	
ARCH 3210	Environmental Systems	
or ARCH 5210	Environmental Systems	
ARCH 5230	Structural Systems	
<b>Elective</b>		
Complete one of the following (the third course from the Building Systems Core section above may be taken as an elective):		4
ARCH 5220	Integrated Building Systems	
GE 3300	Energy Systems: Science, Technology, and Sustainability	
SBSY 5200	Sustainable Engineering Systems for Buildings	

### GPA Requirement

2.000 GPA required in the minor

### Urban Landscape Studies, Minor

Website (<https://camd.northeastern.edu/architecture/academic-programs/urban-landscape-studies/>)

The minor in urban landscape studies has two tracks, one for architecture majors and a second for students from other disciplines. The minor introduces fundamental design and management of sustainable urban environments, as well as an overview of historical and contemporary issues in urban landscape.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

No more than one course may count toward any other degree or minor

### Required Courses

Code	Title	Hours
<b>Urban Landscape Core 1</b>		
LARC 2340	Cities, Landscape, and Contemporary Culture	4
<b>Urban Landscape Core 2</b>		
Complete two of the following:		8
LARC 2230	Introduction to Sustainable Site Planning and Design	
LARC 2330	Cities, Landscape, and Modern Culture	
LARC 2430	Plants, People, and Landscape Change	

### Elective

Code	Title	Hours
Complete one of the following:		4
AFAM 2549	Public Policy and Black America	
ARCH 1310	Buildings and Cities, A Global History	
ARCH 3352	Architecture Topics Abroad: Drawing	
ARCH 4850	Urban and Architectural History Abroad	
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	
ENVR 1200	Dynamic Earth	
ENVR 3200	Water Resources	
LARC 2230	Introduction to Sustainable Site Planning and Design	
LARC 2240	Sustainable Site Construction and Detailing	
LARC 2330	Cities, Landscape, and Modern Culture	
LARC 2430	Plants, People, and Landscape Change	
LARC 2440	Planting Design	
LARC 5210	Landscape Ecology	
POLS 2395	Environmental Politics and Policy	
SOCL 1246	Environment and Society	

### GPA Requirement

2.500 GPA required in the minor

### Art + Design

Website (<https://camd.northeastern.edu/artdesign/>)

**Jason Donati, MFA**

Interim Chair

617.373.4340

Art makes life meaningful. Design makes life possible. Together they make life wonderful. The work of artists and designers informs and forms cultures, benefits society, and empowers the global marketplace of ideas. The faculty in the Department of Art + Design seeks to prepare students for a rich and rewarding life making a significant difference in the lives of others. We study the fundamentals of knowing, thinking, making, and doing; you have an opportunity to learn to use ideas and influences, tools and techniques, and principles and processes of art and design. We provide a faculty, format, and facilities for a great experiential education in art and design within a major urban research university. You pursue your curiosity about, intentions toward, and obligations to the evolving world. Summer programs may include Iceland, Ireland, Venice, Rome, Berlin, Budapest, Cuba, Japan, and Ecuador and offer intensive studio experiences to augment your study with travel and creative work in the context of other cultures.

Whether you are studying design, media art, or game design, the Department of Art + Design seeks to cultivate your talents as a source of original ideas and expressions of an inner life, using classical, current, and emerging media. You are inspired and challenged to create powerful new works. You will gain visual literacy and fluency with professional art, design, and game design practices in the context of a liberal arts education. You can be transformed into a creative force, ready to realize your potential and create cultural value and social benefit.

## Art, BA

Northeastern offers a studio-based fine art program that investigates visual studies and various cultures, giving students a way of developing their own creative practice as well as an understanding of the relationship between form and meaning. To achieve this level of consciousness around arts practice, students will strike a balance between studio courses in drawing/painting and digital media with visual studies courses that focus on the historical, theoretical, and critical interpretation of visual art. This exploration of art methods creates a more visually and conceptually astute student through making. Students' education, experience, and training in understanding creative practices takes full advantage of the remarkable scope of the College of Arts, Media and Design. Some courses in this program are offered in locations abroad and may include Iceland, Ireland, Japan, and Galapagos, where students have an intensive and immersive creative experience during five-week summer sessions. Additionally, students may opt to enroll in select courses at the University of Arts London (UAL), Fine Art at Central Saint Martins campus. This unique opportunity allows students to spend a semester in London while discovering a new culture.

The visual studies concentration examines both the production and public reception of art across regions, contexts, periods, and media, foregrounding arts' status as both a material artifact and social communication. Courses reflect the active research profiles and professional experience of its distinguished faculty who all prioritize accessibility, collaboration, and cutting-edge research. Lectures and seminars take advantage of Northeastern's proximity to area museums and cultural centers, including the Institute of Contemporary Art and the Museum of Fine Arts, as well as campus facilities and initiatives like Gallery 360 and the Center for the Arts. Other dynamic resources include Northeastern's own renowned archives offering tangible case studies to consider how criticism coalesces into the historical record. Visual studies introduces students to a broad range of creative careers endemic to the fields of design, publishing, curation, conservation, and scholarship.

The Department of Art + Design uses communal studio space to train students in painting and drawing processes. The department also hosts

a fabrication lab that supports a wide range of material-based research for the CAMD community. Beyond the foundation-level courses required for all students, the makerspace provides the resources for prototyping processes ranging from model making, woodworking, CAD, as well as digital fabrication through laser cutting, 3D scanning, and 3D printing.

The **Bachelor of Arts in Art** is offered with a concentration in visual studies or without a concentration.

## Design, BFA

Design is the practice-based discipline that poses important questions about—and provides significant answers to—how we live. Designers are needed when we don't know what is needed as well as when we think we do. Designers propose alternative futures and create new choices using principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action. Concentrations in design practices are graphic and information design, interaction design, and experience design.

Graphic designers make messages and meaning using visual form and the integration of text and image. Their work often has a persuasive intent and uses rules of visual composition, form, and pattern to enable storytelling or to create attention and an ambiance for consideration. Information designers visualize concepts and data to enhance human understanding of complex and vital knowledge. Their work has an enlightening or instructive intent and is based on factual content.

Interaction designers focus on the creation of navigable interfaces and systems that allow audiences to take an active role to achieve meaningful goals. Their work connects people to people and people to information and environments.

Experience designers take a holistic and integrative approach that focuses on the quality of the human experience in concrete situations. They employ research, analysis, creativity, and technology as tools to understand human goals, needs, and desires. Their work examines and improves contexts, systems, services, or events.

Additionally, students may opt to enroll in select courses at the University of Arts London (UAL), Fine Art at Central Saint Martins or Design Management at London College of Communications (<https://www.arts.ac.uk/subjects/business-and-management-and-science/undergraduate/ba-hons-design-management-lcc/>) campus. This unique opportunity allows students to spend a semester in London while discovering a new culture.

The **Bachelor of Fine Arts in Design** is offered with the following concentration options: experience design, interaction design, or graphic and information design.

## Game Design, BFA

The BFA in Game Design seeks to give students the skills to communicate ideas and emotions through interactive media. The focus of the BFA degree is to explore games as an aesthetic and expressive form through critical analysis and creative, reflective practice. To reflect emerging trends in the video and analog game industries, including broader platforms, audiences, and distribution channels, students will be oriented toward developing games and playful media in an independent creative context. Curriculum is geared to cultivating students' unique creative voices through courses applying theoretical analysis to game-development practices across a wide range of media. Students are exposed to a wide variety of genres and contexts, as well as different ways of thinking about games content, platforms, and asset production.

## Media Arts, BFA

The continuing revolution in digital computing and global communications has produced a rapidly evolving field for artists who create experiences of image and form with computer screens, intelligent devices, and new materials. Artists also invent tools for exploring, creating, and distributing their ideas and works. Media arts concentrations of animation, photography, and video arts are offered with variations yet to be invented.

Courses in imaginative and narrative arts, required for professional work in documentary films, game art, visualization, visual effects, motion graphics, interactive art, illustration, and short animated films are offered at Northeastern. The curriculum in our intensive studio program provides knowledge, experience, and techniques of media arts informed by theory, experimentation, and critique. Extensive digital imaging and interactive media editing production facilities afford one the opportunity to become highly proficient in the current skills and emerging practices necessary for remarkable work. The media arts are evolving and expanding into culture in daily life and global experience. The revolutions in immersive media, 3D printing, embedded devices, and robotics are changing the landscape in which the media artist will operate. This degree is designed to prepare students to meet the challenges of continuous change with adaptive ingenuity. Additionally, students may opt to enroll in select courses at the University of Arts London (UAL), Fine Art at Central Saint Martins campus. This unique opportunity allows students to spend a semester in London while discovering a new culture.

The animation concentration provides a comprehensive exploration of the entire production pipeline for a variety of animated content including films, visual effects, broadcast, visualization, games, and spatial media. With a focus on developing robust, conceptual, narrative, and technical software skills, this rigorous studio program explores the power and potential of effective visual communication through 2D and 3D motion design. The animation concentration provides ample opportunities to explore and collaborate with related creative disciplines (VR/AR/XR, game design, interactive, video, etc.), making this a truly unique learning experience. Throughout their education, students will work to develop a professional-level portfolio, the centerpiece of which will be a one-year capstone project, demonstrating mastery in their specific area of focus.

The photography concentration encourages experimental and self-disciplined engagement with photographic processes in order to understand how materials function, both as a physical component of photographic work as well as a signifier of meaning. Concept and process are in constant dialogue, and we believe learning through doing cultivates individual vision and working methods. Each student's creative approach establishes a vital platform for discovery. In addition, theory and conceptual development provide students with necessary analytical tools for understanding and analyzing visual and technological trends in current and future photographic practices.

Young professionals today must meet challenges—as well as enjoy opportunities—to be more creative, adaptive, and innovative as active practitioners within our contemporary visual culture and evolving technological environment. Our responsibility as liberal arts educators is to expand the skills and vision of each student in light of their individual and professional goals. At a time when initiative, creativity, and innovation are leading principles for social and economic progress, it is important to stress the ways in which their artistic and creative endeavors can make a rewarding and meaningful contribution.

Northeastern photography program students find themselves in the center of Boston's creative hub, across from the Museum of Fine

Arts. Northeastern's own Center for the Arts directs interdisciplinary research and presents exhibitions and innovative programs. The newly renovated Media Hub offers state-of-the-art equipment rentals and digital printing resources. Photography students have access to two large computer labs and an alternative photographic processes darkroom with film processing and analog printing capabilities.

Our foundation photography courses are small studio and lab classes, leading to intermediate and advanced studios and seminars with an emphasis on personal vision developed through lectures, critiques, individual meetings, and research. In addition, guest artists are invited to participate and offer insights.

The video arts concentration is a multidisciplinary field focused on creative video expression and messaging that weaves together art and design foundations; art and design history; video production; cinematic language (including documentary, narrative, and experimental strategies); collaborative frameworks; and theories of social and cultural change. The scope of the video arts curriculum is a broader and more diverse tapestry than traditional video art, and it reflects the dynamic evolution of video in multiple contexts. The video arts concentration enables students to explore traditional, alternative, and other artistic means of video art production in a variety of creative and technical contexts. The focus on a multiplicity of artistic formats—hence, the choice of the title video arts—underscores our attention to the training of students who are interested in learning how to experiment with new technical, narrative, and aesthetic practices and incorporate these options into the traditional medium of video art.

The **Bachelor of Fine Arts in Media Arts** is offered without a concentration or with the following concentration options: animation, photography, or video arts.

## Studio Art, BFA

Our BFA in Studio Art is offered in partnership with the School of the Museum of Fine Arts at Tufts University (SMFA at Tufts) (<https://smfa.tufts.edu/>) across Huntington Avenue from our campus. In this major, your studio art classes are taken at the SMFA at Tufts, which allows students to explore a wide range of artistic media, including ceramics, drawing, film, metalsmithing, painting, performance, printing, sculpture, and sound, in their extensive studio environments. Our students complete Art + Design history courses in our department and they have access to all the elective courses, co-op and study-abroad programs, student resources, and activities that Northeastern students experience. Additionally, students may opt to enroll in select courses at the University of Arts London (UAL), Fine Art at Central Saint Martins campus. This unique opportunity allows students to spend a semester in London while discovering a new culture.

The **Bachelor of Fine Arts in Studio Art** degree is awarded by Northeastern.

## Admission Requirements for Art + Design

There are specific admissions criteria for students entering majors in the Department of Art + Design. See Admission Requirements for the College of Arts, Media and Design (p. ).

## Academic Progression Standards

Same as college standards.

## Programs

### Bachelor of Arts (BA)

- Art (p. 75)
- Communication Studies and Graphic and Information Design (p. 100)
- English and Graphic and Information Design (p. 101)
- Media and Screen Studies and Media Arts (p. 113)
- Media Arts and Communication Studies (p. 114)
- Theatre and Interaction Design (p. 116)

### Bachelor of Fine Arts (BFA)

- Design (p. 77)
- Game Design (p. 81)
- Media Arts (p. 82)
- Studio Art (p. 87)
- Game Art and Animation (p. 104)

### Bachelor of Science (BS)

- Architectural Studies and Design (p. 58)
- Behavioral Neuroscience and Design (p. 88)
- Business Administration and Design (p. 91)
- Computer Science and Design (p. 93)
- Computer Science and Game Development (p. 96)
- Computer Science and Media Arts (p. 97)
- Game Design and Music with Concentration in Music Technology (p. 108)
- Graphic and Information Design and Mathematics (p. 109)
- Journalism and Interaction Design (p. 111)
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### Bachelor of Science in Mechanical Engineering (BSME)

- Mechanical Engineering and Design (p. 119)

### Minors

- Animation (p. 123)
- Art (p. 124)
- Art History (p. 125)
- Creative Fabrication (p. 125)
- Experience Design (p. 126)
- Game Art (p. 126)
- Game Design (p. 127)
- Graphic and Information Design (p. 127)
- Immersive Media (p. 128)
- Interaction Design (p. 128)
- Photography (p. 129)
- Photojournalism (p. 130)
- Video Arts (p. 130)

## Art, BA

The Bachelor of Arts is a studio-based fine art program that offers an investigation into visual studies and various cultures, giving students a way of developing their own vision of creative practice as well as an understanding of the relationship between form and meaning. To achieve this level of consciousness around arts practice, students are offered a balance between studio courses in drawing/

painting and digital media with visual studies courses that focus on the historical, theoretical, and critical interpretation of visual art. This exploration of art methods creates a more visually and conceptually astute student through making. Students' education, experience, and training in understanding creative practices takes full advantage of the remarkable scope of the College of Arts, Media and Design. Some courses in this program are offered in locations abroad including Iceland, Ireland, Japan, and Galapagos, where students have an intensive and immersive creative experience during five-week summer sessions. Additionally, students may opt to enroll in select courses at the University of the Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&utm\\_medium=profile&utm\\_campaign=referralsites](https://www.arts.ac.uk/?utm_source=qs&utm_medium=profile&utm_campaign=referralsites)) (UAL), fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>) campus. This unique opportunity allows students to spend a semester in London while discovering a new culture.

The visual studies concentration examines both the production and public reception of art across regions, contexts, periods, and media, foregrounding arts' status as both a material artifact and an act of social communication. Courses reflect the active research profiles and professional experience of its distinguished faculty who all prioritize accessibility, collaboration, and cutting-edge research. Lectures and seminars take advantage of Northeastern's proximity to area museums and cultural centers—including the Institute of Contemporary Art and the Museum of Fine Arts—and campus facilities and initiatives like Gallery 360 and the Center for the Arts. Other dynamic resources include Northeastern's own renowned archives offering tangible case studies to consider how criticism coalesces into the historical record. Visual studies introduces students to a broad range of creative careers endemic to the fields of design, publishing, curation, conservation, and scholarship.

The Department of Art + Design uses communal studio space to train students in painting and drawing processes. The department also hosts a fabrication lab that supports a wide range of material-based research for the CAMD community. Beyond the foundation-level courses required for all students, the makerspace provides the resources for prototyping processes ranging from model making, woodworking, CAD, as well as digital fabrication through laser cutting, 3D scanning, and 3D printing.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) must be met through general electives.

## Art and Design Core

Code	Title	Hours
<b>Introduction</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
<b>Drawing Elective</b>		
ARTF 1120 or ARTF 1121	Observational Drawing or Conceptual Drawing	4
<b>Art History Required</b>		
ARTH 1110	Global Art and Design History: Ancient to Medieval	4
ARTH 1111	Global Art and Design History: Renaissance to Modern	4
ARTH 2210	Modern Art and Design History	4
ARTH 2211	Contemporary Art and Design History	4
<b>Capstone</b>		
ARTD 4530	Media Arts Degree Project 1	4

## Concentration or Electives

Complete the following concentration or the electives linked below:

- Concentration in Visual Studies (p. 76)
- Electives (p. 76)

## Major GPA Requirement

A major GPA of 2.500 is required.

## Program Requirement

129 total semester hours required

## Concentration in Visual Studies

Code	Title	Hours
<b>Art and Design History Electives</b>		
Courses in architectural history and media and screen studies may also be used upon approval by the chair of the Department of Art + Design.		
Complete five of the following courses as long as prerequisites have been met. At least one must be at least at the 4000 level:		20
ARTE 2501	Art and Design Abroad: History	
ARTH 1100	Interactive Media and Society	
ARTH 2212	Survey of the Still and Moving Image	
ARTH 2213	Nineteenth-Century Art	
ARTH 2215	History of Graphic Design	

ARTH 5100	Contemporary Art Theory and Criticism
ARTH 5902	Special Topics in Art and Design History

## Electives

Code	Title	Hours
<b>Arts, Media and Design Electives</b>		
Complete any five courses from the following lists as long as prerequisites have been met. At least one must be at least at the 4000 level.		20
<i>Art + Design</i>		
ARTD 2100	Narrative Basics	
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2370	Animation Basics (with optional ARTD 2371)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTD 3460	Photography: Concept + Process	
ARTD 3470	Animation 1	
ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTD 3480	Video: Sound and Image	
ARTD 4565	Photography: Visual Strategies + Context	
ARTD 4570	Animation 2	
ARTD 4575	Animation 3	
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	
ARTE 2301	The Graphic Novel	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 2501	Art and Design Abroad: History	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTG 1250	Design Process Context and Systems	
ARTG 2250	Typography 1 (with optional ARTG 2251)	
ARTG 2252	Graphic Design 1	
ARTH 1100	Interactive Media and Society	
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2213	Nineteenth-Century Art	
ARTH 5100	Contemporary Art Theory and Criticism	
ARTS 2341	Figure Drawing	
ARTS 2340	Painting Basics	
ARTS 3449	Drawing in Mixed Media	
<i>Architecture</i>		
ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	
ARCH 1350	American Architecture	
ARCH 1450	Understanding Design	
ARCH 2330	Architecture and the City in the Nineteenth Century	
ARCH 2340	Modern Architecture	
<i>Communication Studies</i>		

COMM 1101	Introduction to Communication Studies	
<i>Game Design</i>		
GAME 1110	Games and Society	
<i>Journalism</i>		
JRNL 1150	Understanding Today's News	
<i>Media and Screen Studies</i>		
MSCR 1220	Media, Culture, and Society	
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
MSCR 2336	American Film and Culture	
<i>Music</i>		
MUSC 1113	Film Music	
<i>Theatre</i>		
THTR 1101	Introduction to Theatre	
THTR 1270	Introduction to Theatrical Design	
<i>University of Arts London</i>		
Optional London study abroad for fine art at Central Saint Martins, University of Arts London. Complete the following:		16
ARTS 3510	Studio Practice and Exhibition	
ARTS 3520	Critical Disclosures	
ARTS 3530	Studio Practice, Cross-Pathway, and External Projects	

## Plan of Study

### Sample Four Years, Two Co-ops in Spring/Summer 1 Plan of Study Optional

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
ARTF 1000	1	ARTF 1124 (and ARTF 1125)	4	Foreign language	4	Elective	4	4
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2223 (with optional 2224)	4	Elective	4	Elective	4	4
ARTF 2220 (with optional 2221)	4	ARTH 1111	4					
ARTH 1110	4	Foreign language	4					
ENGW 1111	4							
	17		16		8			8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
ARTF 1120 or 1121	4	Co-op	0	Co-op	0	Elective	4	4
ARTH 2210	4					Elective	4	4
Arts, media and design elective	4							
Foreign language	4							
EEAM 2000	1							
	17		0		0			8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
ARTH 2211	4	Co-op	0	Co-op	0	Elective	4	4
Arts, media, and design elective	4					Elective	4	4
Elective	4							
Elective	4							
	16		0		0			8

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
Arts, media, and design elective	4	ARTD 4530	4	Vacation		Vacation		
Arts, media, and design elective	4	Arts, media and design elective	4					
Elective	4	Elective	4					
Elective	4	Elective	4					
	16		16		0			0

Total Hours: 130

Notes:

Optional study abroad with University of the Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&utm\\_medium=profile&utm\\_campaign=referralsites](https://www.arts.ac.uk/?utm_source=qs&utm_medium=profile&utm_campaign=referralsites)), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/bahons-fine-art-csm/>).

## Design, BFA

Design is the practice-based discipline that poses important questions about—and provides significant answers to—how we live. Designers are needed when we don't know what is needed as well as when we think we do. Designers propose alternative futures and create new choices using principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action. Concentrations in design practices are graphic and information design, interaction design, and experience design.

Graphic designers make messages and meaning using visual form and the integration of text and image. Their work often has a persuasive intent and uses rules of visual composition, form, and pattern to enable storytelling or to create attention and an ambiance for consideration. Information designers visualize concepts and data to enhance human understanding of complex and vital knowledge. Their work has an enlightening or instructive intent and is based on factual content.

Interaction designers focus on the creation of navigable interfaces and systems that allow audiences to take an active role to achieve meaningful goals. Their work connects people to people and people to information and environments.

Experience designers take a holistic and integrative approach that focuses on the quality of the human experience in concrete situations. They employ research, analysis, creativity, and technology as tools to

understand human goals, needs, and desires. Their work examines and improves contexts, systems, services, or events.

The Bachelor of Fine Arts in Design is offered with the following concentration options: graphic and information design, interaction design, or experience design.

The major offers optional study abroad with University of Arts London (<https://www.arts.ac.uk/>), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>).

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements. All other NUpath requirements must be met through electives.

## Art and Design Core

Code	Title	Hours
<b>Introduction to College</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools (ARTF 1125)	5
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
<b>Art and Design History</b>		
ARTH 1111	Global Art and Design History: Renaissance to Modern	4
ARTH 2210	Modern Art and Design History	4
ARTH 2211	Contemporary Art and Design History	4

## Design Requirements

Code	Title	Hours
<b>Design Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 3350	Typography 2	4

ARTG 3451	Information Design 1	4
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4

## Design Electives

Code	Title	Hours
<b>Art and Design Elective</b>		
Complete one of the following:		4-6
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTD 2100	Narrative Basics	
ARTG 3510	Contextual and Theoretical Studies 2	
ARTE 3901	Art and Design Special Topics	
ARTE 5901	Special Topics in Art and Design Studio	

## Design History Elective

Complete one of the following:		4
ARTH 1100	Interactive Media and Society	
or ARTH 2215	History of Graphic Design	

## Media Arts Basics Elective

Complete one of the following:		4-6
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2370	Animation Basics (with optional ARTD 2371)	
ARTD 2380	Video Basics (with optional ARTD 2381)	

## Design Management Electives at University of Arts London

Students who study abroad at the University of Arts London will receive general elective credit for the following courses:

ARTG 3530	Interdisciplinary Projects and Practices
ARTG 3520	Marketing Communications and Cultures 2

## Concentrations

Complete one of the concentrations listed below:

- Graphic and Information Design (p. )
- Interaction Design (p. )
- Experience Design (p. )

## Program Requirements

129 total semester hours required

## Concentrations

### CONCENTRATION IN GRAPHIC AND INFORMATION DESIGN

Code	Title	Hours
<b>Required Courses</b>		
ARTG 2252	Graphic Design 1	4
ARTG 3450	Graphic Design 2	4
<b>Electives</b>		
Complete five of the following. At least one must be at the 4000 level:		20-21
ARTG 2260	Programming Basics	
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	

ARTG 3460	Identity and Brand Design
ARTG 3462	Experience Design 1
ARTG 3700	Interaction Design 2: Mobile
ARTG 4554	Typography 3
ARTG 4555	Graphic Design Synthesis
ARTG 5150	Information Visualization Principles and Practices (and ARTG 5151)
ARTE 3901	Art and Design Special Topics
ARTE 4901	Special Topics in Art and Design Studio
ARTE 5901	Special Topics in Art and Design Studio

**CONCENTRATION IN INTERACTION DESIGN**

Code	Title	Hours
<b>Required Courses</b>		
ARTG 2252	Graphic Design 1	4
ARTG 2260	Programming Basics	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	4-5
ARTG 3700	Interaction Design 2: Mobile	4
<b>Electives</b>		
Complete three of the following. At least one must be at the 4000 level:		12
ARTG 3250	Physical Computing	
ARTG 3450	Graphic Design 2	
ARTG 3460	Identity and Brand Design	
ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	
ARTG 4554	Typography 3	
ARTG 4555	Graphic Design Synthesis	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTE 5901	Special Topics in Art and Design Studio	

**CONCENTRATION IN EXPERIENCE DESIGN**

Code	Title	Hours
<b>Required Courses</b>		
ARTG 2260	Programming Basics	4
ARTG 3462	Experience Design 1	4
ARTG 3463	Experience Design 2	4
<b>Electives</b>		
Complete four of the following. At least one must be at the 4000 level:		16
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 3450	Graphic Design 2	
ARTG 3460	Identity and Brand Design	
ARTG 3700	Interaction Design 2: Mobile	
ARTG 4554	Typography 3	
ARTG 4555	Graphic Design Synthesis	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTE 5901	Special Topics in Art and Design Studio	

**Plan of Study**

- Experience Design (p. 79)
- Graphic and Information Design (p. 80)
- Interaction Design (p. 80)

**Experience Design**

**SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1 OR SUMMER 2/FALL PLAN OF STUDY OPTIONAL**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 1124 (and ARTF 1125)	4	ARTG 2260	4	ARTF 2220 or 2223 (with optional ARTF 2220)	4
ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4	Elective	4	Elective	4
ARTG 1250	4	ARTH 2210	4				
ARTH 1111	4	Elective	4				
Elective	4						
		17	16	8	8		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 2223 or 2220 (with optional ARTF 2224)	4	Co-op		Co-op		Art + design elective	4
ARTG 3462	4					Elective	4
ARTG 3350	4						
Design elective	4						
EEAM 2000	1						
		17	0	0	8		
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 3463	4	Co-op		Co-op		Elective	4
Design elective	4					Elective	4
Design history elective	4						
Elective	4						
		16	0	0	8		
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 3451	4	ARTG 4550	4				
ARTH 2211	4	Design elective	4				
Media arts elective	4	Design elective	4				
Elective	4	Elective	4				
		16	16				

Total Hours: 130



**Graphic and Information Design****SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1 OR SUMMER 2/FALL PLAN OF STUDY OPTIONAL****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTF 1000	1 ARTF 1124 (and ARTF 1125)	4 ARTF 2220 or 2223 (with optional ARTF 2220 )	4 Elective	4
ARTF 1122 (with optional ARTF 1123)	4 ARTG 2250 (with optional ARTG 2251)	4 Art + design elective	4 Elective	4
ARTG 1250	4 ARTH 2210	4		
ARTH 1111	4 Elective	4		
Elective	4			
	17	16	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTF 2223 or 2220 (with optional ARTF 2224)	4 Co-op	Co-op	Elective	4
ARTG 2252	4		Elective	4
ARTG 3350	4			
Media arts elective	4			
EEAM 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTG 3450	4 Co-op	Co-op	Elective	4
Design elective	4		Elective	4
Design elective	4			
Design history elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours
ARTG 3451	4 ARTG 4550	4
ARTH 2211	4 Design elective	4
Design elective	4 Design elective	4
Elective	4 Elective	4
	16	16

Total Hours: 130

**Interaction Design****SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1 OR SUMMER 2/FALL PLAN OF STUDY OPTIONAL****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTF 1000	1 ARTF 1124 (and ARTF 1125)	4 ARTG 2260	4 ARTF 2220 or 2223 (with optional ARTF 2220)	4
ARTF 1122 (with optional ARTF 1123)	4 ARTG 2250 (with optional ARTG 2251)	4 Elective	4 Elective	4
ARTG 1250	4 ARTH 2210	4		
ARTH 1111	4 Elective	4		
Elective	4			
	17	16	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTF 2223 or 2220 (with optional ARTF 2224)	4 Co-op	Co-op	Art + design elective	4
ARTG 2400 (with optional ARTG 2401)	4		Elective	4
ARTG 3350	4			
Elective	4			
EEAM 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTG 2252	4 Co-op	Co-op	Elective	4
Design elective	4		Elective	4
Design elective	4			
Media arts elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours
ARTG 3451	4 ARTG 4550	4
ARTG 3700	4 ARTH 2211	4
Design history elective	4 Design elective	4
Elective	4 Elective	4
	16	16

Total Hours: 130

**Notes:**

Online elective courses are optional while on co-op.

Optional study abroad with University of Arts London ([https://www.arts.ac.uk/?](https://www.arts.ac.uk/))

utm\_source=qs&utm\_medium=profile&utm\_campaign=referralsites), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second year spring semester in London studying design management at London College of Communication (<https://www.arts.ac.uk/subjects/business-and-management-and-science/undergraduate/ba-hons-design-management-lcc/>).

## Game Design, BFA

The Bachelor of Fine Arts in Game Design is designed to provide students with the skills to communicate ideas and emotions through interactive media. The focus of the BFA degree is exploring games as an aesthetic and expressive form through critical analysis and creative, reflective practice. Anticipating emerging trends in the video and analog game industries—including broader platforms, audiences, and distribution channels—students will be oriented toward developing games and playful media in an independent creative context. Curriculum is geared to cultivate students' unique creative voices through courses that apply theoretical analysis to game-development practices across a range of media. Students are exposed to a wide variety of genres and contexts, as well as alternative ways of thinking about games content, platforms, and asset production.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Formal and Quantitative Reasoning (FQ), and Analyzing/Using Data (AD) are met through the major course requirements. All other NUpath requirements must be met through electives.

### Required Courses

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Game Studies</b>		
GAME 1110	Games and Society	4
GAME 2650	Introduction to Game Research Methods	4
<b>Game Design</b>		
GAME 2500	Foundations of Game Design	4
GAME 2950	Game Studio	4
GAME 3700	Rapid Idea Prototyping for Games	4
<b>Game Development</b>		
ARTG 2260	Programming Basics	4
GAME 3300	Game Interface Design	4
GAME 3400	Level Design and Game Architecture	4

GAME 3800	Game Concept Development	4
<b>Game Aesthetics</b>		
ARTF 1122	Color and Composition (with optional ARTF 1124 )	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5
ARTF 2220	Movement and Time (with optional ARTF 2221 )	4
ARTD 2370	Animation Basics (with optional ARTD 2371 )	4

### Critical Play

GAME 2010	The Business of Games	4
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### Capstone

A grade of C or higher is required:

GAME 4700	Game Design Capstone	4
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### Electives

Code	Title	Hours
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#### Game Design and Development

Complete two of the following as long as prerequisites have been met: 8

GAME 1850	Experimental Game Design	
GAME 1999	Principles of Board Game Development	
GAME 2991	Research in Game Design	
GAME 3055	Playful Design	
GAME 3800	Game Concept Development	
GAME 4460	Generative Game Design	
GAME 4600	Game Production	

#### Game Aesthetics and Critical Play

Complete two of the following as long as prerequisites have been met: 8

GAME 2355	Narrative for Games	
GAME 2750	Games Criticism and Theory	
GAME 2755	Games and Social Justice	
GAME 4155	Designing Imaginary Worlds	

#### Art + Design

Complete three of the following as long as prerequisites have been met: 12

ARTF 1120	Observational Drawing	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
ARTD 3470	Animation 1	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTG 3250	Physical Computing	

#### Art History

Complete one art history course within the ARTH subject code. 4

### Game Design Major Credit/GPA Requirement

Complete 92 semester hours for the major with a 2.000 GPA.

### Program Requirement

128 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTF 1000	1 GAME 2500	4 Art + Design Elective	4 Art + Design Elective	4
GAME 1110	4 GAME 2650	4 Art History Elective	4 Elective	4
ARTF 1122 (with optional 1123)	4 ARTD 2370 (with optional ARTD 2371)	4		
ARTF 2220 (with optional 2221)	4 ARTF 1124 and ARTF 1125	5		
ENGW 1111	4			
	17	17	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
GAME 2950	4 Co-op	Co-op	Elective	4
GAME 3300	4		Elective	4
ARTG 2260	4			
EEAM 2000	1			
Game Aesthetics and Critical Play Elective	4			
	17	0	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
GAME 3400	4 Co-op	Co-op	Elective	4
GAME 3700	4		Elective	4
Game Design and Development Elective	4			
Art + Design Elective	4			
	16	0	0	8
Year 4				
Fall	Hours Spring	Hours		
GAME 3800	4 GAME 4700	4		
Game Design and Development Elective	4 GAME 2010	4		
Game Aesthetics and Critical Play Elective	4 Elective	4		
Elective	4 Elective	4		
	16	16		

Total Hours: 131

## Media Arts, BFA

The continuing revolution in digital computing and global communications has produced a rapidly evolving field for artists who create experiences of image and form with computer screens, intelligent devices, and new materials. Artists also invent tools for exploring, creating, and distributing their ideas and works. Media arts concentrations of animation, photography, and video arts are offered with variations yet to be invented.

Courses in imaginative and narrative arts required for professional work in documentary films, game art, visualization, visual effects, motion graphics, interactive art, illustration, and short animated films are offered at Northeastern. The curriculum in our intensive studio program provides knowledge, experience, and techniques of media arts informed by theory, experimentation, and critique. Extensive digital imaging and interactive media editing production facilities afford one the opportunity to become highly proficient in the current skills and emerging practices necessary for remarkable work. The media arts are evolving and expanding into culture in daily life and global experience. The revolutions in immersive media, 3D printing, embedded devices, and robotics are changing the landscape in which the media artist will operate. This degree is designed to prepare students to meet the challenges of continuous change with adaptive ingenuity.

The animation concentration provides a comprehensive exploration of the entire production pipeline for a variety of animated content including films, visual effects, broadcast, visualization, games, and spatial media. With a focus on developing robust, conceptual, narrative, and technical software skills, this rigorous studio program explores the power and potential of effective visual communication through 2D and 3D motion design. The animation concentration provides ample opportunities to explore and collaborate with related creative disciplines (VR/AR/XR, game design, interactive, video, etc.) making this a truly unique learning experience. Throughout their education, students will work to develop a professional-level portfolio—the centerpiece of which will be a one-year capstone project—demonstrating mastery in their specific area of focus.

The photography concentration encourages experimental and self-disciplined engagement with photographic processes in order to understand how materials function, both as a physical component of photographic work as well as a signifier of meaning. Concept and process are in constant dialogue, and we believe learning through doing cultivates individual vision and working methods. Each student's creative approach establishes a vital platform for discovery. In addition, theory and conceptual development provide students with necessary analytical tools for understanding and analyzing visual and technological trends in current and future photographic practices.

Young professionals today must meet challenges—as well as enjoy opportunities—to be more creative, adaptive, and innovative as active practitioners within our contemporary visual culture and evolving technological environment. Our responsibility as liberal arts educators is to expand the skills and vision of each student in light of their individual and professional goals. At a time when initiative, creativity, and innovation are leading principles for social and economic progress, it is important to stress the ways in which their artistic and creative endeavors can make a rewarding and meaningful contribution.

Northeastern photography program students find themselves in the center of Boston's creative hub, across from the Museum of Fine Arts. Northeastern's own Center for the Arts directs interdisciplinary research and presents exhibitions and innovative programs. The newly renovated Media Hub offers state-of-the-art equipment rentals and digital printing

resources. Photography students have access to two large computer labs and an alternative photographic processes darkroom with film processing and analog printing capabilities.

Our foundation photography courses are small studio and lab classes, leading to intermediate and advanced studios and seminars with an emphasis on personal vision developed through lectures, critiques, individual meetings, and research. In addition, guest artists are invited to participate and offer insights.

The video arts concentration is a multidisciplinary field focused on creative video expression and messaging that weaves together art and design foundations; art and design history; video production; cinematic language (including documentary, narrative, and experimental strategies); collaborative frameworks; and theories of social and cultural change.

The scope of the video arts curriculum is a broader and more diverse tapestry than traditional video art and it reflects the dynamic evolution of video in multiple contexts. The video arts concentration enables students to explore traditional, alternative, and other artistic means of video art production in a variety of creative and technical contexts. The focus on a multiplicity of artistic formats—hence, the choice of the title video arts—underscores our attention to the training of students who are interested in learning how to experiment with new technical, narrative, and aesthetic practices and incorporate these options into the traditional medium of video art.

Optional study abroad with University of Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&utm\\_medium=profile&utm\\_campaign=referralsites](https://www.arts.ac.uk/?utm_source=qs&utm_medium=profile&utm_campaign=referralsites)), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/bahons-fine-art-csm/>).

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression and Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) must be met through general electives.

## Art and Design Core

Code	Title	Hours
<b>Introduction to College</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Fundamentals</b>		

ARTF 1122	Color and Composition (with optional ARTF 1123 )	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5
ARTF 2220	Movement and Time (with optional ARTF 2221 )	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4

## Art and Design History

ARTH 1110	Global Art and Design History: Ancient to Medieval	4
ARTH 1111	Global Art and Design History: Renaissance to Modern	4
ARTH 2210	Modern Art and Design History	4

## Media Arts Requirements

Code	Title	Hours
<b>Drawing Fundamentals Elective</b>		

ARTF 1120 or ARTF 1121	Observational Drawing or Conceptual Drawing	4
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## Media Arts Basics Elective

Note: If you are pursuing a concentration, select courses not used for your concentration.

Complete one of the following:		4-5
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2370	Animation Basics (with optional ARTD 2371 )	
ARTD 2380	Video Basics (with optional ARTD 2381 )	

## Media Arts History Elective

Complete one of the following:		4
ARTH 2211	Contemporary Art and Design History	
ARTH 2212	Survey of the Still and Moving Image	
ARTH 1100	Interactive Media and Society	

## Design Requirement

ARTG 2250	Typography 1 (with optional ARTG 2251 )	4
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## Degree Project

ARTD 4530	Media Arts Degree Project 1	4
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## Media Arts Electives or Concentration

Complete the media arts electives or contact your academic adviser to declare one of the following concentrations:

- Animation (p. 84)
- Photography (p. 84)
- Video Arts (p. 84)

Code	Title	Hours
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Note: Courses in this requirement may not be used for the drawing fundamentals elective or media arts history elective.

Complete 24 semester hours from the following:		24
ARTE 2301	The Graphic Novel	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 2501	Art and Design Abroad: History	
ARTE 3901	Art and Design Special Topics	

ARTE 4901	Special Topics in Art and Design Studio
ARTH 1100	Interactive Media and Society
ARTH 1400	The Science of Art, the Art of Science
ARTH 2213	Nineteenth-Century Art
ARTH 5100	Contemporary Art Theory and Criticism
ARTS 2340	Painting Basics
ARTS 2341	Figure Drawing
ARTS 3449	Drawing in Mixed Media
ARTD 2100	Narrative Basics
ARTD 3460	Photography: Concept + Process
ARTD 3470	Animation 1
ARTD 3471	Virtual Environment Design
ARTD 3472	Character Design for Animation
ARTD 3473	Animation for Games
ARTD 3480	Video: Sound and Image
ARTD 3485	Experimental Video
ARTD 4565	Photography: Visual Strategies + Context
ARTD 4570	Animation 2
ARTD 4575	Animation 3
ARTD 4660	Studio Photography
ARTD 4661	Photography: Experimental Processes

#### Sound Management at University of Arts London

Optional London study abroad for sound management at Central Saint Martins, University of Arts London. Complete the following:

INAM 3510	Applied Sound Design
INAM 3520	Collaborative Project
INAM 3540	Sound Culture: Perception and Communication 2
INAM 3550	Sound Practitioners 2

### Program Requirement

130 total semester hours required

## Concentrations (Animation/Photography/Video Arts)

### CONCENTRATION IN ANIMATION

Code	Title	Hours
<b>Animation Requirements</b>		
ARTD 2100	Narrative Basics	4
ARTD 2370	Animation Basics (with optional ARTD 2371)	4
ARTD 3470	Animation 1	4
ARTD 4570	Animation 2	4
<b>Animation Electives</b>		
Complete three of the following. At least one must be at the 4000 level:		12
ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 4575	Animation 3	
ARTD 3473	Animation for Games	

#### Art and Design Elective

Note: Courses in this requirement may not be used for the drawing fundamentals elective, media arts basics elective, media arts history elective, or animation electives.

Complete any one ARTG, ARTE, ARTD, ARTH, ARTS, or GAME course as long as prerequisites have been met. 4

### CONCENTRATION IN PHOTOGRAPHY

Code	Title	Hours
<b>Photography Requirements</b>		
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	5
ARTD 3460	Photography: Concept + Process	4
ARTD 4565	Photography: Visual Strategies + Context	4

#### Photography Elective

ARTD 4660	Studio Photography	4
or ARTD 4661	Photography: Experimental Processes	

#### Art and Design Electives

Note: Courses in this requirement may not be used for the drawing fundamentals elective, media arts basics elective, media arts history elective, or photography elective.

Complete any three ARTG, ARTE, ARTD, ARTH, ARTS, or GAME courses as long as prerequisites have been met. At least one must be a 4000-level course. 12

### CONCENTRATION IN VIDEO ARTS

Code	Title	Hours
<b>Video Arts Requirements</b>		
ARTD 2380	Video Basics (with optional ARTD 2381 )	4
ARTD 3480	Video: Sound and Image	4

#### Video Arts Electives

Complete four of the following:		16
ARTD 3485	Experimental Video	
MSCR 2160	Narrative Filmmaking	
MSCR 3446	Documentary Production	
MSCR 3389	Screenwriting	
ARTH 2212	Survey of the Still and Moving Image	
THTR 2345	Acting for the Camera	

Optional London study abroad for sound management at Central Saint Martins, University of Arts London. Complete the following:

INAM 3510	Applied Sound Design
INAM 3540	Sound Culture: Perception and Communication 2

#### Art and Design Electives

Note: Courses in this requirement may not be used for the drawing fundamentals elective, media arts basics elective, and media arts history elective.

Complete any three ARTG, ARTE, ARTD, ARTH, ARTS, or GAME courses as long as prerequisites have been met. At least one must be a 4000-level course. 12

Optional London study abroad for sound management at Central Saint Martins, University of Arts London. Complete the following:

INAM 3520	Collaborative Project
INAM 3550	Sound Practitioners 2

### Plan of Study

- No Concentration (p. 85)
- Animation (p. 85)

- Photography (p. 86)
- Video Arts (p. 86)

**No Concentration**

**SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1/SAMPLE--ZA PLAN OF STUDY ONLY**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTF 1000	1 ARTF 1122 (with optional ARTF 1123)	4 Elective	4 Elective	4
ARTF 1124 and ARTF 1125	5 ARTF 2220 (with optional ARTF 2221)	4 Elective	4 Elective	4
Drawing fundamentals elective	4 ARTH 1111	4		
ARTH 1110	4 Media arts history elective	4		
ENGW 1111	4			
	18	16	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTF 2223 (with optional ARTF 2224)	4 Co-op	Co-op	Elective	4
ARTH 2210	4		Elective	4
Media arts basics elective	4-5			
Elective	4			
EEAM 2000	1			
	17-18	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTG 2250 (with optional ARTG 2251)	4 Co-op	Co-op	Elective	4
Media arts elective	4		Elective	4
Elective	4			
Elective	4			
	16	0	0	8

Year 4				
Fall	Hours Spring	Hours	Summer 2	Hours
Media arts elective	4 ARTD 4530	4	Vacation	
Media arts elective	4 Media arts elective	4		
Media arts elective	4 Media arts elective	4		

Elective	4	Elective	4	
	16		16	0

Total Hours: 131-132

**Animation**

**SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1/SAMPLE--ZA PLAN OF STUDY ONLY**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTF 1000	1 ARTF 1122 (with optional ARTF 1123)	4 ARTF 2223 (with optional 2224)	4 Elective	4
Drawing fundamentals elective	4 ARTF 1124 and ARTF 1125	5 Elective	4 Elective	4
ARTF 2220 (with optional ARTF 2221)	4 ARTD 2370	4		
ARTH 1110	4 ARTH 1111	4		
ENGW 1111	4			
	17	17	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTD 2100	4 Co-op	Co-op	Elective	4
ARTD 3470	4		Elective	4
Animation elective	4			
Media arts basics elective	4-5			
EEAM 2000	1			
	17-18	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTD 4570	4 Co-op	Co-op	Elective	4
ARTG 2250 (with optional ARTG 2251)	4		Elective	4
ARTH 2210	4			
Media arts history elective	4			
	16	0	0	8

Year 4		
Fall	Hours Spring	Hours
Animation elective	4 ARTD 4530	4
Art and design elective	4 Elective	4
Art and design elective	4 Elective	4

Elective	4	Elective	4
	16		16

Total Hours: 131-132

## Photography

### SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1/SAMPLE-ZA PLAN OF STUDY ONLY

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 2220 (with optional ARTF 2221)	4	Elective	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2223 (with optional ARTF 2224)	4	Elective	4	Elective	4
ARTF 1124 and ARTF 1125	5	ARTD 2360 (with optional 2361)	4				
ARTH 1110	4	ARTH 1111	4				
ENGW 1111	4						
	18		16		8		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTD 3460	4	Co-op		Co-op		Elective	4
Photography elective	4					Elective	4
Drawing fundamentals elective	4						
ARTH 2210	4						
EEAM 2000	1						
	17		0		0		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTD 4565	4	Co-op		Co-op		Elective	4
ARTG 2250 (with optional ARTG 2251)	4					Elective	4
Media arts basics elective	4-5						
Media arts history elective	4						
	16-17		0		0		8

#### Year 4

Fall	Hours	Spring	Hours
Art and design elective	4	ARTD 4530	4
Art and design elective	4	Art and design elective	4
Elective	4	Elective	4

Elective	4	Elective	4
	16		16

Total Hours: 131-132

## Video Arts

### SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1/SAMPLE-ZA PLAN OF STUDY ONLY

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 2220 (with optional ARTF 2221)	4	Elective	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2223 (with optional ARTF 2224)	4	Elective	4	Elective	4
ARTF 1124 and ARTF 1125	5	ARTH 1111	4				
ARTH 1110	4	Art and design elective	4				
ENGW 1111	4						
	18		16		8		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTD 2380 (with optional ARTD 2381)	4	Co-op		Co-op		Elective	4
Video arts elective	4					Elective	4
Drawing fundamentals elective	4						
ARTH 2210	4						
EEAM 2000	1						
	17		0		0		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTD 3480	4	Co-op		Co-op		Elective	4
ARTG 2250 (with optional ARTG 2251)	4					Elective	4
Media arts basics elective	4-5						
Media arts history elective	4						
	16-17		0		0		8

#### Year 4

Fall	Hours	Spring	Hours
ARTD 5582	4	ARTD 4530	4
Video arts elective	4	Video arts elective	4

Art and design elective	4 Art and design elective	4
Elective	4 Elective	4
	16	16

Total Hours: 131-132

#### Notes:

Optional study abroad with University of Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&utm\\_medium=profile&utm\\_campaign=referralsites](https://www.arts.ac.uk/?utm_source=qs&utm_medium=profile&utm_campaign=referralsites)), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>).

### Studio Art, BFA

Our Bachelor of Fine Arts in Studio Art is offered in partnership with the School of the Museum of Fine Arts at Tufts (<https://smfa.tufts.edu/>) University (SMFA at Tufts) across Huntington Avenue from our campus. In this major, your studio art classes are taken at the SMFA at Tufts, which allows students to explore a wide range of artistic media, including ceramics, drawing, film, metalsmithing, painting, performance, printing, sculpture, and sound in their extensive studio environments. Our students complete art and design history courses in our department and they have access to all the elective courses, co-op, and study-abroad programs; student resources; and activities that Northeastern students experience.

The BFA in studio art degree is awarded by Northeastern.

Optional study abroad with University of Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&utm\\_medium=profile&utm\\_campaign=referralsites](https://www.arts.ac.uk/?utm_source=qs&utm_medium=profile&utm_campaign=referralsites)), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), Formal and Quantitative Reasoning (FQ),

Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) must be met through general electives.

Note: The BFA in studio art is a joint degree program offered in collaboration with the School of the Museum of Fine Arts at Tufts University (SMFA at Tufts), which is affiliated with Tufts University. Art and design history and general education requirements are offered at Northeastern University, and studio art courses, which are determined in consultation with academic advisers at the SMFA at Tufts, are targeted to each student's unique program of study.

### Art History Requirements for Studio Art

A cumulative grade-point average (GPA) of 2.500 or higher is required for the art history requirements.

Code	Title	Hours
<b>Art History Required Courses</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2211	Contemporary Art and Design History	4
<b>Art and Design History Electives</b>		
Complete three of the following:		12
ARCH 1310	Buildings and Cities, A Global History	
ARCH 1350	American Architecture	
ARCH 2330	Architecture and the City in the Nineteenth Century	
ARCH 2340	Modern Architecture	
ARTE 2301	The Graphic Novel	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 2501	Art and Design Abroad: History	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTH 1100	Interactive Media and Society	
ARTH 1110	Global Art and Design History: Ancient to Medieval	
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2212	Survey of the Still and Moving Image	
ARTH 2213	Nineteenth-Century Art	
ARTH 5100	Contemporary Art Theory and Criticism	
ARTH 5902	Special Topics in Art and Design History	
CLTR 1240	Latin American Film	
CLTR 1260	Japanese Film	
ECON 1281	Economics of the Creative Industries	
GAME 1110	Games and Society	
MSCR 1220	Media, Culture, and Society	
MSCR 2302	Advertising and Promotional Culture	
MSCR 2336	American Film and Culture	
MSCR 3392	Gender and Film	
MSCR 3426	Popular Music as Media Form	
MSCR 3600	Film Theory	
MSCR 3920	Topics in Film Studies	
MUSC 1113	Film Music	



## Studio Art Courses

Code	Title	Hours
<b>Studio Art</b>		
Specific courses are targeted to each student's unique program of study, which is determined in consultation with an academic adviser at SMFA at Tufts and CAMD. Optional credits for London study abroad or SMFA at Tufts. These courses generally have the following course number:		68
SMFA 3000	Museum of Fine Arts Studio (4 to 12 SH)	
Optional London study abroad for fine art at Central Saint Martins, University of Arts London. Complete the following:		
ARTS 3510	Studio Practice and Exhibition	
ARTS 3520	Critical Disclosures	
ARTS 3530	Studio Practice, Cross-Pathway, and External Projects	
Senior thesis is a self-directed studio practice and exhibition under consultation of senior thesis faculty at SMFA at Tufts. These courses are generally in the SMFA subject area.		8
<b>Senior Thesis Capstone</b>		
SMFA 4000	Museum of Fine Arts Capstone	

## Studio Art Major Credit Requirement

Complete 96 semester hours in the major.

## Program Requirement

136 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops Plan of Study

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ARTF 1000	1	SMFA 3000	10	Elective	4
SMFA 3000	10	ARTH 2210	4	Elective	4
ENGW 1111	4	ENGW 1111	4		
Art history elective	4				
	19		18		8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
SMFA 3000	10	Co-op	0	Co-op	0
SMFA 3000	4			Elective	4
ARTH 2211	4				
EEAM 2010	1				
	19		0	0	8
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
SMFA 3000	10	Co-op	0	Co-op	0
SMFA 3000	4	ENGW 3314 (Online)	4		Elective
Art history elective	4				
	18		4	0	8
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
SMFA 3000	10	SMFA 3000	10		

SMFA 4000	4	SMFA 4000	4
Art history elective	4	Elective	4
	18		18

Total Hours: 138

Notes:

Optional study abroad with University of Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&utm\\_medium=profile&utm\\_campaign=referralsites](https://www.arts.ac.uk/?utm_source=qs&utm_medium=profile&utm_campaign=referralsites)), based at the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>).

## Behavioral Neuroscience and Design, BS

The behavioral neuroscience and design combined major engages students in an interdisciplinary study across the biology, psychology, and Art + Design departments to integrate fundamental design courses with a strong foundation in the physiological brain mechanisms that give rise to behavioral functions. The latest research in neuroscience and psychology enables designers to maximize the impact of their designs and, conversely, complex neuroscientific concepts can be made intelligible to a wider public through creative visual works. Students in this major have the opportunity to learn about the inner workings of the brain and how its various structures interact to enhance their approach to design methodologies. Students can then apply these principles to biomimetic medical devices as well as data and network visualization.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Behavioral Neuroscience Requirements

Code	Title	Hours
<b>Behavioral Neuroscience Overview</b>		
BNSC 1000	Behavioral Neuroscience at Northeastern <sup>1</sup>	1
EESC 2000	Professional Development for Co-op <sup>2</sup>	1
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5

**Mathematics Foundation**

MATH 1251 or MATH 1341	Calculus and Differential Equations for Biology 1 Calculus 1 for Science and Engineering	4
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**Statistics Foundation**

Complete one of the following:

ENVR 2500 and ENVR 2501 or PSYC 2320	Biostatistics and Lab for ENVR 2500 Statistics in Psychological Research	4-5
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**Behavioral Neuroscience Foundations**

PSYC 3200	Clinical Neuroanatomy	4
PSYC 3452	Sensation and Perception	4
PSYC 3458	Biological Psychology	4

**Behavioral Neuroscience Core Courses**

Complete two of the following: 8

BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	
PSYC 4510	Psychopharmacology	
PSYC 4512	Neuropsychology	
PSYC 4514	Clinical Neuroscience	
PSYC 4570	Behavioral Genetics	

<sup>1</sup> Students entering through CAMD may take Art and Design at Northeastern (ARTF 1000).

<sup>2</sup> Students entering through CAMD may take Professional Development for Co-op (EEAM 2000).

**Design Requirements**

Code	Title	Hours
<b>Foundations</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
Complete one of the following: 4-5		
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	

<b>Design Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 3350	Typography 2	4
ARTG 3451 or ARTG 5330	Information Design 1 Visualization Technologies 1: Fundamentals	4

**Art + Design History**

Complete one of the following: 4		
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2210	Modern Art and Design History	
ARTH 2211	Contemporary Art and Design History	
ARTH 2213	Nineteenth-Century Art	

**Degree Capstone Project**

ARTG 4550	Design Degree Project 1	4
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**Design Options**

Code	Title	Hours
Complete one of the following options: 8		

**Interaction Design Option**

ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3700	Interaction Design 2: Mobile	

**Graphic and Information Design Option**

ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	

**Experience Design Option**

ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
BIOL 5587	Comparative Neurobiology	4
ARTG 5310	Visual Cognition	4
<b>Upper-Division Elective</b>		
Complete one course that is not already taken as long as prerequisites have been met: 4		
Any 2000-level or higher ARTG, ARTE, ARTD, ARTH, or ARTS course		
BNSC 4970 or higher		
BIOL 3403 or higher		
PSYC 3404 or higher		

**Writing Requirements**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3307 or ENGW 3314 or ENGW 3315	Advanced Writing in the Sciences Advanced Writing in the Arts, Media, and Design Interdisciplinary Advanced Writing in the Disciplines	4

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Major Credit Hour Requirement**

104 semester hours in the major.

**Program Requirements**

133 total semester hours required

**Plan of Study**

**SAMPLE PATTERNS:  
FOUR YEARS, TWO CO-OPS**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BNSC 1000 or ARTF 1000	1 BIOL 2299	4 ARTG 2250	4 PSYC 3452	4
BIOL 1107 and BIOL 1108	5 MATH 1251	4 PSYC 2320	4 General elective	4
CHEM 1161 and CHEM 1162 and CHEM 1163	5 ARTG 1250	4		
PSYC 1101	4 ENG 1111	4		
ARTF 1122	4			
	19	16	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 3458	4 Co-op	Co-op	ARTG 3350	4
BIOL 2301 and BIOL 2302	5		General elective	4
CHEM 2311 and CHEM 2312	5			
A+D foundations 2	4			
EESC 2000 or EEAM 2000	1			
	19	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 3200	4 Co-op	Co-op	ENGW 3315	4
ARTG 3451 or 5330	4		General elective	4
Design option level 1	4			
BNS core course	4			
	16	0	0	8

Year 4		
Fall	Hours Spring	Hours
BIOL 5587	4 ARTG 4550	4

ARTG 5310	4 BNS core course	4
Design option level 2	4 Upper-division elective	4
A+D history course	4 General elective	4
	16	16

Total Hours: 134

**FIVE YEARS, THREE CO-OPS**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BNSC 1000 or ARTF 1000	1 BIOL 2299	4 Vacation	Vacation	
PSYC 1101	4 MATH 1251	4		
BIOL 1107 and BIOL 1108	5 ARTG 1250	4		
CHEM 1161 and CHEM 1162 and CHEM 1163	5 ENG 1111	4		
ARTF 1122	4			
	19	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 3452	4 Co-op	Co-op	PSYC 2320	4
CHEM 2311 and CHEM 2312	5		ARTG 3350	4
ARTG 2250	4			
A+D foundations 2	4			
EESC 2000 or EEAM 2000	1			
	18	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 3200	4 Co-op	Co-op	Vacation	
PSYC 3458	4			
BIOL 2301 and BIOL 2302	5			
Design option level 1	4			
	17	0	0	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTG 3451 or 5330	4 Co-op	Co-op	ENGW 3315	4

Design option level 2	4	General elective	4
BNS core course	4		
General elective	4		
	16	0	0

Year 5			
Fall	Hours	Spring	Hours
BIOL 5587	4	ARTG 4550	4
ARTG 5310	4	BNS core course	4
A+D history course	4	Upper-division elective	4
General elective	4	General elective	4
	16		16

Total Hours: 134

## Business Administration and Design, BS

The combined major in business administration and design integrates fundamental design courses with the theory and practice of management through active learning, problem-driven research, corporate partnerships, and experiential assignments. The BS degree can be accomplished using the five-year co-op plan.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Business Core Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BUSN 1102	Personal Skill Development for Business	1
or ARTF 1000	Art and Design at Northeastern	
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1260	Math Fundamentals for Games	
<b>Macroeconomics and Microeconomics</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

### Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
<b>Business Statistics</b>		
MGSC 2301	Business Statistics	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>Strategy in Action</b>		
STRT 4501	Strategy in Action	4
<b>Business Core Option</b>		
Complete one of the following:		4
ACCT 2301	Managerial Accounting	
ENTR 2301	Innovation!	
MISM 2301	Management Information Systems	
SCHM 2301	Supply Chain and Operations Management	
<b>Professional Development</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EEAM 2000	Professional Development for Co-op	

### Business Concentration

Complete one of the following business concentrations:

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

### Second Business Concentration (Optional)

A second business concentration is optional and may be chosen from the following list:

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)

- Entrepreneurial Startup (p. 291)s
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

### Design Requirements

Code	Title	Hours
<b>Art + Design Fundamentals Required</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
<b>Art + Design Fundamentals Elective</b>		
Complete one of the following:		4-5
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
<b>Design Required</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1	4
ARTG 3350	Typography 2	4
<b>Design Elective</b>		
Complete any one ARTG design elective course, as long as prerequisites have been met.		4
<b>Art History Elective</b>		
Complete any one ARTH course.		4
<b>Art + Design Elective</b>		
Complete any one ARTG, ARTE, ARTD, ARTH, ARTS, or GAME course as long as prerequisites have been met.		4
<b>Degree Capstone Project</b>		
ARTG 4550	Design Degree Project 1	4

### Design Option

Code	Title	Hours
Complete one of the following options:		8
<b>Interaction Design Option</b>		
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3700	Interaction Design 2: Mobile	
<b>Graphic and Information Design Option</b>		
ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	
<b>Experience Design Option</b>		
ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

### Integrative Course

Code	Title	Hours
Note: Integrative course is required above.		
ARTG 4550	Design Degree Project 1	

### Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

### Business Cooperative Education Requirement

Complete one six-month co-op experience.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BUSN 1102 or ARTF 1000	1	ECON 1115 or 1116	4	ARTG 2250 (with optional ARTG 2251)	4	Art + Design fundamentals elective	4
ACCT 1201	4	MGSC 2301	4	Elective	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTG 1250	4				
Art history elective	4	Math elective	4				
ENGW 1111	4						
		17		16		8	8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTB 1203	4	Business concentration introductory course	4	FINA 2201	4	Co-op	0
ARTG 3350	4	Business core option	4	Elective	4		
Design option 1	4	Design option 2	4				
MKTG 2201	4	Art + Design elective	4				
		BUSN 1103 or EEAM 2000	1				
		16		17		8	0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ORGB 3201	4	Business concentration elective course 2	4	Co-op	0
		Business concentration elective course 1	4	Elective	4		
		Design elective	4				

ENGW 3314 or 3315	4			
	0	16	8	0
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
Co-op	0	STRT 4501	4	
		ARTG 4550	4	
		Business concentration course	4	
		Elective	4	
	0		16	

Total Hours: 130

## Computer Science and Design, BS

The combined major in computer science and design integrates fundamental design courses with a strong programming foundation. Students will declare a concentration in interaction design, graphic and information design, or experience design. Students in this major often have an interest in human-centered design methods used in developing digital interfaces and applications.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ARTF 1000	First Year Seminar Art and Design at Northeastern	1
CS 1210 or EEAM 2000	Professional Development for Khoury Co-op Professional Development for Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500	Software Development	4

or CS 4530	Fundamentals of Software Engineering	
IS 4300	Human Computer Interaction	4
<b>Computer Science Elective Courses</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		8
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

### Design Requirements

Code	Title	Hours
<b>Art + Design Fundamentals Required</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
<b>Art + Design Fundamentals Elective</b>		
Complete one of the following:		4-5
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	

### Design Required

ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4

### Design Elective

Complete any one ARTG design elective course, as long as prerequisites have been met. 4

### Art + Design History Elective

Complete any one ARTH course. 4

### Art + Design Elective

Complete any one ARTG, ARTE, ARTD, ARTH, ARTS, or GAME course as long as prerequisites have been met. 4

### Degree Capstone Project

ARTG 4550 Design Degree Project 1 4

### Design Options

Code	Title	Hours
Complete one of the following options: 8		
<b>Interaction Design Option</b>		
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3700	Interaction Design 2: Mobile	

Code	Title	Hours
<b>Graphic and Information Design Option</b>		
ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	

Code	Title	Hours
<b>Experience Design Option</b>		
ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

### Degree-Focused Electives

Code	Title	Hours
Complete two courses from the following lists: 8		
<i>Art + Design</i>		
Complete any ARTG or ARTE courses as long as prerequisites have been met.		
<i>Psychology</i>		
PSYC 1101	Foundations of Psychology	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<i>Computer Science</i>		
CS 3200	Database Design	
CS 3520	Programming in C++	
CS 3540	Game Programming	
CS 3650	Computer Systems	
CS 3700	Networks and Distributed Systems	
CS 3800	Theory of Computation	
CS 4100	Artificial Intelligence	
CS 4150	Game Artificial Intelligence	
CS 4300	Computer Graphics	
CS 4400	Programming Languages	
CS 4520	Mobile Application Development	
CS 4550	Web Development	
CS 4850	Building Game Engines	
CS 4991	Research	
CS 4992	Directed Study	
CS 4993	Independent Study	
DS 3000	Foundations of Data Science	
DS 4200	Information Presentation and Visualization	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
DS 4420	Machine Learning and Data Mining 2	
IS 2000	Principles of Information Science	

### Integrative Requirement

Code	Title	Hours
The following courses are used in the major but also count as the integrative requirement:		
IS 4300	Human Computer Interaction	
ARTG 4550	Design Degree Project 1	

### Supporting Course

Code	Title	Hours
<b>Computing and Social Issues</b>		
Complete one of the following: 4		
AFAM 2600	Issues in Race, Science, and Technology	

CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### NUPath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

### Computer Science and Design Major Credit Requirement

96 SH are required in the major.

### Program Requirement

133 total semester hours required

## Plan of Study

### Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200 or ARTF 1000	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 ARTG 1250	4		
CS 2500 and CS 2501	5 A+D Fundamentals elective	4		
ARTF 1122 (with optional ARTF 1123)	4 Elective	4		
ENGW 1111	4			
	19	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 Co-op 1	Co-op 1	Elective	4
CS 3500 and CS 3501	5		Elective	4
ARTG 2250 (with optional ARTG 2251)	4			
Design option 1	4			
CS 1210 or EEAM 2000	1			
	18	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
IS 4300	4 Co-op 2	Co-op 2	ENGW 3302 or 3315	4
ARTG 3350	4		Elective	4
Art + Design History Elective	4			
Design option 2	4			
	16	0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours	
ARTG 3451	4 Co-op 3	Co-op 3		
Computing and social issues elective	4			
Degree-focused elective 1	4			
Art + Design elective	4			
	16	0	0	

Year 5		
Fall	Hours Spring	Hours
CS 4500 (and CS 4501)	4 CS elective	4
ARTG 4550	4 Degree-focused elective 2	4
CS elective	4 Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 134

\* Indicates course must be taken in the semester listed.

### Four Years, Two Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200 or ARTF 1000	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 ARTG 1250	4 CS 3000	4	
CS 2500 and CS 2501	5 A+D fundamentals elective	4		
ARTF 1122 (with optional ARTF 1123)	4 Elective	4		
ENGW 1111	4			
	19	17	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTG 2250 (with optional ARTG 2251)	4 Co-op 1	Co-op 1	ENGW 3302	4
Art + Design History Elective	4		Elective	4
Design option 1	4			
Degree-focused elective 1	4			
CS 1210 or EEAM 2000	1			
	17	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
IS 4300	4 Co-op 2	Co-op 2	Elective	4
ARTG 3350	4		Elective	4
Computing and social issues	4			
Design option 2	4			
	16	0	0	8



Year 4			
Fall	Hours Spring	Hours Summer 1	Hours
CS 4500 (and CS 4501)	4 Degree-focused elective 2	4 Elective	4
ARTG 3451	4 Art + Design elective	4 Elective	4
ARTG 4550	4 CS elective	4	
Elective	4 CS elective	4	
	16	16	8

Total Hours: 134

## Computer Science and Game Development, BS

The computer science and game development combined major focuses on the specific skills needed to succeed in the highly competitive game industry. Students will engage in building and developing games and playable media experiences while completing courses in computer science and specialized game technology and design. Interdisciplinary courses enable students to develop their creative and entrepreneurial abilities, as well as create a strong portfolio of game pieces.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ARTF 1000	First Year Seminar Art and Design at Northeastern	1
CS 1210 or EEAM 2000	Professional Development for Khoury Co-op Professional Development for Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3520	Programming in C++ (Integrative course)	4

CS 3540	Game Programming (Integrative course)	4
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
CS 4300	Computer Graphics (Integrative course)	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
CS 4850	Building Game Engines (Integrative course)	4

### Computer Science Elective Course

CS 4150 or IS 4300	Game Artificial Intelligence (Integrative course) Human Computer Interaction	4
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### Game Design Courses

Code	Title	Hours
<b>Game Design Required</b>		
GAME 1110	Games and Society	4
GAME 2500	Foundations of Game Design	4
GAME 2950	Game Studio	4
GAME 3400	Level Design and Game Architecture	4
GAME 3700	Rapid Idea Prototyping for Games	4
GAME 3800	Game Concept Development	4
GAME 4700	Game Design Capstone	4

### Game Design Elective

GAME 1850 or GAME 3300	Experimental Game Design Game Interface Design	4
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### Khoury/Game-Related Electives

Complete three of the following:	12
Any course in ARTD, ARTE, ARTF, ARTG, ARTH, and GAME subject areas as long as prerequisites have been met.	
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	
MATH 1342	Calculus 2 for Science and Engineering
MATH 2331	Linear Algebra
ECON 2350 or PSYC 2320	Statistics Statistics in Psychological Research

### Supporting Courses

Code	Title	Hours
<b>Psychology</b>		
PSYC 1101	Foundations of Psychology	4
<b>Mathematics</b>		
Complete two courses from the following:	8	
MATH 1260	Math Fundamentals for Games (Integrative course)	
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342 or higher		

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4

**Advanced Writing in the Disciplines**

Students are strongly encouraged to take Advanced Writing in the Technical Professions (ENGW 3302) but may substitute Interdisciplinary Advanced Writing in the Disciplines (ENGW 3315).

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
	Complete 12 semester hours of general electives.	12

**Khoury College GPA Requirements**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Understanding Societies and Institutions
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills through Experience is satisfied through co-op.*

**Program Requirement**

133 total semester hours required

**Plan of Study****Sample Pattern, Four Years, Two Co-ops**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200 or ARTF 1000	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	0
CS 1800 and CS 1802	5 GAME 2500	4 Math Elective	4	
CS 2500 and CS 2501	5 Math Elective	4		
ENGW 1111	4 Elective	4		
GAME 1110	4			
	19	17	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3520 (*)	4 CS 1210 or EEAM 2000	1 Elective	4 Co-op	
CS 3000	4 CS 3540 (*)	4 Elective	4	
GAME 2950	4 CS 3650	4		
GAME 3400	4 GAME 3700	4		
	Khoury/ game elective	4		
	16	17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 4850 (*)	4 Co-op	0 Co-op	0
	CS 4300	4		
	ENGW 3302	4		
	PSYC 1101	4		
	0	16	0	0

**Year 4**

Fall	Hours Spring	Hours	Summer 2	Hours
CS 3700	4 GAME 4700	4	Vacation	0
CS 4500	4 Computer science elective	4		
GAME 3800	4 Khoury/ game elective	4		
Khoury/ game elective	4 Game Design Elective	4		
	16	16		0

Total Hours: 134

\*Indicates courses that must be taken in the semester listed.

**Computer Science and Media Arts, BS**

The computer science and media arts combined major is ideal for creative students who love technology. Students will acquire a solid foundation in both fields through curriculum that spans photography, animation, video, database design, computer graphics, and human-computer interaction.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ARTF 1000	First Year Seminar Art and Design at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1
or EEAM 2000	Professional Development for Co-op	
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4300	Computer Graphics	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction	4

**Khoury Elective Courses**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4

**Advanced Writing in the Disciplines**

ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4
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**Media Arts Courses**

Code	Title	Hours
<b>Required Media Arts Courses</b>		
ARTD 2100	Narrative Basics	4
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4

**Media Arts Electives**

Complete any six courses as long as prerequisites have been met. At least two must be a 3000-level course.

**Basics**

ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2370	Animation Basics (with optional ARTD 2371)	
ARTD 2380	Video Basics (with optional ARTD 2381)	

<b>Photography</b>		
ARTD 3460	Photography: Concept + Process	
ARTD 4565	Photography: Visual Strategies + Context	
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	

**Animation**

ARTD 3470	Animation 1	
ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTD 4570	Animation 2	
ARTD 4575	Animation 3	

**Video**

ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	

**History**

ARTH 2212	Survey of the Still and Moving Image	
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**Media Arts Capstone**

ARTD 4530	Media Arts Degree Project 1	4
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**Supporting Courses**

Code	Title	Hours
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**Mathematics Requirement**

MATH 2331	Linear Algebra	4
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**Computing and Social Issues**

Complete one of the following: 4

AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Integrative Courses**

Code	Title	Hours
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The following courses are fulfilled through the computer science requirement:

CS 4300	Computer Graphics	
IS 4300	Human Computer Interaction	

**Required General Electives**

Code	Title	Hours
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Complete 20 credits of general electives.

20

### NUPATH Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Integrating Knowledge and Skills Through Experience
- Demonstrating Thought and Action in a Capstone

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

137 total semester hours required

### Plan of Study

#### Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510	4 CS 3500 and CS 3501	5 Elective	4
CS 1800 and CS 1802	5 CS 2511	1 ARTF 1120	4 Elective	4
CS 2500	4 CS 3200	4		
CS 2501	1 ARTF 1122 (with optional ARTF 1123)	4		
ARTF 1124 and ARTF 1125	5 ARTF 2223 (with optional 2224)	4		
ENGW 1111	4			
	20	17	9	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210	1 Co-op	Co-op	MATH 2331	4
IS 4300	4		Khoury elective	4
CS 3000	4			
ARTF 2220 (with optional 2221)	4			
ARTD 2100	4			
	17	0	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 4300	4 Co-op	0 Co-op	0 Elective	4
Khoury elective	4 ENGW 3302	4	Elective	4

Media arts elective	4			
Media arts elective	4			
	16	4	0	8
Year 4				
Fall	Hours Spring	Hours		
CS 4500	4 ARTD 4530	4		
Elective	4 Computing and social issues	4		
Media arts elective	4 Media arts elective	4		
Media arts elective	4 Media arts elective	4		
	16	16		

Total Hours: 139

\*Indicates course must be taken in the term listed.

#### Sample Pattern, Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	0
CS 1800 and CS 1802	5 CS 3200	4 Elective	4	
CS 2500 and CS 2501	5 ARTF 1120	4		
ARTF 1122 (with optional ARTF 1123)	4 ARTF 2220 (with optional ARTF 2221)	4		
ENGW 1111	4			
	19	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210	1 Co-op	Co-op	Elective	4
IS 4300	4		Elective	4
CS 3000	4			
ARTD 2100	4			
Media arts elective	4			
	17	0	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2331	4 Co-op	0 Co-op	0 Vacation	0
Khoury elective	4			
ARTF 1124 and ARTF 1125	5			

ARTF 2223 (with optional ARTF 2224)	4				
	17	0	0	0	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
CS 4300	4	Co-op	0	Co-op	0
Khoury elective	4	ENGW 3302	4		
Media arts elective	4				
Media arts elective	4				
	16	4	0	0	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
CS 4500	4	ARTD 4530	4		
Media arts elective	4	Computing and social issues	4		
Media arts elective	4	Media arts elective	4		
Elective	4	Elective	4		
	16	16			

Total Hours: 139

\*Indicates course must be taken in the term listed.

## Communication Studies and Graphic and Information Design, BA

The Department of Communication Studies and the Department of Art + Design offer a combined major in communication studies and graphic and information design. Students interested in the combined major integrate the study of communication skills and processes with the design of message and meaning, integrating text, image, and data.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), Formal and Quantitative Reasoning (FQ),

Analyzing and Using Data (AD), and Difference and Diversity (DD) may be met through electives in the major.

## Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	

### Communication Electives

Complete three COMM courses. 12

## Graphic and Information Design Requirements

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2220)	4
<b>Art and Design History</b>		

ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Art and Design Electives</b>		
Complete one course with the corresponding tools course, if indicated, from the following:		4-5
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTG 2260	Programming Basics	
ARTG 2400	Interaction Design 1: Responsive	
ARTG 3450	Graphic Design 2	
ARTG 3460	Identity and Brand Design	
ARTG 4554	Typography 3	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Courses</b>		
COMM 2200 or ARTG 4550	Visual Communication Design Degree Project 1	4

**Communication Studies Grade Requirement**

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

**Communication Studies and Graphic and Information Design Major Credit Requirement**

84 semester hours required in the major

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops in Summer 2/Fall**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ARTF 1000 or COMM 1000	1	COMM 1112 or 2301	4	Communication studies elective	4
COMM 1101	4	Communication studies foundation course	4	ARTG 2250 (with optional ARTG 2251)	4

ARTF 1122 (with optional ARTF 1123)	4	ARTG 1250	4
Art History Elective	4	Elective	4
ENGW 1111	4		
		17	16
			8
			8

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
Communication studies writing-intensive 1	4	Communication studies elective 1	4	Communication studies elective 2	4
ARTG 3350	4	Design option 2	4	Elective	4
Design option 1	4	Art + Design elective	4		
Elective	4	Elective	4		
		EEAM 2000	1		
		16	17	8	0

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	Communication writing-intensive 2	4	Communication studies elective 3	4
		Design elective	4	Elective	4
		Elective	4		
		ENGW 3314 or 3315	4		
		0	16	8	0

Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	ARTG 4550	4	Vacation	0
		COMM 2200	4		
		Elective	4		
		Elective	4		
		0	16	0	0

Total Hours: 130

**English and Graphic and Information Design, BA**

The Department of English and the Department of Art + Design offer an interdisciplinary combined major in English and graphic and information design. Students interested in the combined major in English and graphic and information design integrate the study of literature and writing with the design of message and meaning, integrating text, image, and data.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450		
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2460		
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3676		
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2240		
ENGL 2296	Early African-American Literature	
ENGL/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000		
ENGL 4020		
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		

Complete one of the following: 4

ENGL 2330	The American Renaissance
ENGL 3720	19th-Century Major Figure
ENGL 4040	
ENGL 2301	The Graphic Novel
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3730	20th- and 21st-Century Major Figure

### Theories and Methods

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3700	Narrative Medicine
ENGL 4400	
ENGL 4410	Research in Rhetoric and Writing
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

### Comparative Literature

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 1503	
ENGL 2150	Literature and Digital Diversity
ENGL 2380	
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2460	
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3582	

ENGL 3663	The African American Novel	
ENGL 3676		
<b>Writing</b>		
Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Writing Seminar	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	
<b>Capstone</b>		
ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	
<b>English Electives</b>		
Complete two additional ENGL electives.		8

### Graphic and Information Design Requirements

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
or ENGL 1000	English at Northeastern	
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Art and Design Electives</b>		
Complete one of the following:		4
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTG 2260	Programming Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	

ARTF 1124	Form and Structure (with optional ARTF 1125)
ARTF 2223	Experience and Interaction (with optional ARTF 2224)
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)
ARTG 3351	
ARTG 3450	Graphic Design 2
ARTG 3460	Identity and Brand Design
ARTG 4552	
ARTG 4553	
ARTG 4554	Typography 3

### Integrative Requirement

Code	Title	Hours
<b>Integrative English Course</b>		
Complete one of the following:		4
ENGL 2301	The Graphic Novel	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 3340	Technologies of Text	
ARTG 4551	Design Degree Project 2	

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Five Years, Two Co-ops (Summer 2/Fall)

Year 1						
Fall	Hours	Spring	Hours	SummerHours	SummerHours	
				1	2	
ENGL 1000	1	ENGL 1160	4	Vacation	Vacation	
or ARTF 1000		or ARTF 1410				
ENGL 1450	4	ARTG 1122	4			
		ARTG 2250	4			
		(With optional ARTF 2251)				
ARTF 1122	4	Integrat course	4			
(with optional ARTF 2221)						
Elective	4					
	17		16	0	0	
Year 2						
Fall	Hours	Spring	Hours	SummerHours	SummerHours	
				1	2	
ARTF 2220	4	ARTH 2210	4	Vacation	Co-op	
(with optional ARTF 2221)						
ARTG 2250	4	ARTG 3350	4			



ENGL 1700	4	ENGL	4		
		19th-century requirement			
ENGL pre-19th century requirer	4	ENGL theories & method requirer	4		
	16		16	0	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>SummerHours 1</b>	<b>SummerHours 2</b>
Co-op		ARTG 3350	4	Vacation	Co-op
		ARTH 2:	4		
		ENGL comparative requirement	4		
		ENGL diversity requirer	4		
	0		16	0	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>SummerHours Full Semester</b>	
Co-op		ARTG 3451	4	Vacation	
		Elective	4		
		ENGL 20th-century requirement	4		
		ENGL elective	4		
	0		16		0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
ARTG 4550	4	Integrative course			
ENGL 4:	4	English writing requirer	4		
Elective	4	Elective	4		
ENGL elective	4	Elective	4		
	16		12		

Total Hours: 125

## Game Art and Animation, BFA

Game art and animation offers students an opportunity to master visual arts and animation within the game medium. The program focuses on developing the depth of knowledge required to be successful in a highly competitive industry. The continuing revolution in digital computing and animation has produced a rapidly evolving field for artists who create aesthetics, characters, and environments for games. The major encourages students to think critically and work collaboratively in multidisciplinary teams. The collaborative approach helps all team members to understand the context in which their asset contributions

are used and to develop visual design skills in the service of larger experiential goals. Students have many opportunities to collaborate with their peers and work with students in the BS in computer science and game development and BFA in games majors, culminating in a two-semester senior capstone. Students will have a home college in the College of Arts, Media and Design but will have a minimum of four interdisciplinary courses where students interact and work together with students in the other degrees.

Working in the interdisciplinary game areas, the program fosters experiential learning opportunities utilizing diverse intersections of skills merging artistic practice and expression blended with technology. Focus is on establishing core skills that engage critical thinking in preparation for professional practice in game art and asset creation or moving on to advanced study. Students will have an opportunity to develop tools to succeed, eagerness to innovate, and skills to become next-generation entrepreneurs in an ever-changing games and media landscape. Practical and technical experiential training will be offered via Northeastern's world-renowned co-op program.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression (EI), Interpreting Culture (IC), Societies and Institutions (SI), and Analyzing/Using Data (AD) are met through the major course requirements. All other NUpath requirements must be met through electives.

### Game Art Courses

Code	Title	Hours
ARTF 1000	Art and Design at Northeastern	1
<b>Foundations</b>		
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
GAME 1110	Games and Society	4
ARTH 1111	Global Art and Design History: Renaissance to Modern	4
ARTH 2212	Survey of the Still and Moving Image	4
<b>Art History Elective</b>		
Complete one of the following:		
ARTH 1100	Interactive Media and Society	4

ARTH 1110	Global Art and Design History: Ancient to Medieval	
ARTH 2210	Modern Art and Design History	
ARTH 2211	Contemporary Art and Design History	
ARTH 2213	Nineteenth-Century Art	
ARTH 2215	History of Graphic Design	
ARTH 5100	Contemporary Art Theory and Criticism	

**Media Arts Required**

GAME 2500	Foundations of Game Design	4
ARTD 2100	Narrative Basics	4
or GAME 2355	Narrative for Games	
ARTD 2370	Animation Basics (with optional ARTD 2371)	4

Complete one of the following: 4

ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2380	Video Basics (with optional ARTD 2381)	

**Animation Courses**

Code	Title	Hours
<b>Animation</b>		
ARTD 3470	Animation 1	4
ARTD 3472	Character Design for Animation	4
ARTD 3473	Animation for Games	4
ARTD 4570	Animation 2	4
ARTD 4575	Animation 3	4

**Electives**

Complete two of the following as long as prerequisites have been met. At least one must be at the 4000 level. 8

*Game Design*

GAME 1850	Experimental Game Design	
GAME 2010	The Business of Games	
GAME 2650	Introduction to Game Research Methods	
GAME 2750	Games Criticism and Theory	
GAME 2755	Games and Social Justice	
GAME 2950	Game Studio	
GAME 3055	Playful Design	
GAME 3300	Game Interface Design	
GAME 3400	Level Design and Game Architecture	
GAME 3700	Rapid Idea Prototyping for Games	
GAME 3800	Game Concept Development	
GAME 4155	Designing Imaginary Worlds	

*Art and Design*

ARTG 2260	Programming Basics	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 2501	Art and Design Abroad: History	
ARTE 4901	Special Topics in Art and Design Studio	
ARTH 1100	Interactive Media and Society	
ARTH 2213	Nineteenth-Century Art	
ARTS 2340	Painting Basics	
ARTS 2341	Figure Drawing	
ARTS 3449	Drawing in Mixed Media	
ARTD 3460	Photography: Concept + Process	
ARTD 3470	Animation 1	

ARTD 3480	Video: Sound and Image	
ARTD 4565	Photography: Visual Strategies + Context	
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	

*Other*

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
PSYC 1101	Foundations of Psychology	

**Capstone Requirement**

Code	Title	Hours
ARTD 4530	Media Arts Degree Project 1	4
ARTD 4670	Media Arts Degree Project 2	4

**Supporting Course**

Code	Title	Hours
MATH 1260	Math Fundamentals for Games	4

**Writing Requirement**

Code	Title	Hours
ENGW 3314	Advanced Writing in the Arts, Media, and Design	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Major Credit Requirement**

89 semester hours required in the major

**Program Requirement**

129 total semester hours required

**Plan of Study****Sample Four Years, Two Co-ops in Spring/Summer 1. Sample ZA Plan of Study Only****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 1122 (with optional ARTF 1123)	4	ARTF 2223 (with optional 2224)	4	Elective	4
ARTF 1120	4	ARTF 1124 and ARTF 1125	5	Elective	4	Elective	4
ARTF 2220 (with optional ARTF 2220)	4	ARTD 2370 (with optional ARTD 2371)	4				
GAME 2500	4	GAME 1110	4				
ENGW 1111	4						
		17	17	8	8		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTD 3470	4	Co-op		Co-op		Elective	4
ARTD 3473	4					Elective	4

ARTH 1111	4			
GAME 2355 or ARTD 2100	4			
EEAM 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTD 4570	4 Co-op	Co-op	Elective	4
ARTD 3472	4		Elective	4
ARTH 2212	4			
Advanced Writing in the Disciplines	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours
ARTD 4575	4 ARTD 4530	4
Art history elective	4 Game Design or A + D elective	4
Game Design or A + D elective	4 Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 131

**Architectural Studies and Design, BS**

Students integrate the study of architecture with strategies of graphic and information design, interaction design, or experience design. A flexible curriculum focused on key contemporary topics related to the built environment is combined with a broad understanding of the principles and systems of perception, communication, and action. Students integrate text and image to visualize concepts and data, create navigable interfaces and systems that allow audiences to take an active role to achieve meaningful goals, and take a holistic and integrative approach that focuses on the quality of the human experience in concrete situations. Successful students emerge with a strong portfolio suited to further graduate education or experience in architecture and design-related fields.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath attributes Engaging with the Natural and Designed World (ND), Exploring Creative Expression and Innovation (EI), Interpreting Culture (IC), Analyzing and Using Data (AD), Understanding Societies and Institutions (SI), and Engaging Differences and Diversity (DD) are met through the major course requirements.

In order to graduate, students must complete Formal and Quantitative Reasoning (FQ) and Ethical Reasoning (ER) in their electives.

*\*Please Note: We suggest students who wish to be eligible for the two-year Master of Architecture degree take the following courses: ARCH 2240, ARCH 3170, ARCH 5230, along with calculus and physics.*

**Architectural Studies Courses**

Code	Title	Hours
<b>Required Courses</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
ARCH 1120	Fundamental Architectural Design	6
ARCH 2130	Site, Space, and Program	6
ARCH 2260	Introduction to Building Systems	4
ARCH 3450	Advanced Architectural Communication	4
<b>Architecture History Elective</b>		
	Either ARCH 1370 or any ARCH 2300-level history course	4
<b>Electives</b>		
	Complete two of the following:	8
ARCH 1370	Special Topics in Architectural History	
ARCH 1450	Understanding Design	
ARCH 2140	Urban Institutions	
	Any second ARCH 2300-level history course	
ARCH 3351	Architecture Topics Abroad: Theory	
ARCH 3352	Architecture Topics Abroad: Drawing	
ARCH 3370	Advanced Topics in Architectural History	
ARCH 4850	Urban and Architectural History Abroad	
ARCH 5310	Design Tactics and Operations	

**Design Requirements**

Code	Title	Hours
<b>Art + Design Fundamentals Required</b>		
ARTF 1122	Color and Composition	4
<b>Art + Design Fundamentals Elective</b>		
	Complete one of the following:	4-5
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optimal ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional 2224)	

**Design Required**

ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4

**Design Elective**

Complete any one ARTG design elective course, as long as prerequisites have been met. 4

**Art + Design History Elective**

Complete any one art history course within the ARTH subject code. 4

**Art + Design Elective**

Complete any one ARTG, ARTE, ARTD, ARTH, ARTS, or GAME course as long as prerequisites have been met. 4

**Degree Capstone Project**

ARTG 4550 Design Degree Project 1 4

**Design Option**

**Code Title Hours**  
Complete one of the following options: 8

**Interaction Design Option**

ARTG 2400 Interaction Design 1: Responsive (with optional ARTG 2401)  
ARTG 3700 Interaction Design 2: Mobile

**Graphic and Information Design Option**

ARTG 2252 Graphic Design 1  
ARTG 3450 Graphic Design 2

**Experience Design Option**

ARTG 3462 Experience Design 1  
ARTG 3463 Experience Design 2

**Integrative Requirement**

**Code Title Hours**  
ARTG 4550 Design Degree Project 1

**Program Requirement**

132 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops in Summer 2/Fall**

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ARTF 1000 or ARCH 1000	1 ARCH 1110	4 Elective	4 Vacation	0	
ARCH 1310 and ARCH 1311	4 ARCH 1120	6 Elective	4		
ARTF 1122 (with optional ARTF 1123)	4 Architecture history elective	4			
ARTG 1250	4 Art + Design fundamentals elective	4			
ENGW 1111	4				
	17	18	8	0	

Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ARCH 2130	6 ARCH 2340 and ARCH 2341	4 Elective	4 Co-op	0	

ARCH 2260	4 ARCH 3450	4 Elective	4	
ARTG 2250 (with optional ARTG 2251)	4 ARTG 3350	4		
Architecture elective	4 Design option 1	4		
	EEAM 2000	1		
	18	17	8	0

Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	0 Architecture elective	4 Elective	4 Co-op	0	
ENGW 3314 or 3315 (online)	4 Art + Design history elective	4 Elective	4		
	ARTG 3451	4			
	Design option 2	4			
	4	16	8	0	

Year 4					
Fall	Hours Spring	Hours			
Co-op	0 Architecture elective	4			
Elective (online)	4 ARTG 4550	4			
	Art + Design elective	4			
	Design elective	4			
	4	16			

Total Hours: 134

**Sample Five Years, Two Co-ops in Spring/Summer 1**

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ARTF 1000 or ARCH 1000	1 ARCH 1110	4 Vacation	0 Vacation	0	
ARTF 1122 (with optional ARTF 1123)	4 ARCH 1120	6			
ARTG 1250	4 Architecture history Elective	4			
ARCH 1310 and ARCH 1311	4 Art + Design fundamentals elective	4			
ENGW 1111	4				
	17	18	0	0	

Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ARCH 2130	6 ARCH 2340 and ARCH 2341	4 Vacation	0 Vacation	0	

ARTG 2250 (with optional ARTG 2251)	4	ARCH 3450	4		
Art + Design history elective	4	Design option 1	4		
ARCH 2260	4	Design elective	4		
		18	16	0	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Architecture elective	4	Co-op	0	Co-op	0
ARTG 3350	4				
Design option 2	4				
ENGW 3314 or 3315	4				
EEAM 2000	1				
		17	0	0	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Architecture elective	4	Co-op	0	Co-op	0
ARTG 3451	4				
Elective	4				
Elective	4				
		16	0	0	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Art + Design elective	4	ARTG 4550	4		
Elective	4	Elective	4		
Elective	4	Elective	4		
Elective	4	Elective	4		
		16	16		

Total Hours: 134

## Game Design and Music with concentration in Music Technology, BS

The Game Design and Music combined major with a concentration in Music Technology prepares students to manage all aspects of music and sound design integral to the creative process in Game Design. Students focus on the digital sound technologies, audiovisual integration techniques and collaborative skills, grounded in real-world experience, that are necessary to apply one's musical imagination effectively in a game design environment. Also emphasized are the aesthetic, expressive, psychological and social perspectives essential to meaningful engagement across a broad range of applications in the game industry.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), and Analyzing/Using Data (AD), Interpreting Culture (IC), Natural/Designed World (ND), Difference/Diversity (DD), Writing Intensive (WI), and Capstone Experience(CE) are met through the major course requirements. All other NUpath requirements must be met through electives.

### Game Design Courses

Code	Title	Hours
ARTF 1000	Art and Design at Northeastern	1
<b>Game Design Required</b>		
GAME 1110	Games and Society	4
GAME 2500	Foundations of Game Design	4
GAME 2950	Game Studio	4
GAME 3400	Level Design and Game Architecture	4
GAME 3700	Rapid Idea Prototyping for Games	4
GAME 3800	Game Concept Development	4
<b>Game Design Electives</b>		
Complete one of the following:		
GAME 1850	Experimental Game Design	4
or GAME 3300	Game Interface Design	

### Art + Design Electives

Complete three courses from the following: 12  
Any course in ARTD, ARTE, ARTF, ARTG, ARTH, and GAME subject areas as long as prerequisites have been met.

### Music Requirements

Code	Title	Hours
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
Complete two of the following: 8		
MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition	
MUSC 3541	Music Analysis Seminar	
<b>Music in Context</b>		
MUSC 1001	Music in Everyday Life	4
<b>Contemporary</b>		
Complete one from the following: 4		
MUSC 2101	Black Popular Music	
MUSC 2310	Popular Music Since 1945	
MUSC 2320	40,000 Years of Music Technology	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	

### Music Technology Requirements

MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4
<b>Music Technology Electives</b>		
Complete two of the following:		8
MUSC 4510	Music and the Brain Research	
MUST 2320	Sound Design	
MUST 4610	Composition for Electronic Instruments	
MUST 3540	Special Topics in Music Technology	
MUST 4520		

## Integrative Requirement

Code	Title	Hours
Note: MUSC 1220 is already required in the Music Technology Requirements section		
MUST 1220	Introduction to Music Technology	

### Capstone

MUST 4611	Music Technology Capstone/Senior Recital	4
GAME 4700	Game Design Capstone	4

## Combined-Major Credit Requirement

Complete 90 semester hours in the major.

## Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or MUSC 1000	1	GAME 2500	4	A + D elective	4	Vacation	0
GAME 1110	4	MUST 1220	4	A + D elective	4		
ENGW 1111	4	MUSC 1202	4				
MUSC 1201	4	MUSC 2350	4				
Elective	4						
		17	16		8		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
GAME 2950	4	Co-op	4	Co-op	4	ENGW 3302	4
GAME 3400	4	Elective (online)	4			A + D elective	4
MUSC 1001	4						
MUST 1301	4						

EEAM 2000	1				
		17	4	0	8
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
GAME 3700	4	Co-op	4	Co-op	4
MUSC 3541, 2111, or 3300	4	Elective (online)	4		Elective
MUST 2431	4				Elective
Contemporary music requirement	4				4
		16	4	0	8
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
GAME 3800	4	GAME 4700	4		
MUSC 3541, 2111, or 3300	4	Computing and social issues	4		
Game design elective	4	Music technology elective	4		
Music technology elective	4	Elective	4		
		16	16		

Total Hours: 130

## Graphic and Information Design and Mathematics, BS

The Department of Mathematics and the Department of Art + Design offer a combined major in mathematics and graphic and information design. Students interested in the combined major integrate the study of mathematical reasoning including methods for analyzing and solving problems encountered in the physical world with the design of message and meaning, integrating text and image to visualize concepts and data to enhance human understanding of complex and vital knowledge.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Societies and Institutions (SI) are met through the major course requirements.

NUpaath requirements Natural and Designed World (ND), Difference and Diversity (DD), and Ethical Reasoning (ER) must be met through electives.

### Graphic and Information Design Requirements

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000 or MATH 1000	Art and Design at Northeastern Mathematics at Northeastern	1
<b>Art and Design Fundamentals</b>		
Complete one course in the following range. ARTF 1143 is recommended. ARTF 1141 to ARTF 1149		4
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optinal ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Art and Design Elective</b>		
Complete one of the following:		4
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTG 2260	Programming Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2223	Experience and Interaction (with optional ARTF 2224 )	
ARTG 2400	Interaction Design 1: Responsive (with optinal ARTG 2401 )	
ARTG 3351		
ARTG 3450	Graphic Design 2	
ARTG 3460	Identity and Brand Design	
ARTG 4552		
ARTG 4553		
ARTG 4554	Typography 3	

### Mathematics Requirements

Code	Title	Hours
<b>Math Reasoning</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
A grade of C or higher is required:		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4

MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate Math</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Advanced Elective</b>		
Complete one of the following:		4
MATH 3150	Real Analysis	
MATH 3175	Group Theory	
MATH 3560	Geometry	
<b>Mathematics Elective</b>		
MATH 4025 can count as an upper-level math elective as well as a capstone.		
Complete one course in the following range:		4
MATH 3101 to MATH 4899		

### Integrative Requirement

Code	Title	Hours
ARTG 3451	Information Design 1	4

### Combined-Major Credit Requirement

Complete 80 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample 5-Year Plan of Study , 2 Co-op

Year 1					
Fall	Hours	Spring	Hours		
ARTF 1000		1 MATH 1342	4		
ARTF 1143		4 ARTF 1122 (with optional ARTF 1123)	4		
MATH 1365		4 ARTG 1250	4		
MATH 1341		4 ARTH 2210	4		
ENGW 1111		4			
			17	16	
Year 2					
Fall	Hours	Spring	Hours		
MATH 2321		4 MATH 2341	4		
ARTG 2250		4 ARTG 2252	4		
ARTH 2215		4 Math elective	4		
Elective		4 Elective	4		
			16	16	
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 2331		4 Co-op		Co-op	
ARTG 3350		4			
Elective		4			
Elective		4			

EEAM 2000	1				
	17		0		0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
MATH 3081	4	Co-op		Co-op	
ARTG 3451	4				
Elective	4				
Elective	4				
	16		0		0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
ARTG 4550	4	Capstone	4		
Art and Design Elective	4	Elective	4		
Elective	4	Elective	4		
Elective	4	Elective	4		
	16		16		

Total Hours: 130

## Journalism and Interaction Design, BS

The School of Journalism and the Department of Art and Design offer an interdisciplinary combined major in journalism and interaction design. Broadly speaking, students in the combined major in journalism and interaction design at Northeastern integrate the study of journalism with the study of art and design.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), Difference and Diversity (DD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Introduction to College

Code	Title	Hours
JRNL 1000 or ARTF 1000	Journalism at Northeastern Art and Design at Northeastern	1

## Journalism Major Requirements

Code	Title	Hours
<b>Journalism Introductory Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundations</b>		
Must receive a C or better in the following:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Law and Ethics</b>		
JRNL 3550 or JRNL 4650	The First Amendment and the Media Ethics and Issues in Journalism	4
<b>Journalism Electives</b>		
Take three JRNL courses		12

## Art and Design Core

Code	Title	Hours
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
<b>Art and Design History</b>		
Complete two of the following:		8
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 2210	Modern Art and Design History	
ARTH 2215	History of Graphic Design	

## Design Requirements

Code	Title	Hours
<b>Design Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2260	Programming Basics	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4
<b>Degree Project</b>		
Complete one of the following:		8
ARTG 4550	Design Degree Project 1	
ARTG 4700	Interaction Team Degree Project 1	

## Design Elective

Code	Title	Hours
Complete one of the following:		
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	4
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTF 1120	Observational Drawing	



ARTF 1121	Conceptual Drawing
ARTF 1124	Form and Structure (with optional ARTF 1125)
ARTF 2220	Movement and Time (with optional ARTF 2221)
ARTG 2252	Graphic Design 1
ARTG 3250	Physical Computing
ARTG 3450	Graphic Design 2
ARTG 3460	Identity and Brand Design
ARTG 4552	
ARTG 4553	
ARTG 4554	Typography 3

**Integrative Requirements**

Code	Title	Hours
JRNL 5311	Design for Storytelling	4
Complete one of the following:		4
ARTG 4551	Design Degree Project 2	
or ARTG 4701	Interaction Team Degree Project 2	

**Program Requirement**

131 total semester hours required

**Plan of Study**

**Sample Five Years, Three Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
JRNL 1000 or ARTF 1000	1	JRNL 1101 and JRNL 1102	5	Elective	4	Vacation		
JRNL 1150	4	ARTF 2223 (with optional ARTF 2224)	4	Elective	4			
ENGW 1111	4	ARTG 2250 (with optional ARTG 2251)	4					
ARTG 1250	4	Elective	4					
ARTF 1122 (with optional ARTF 1123)	4							
		17	17	8				0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
JRNL 2201	4	Co-op 1	4	Co-op 1	4	Vacation		
EEAM 2000	1							
Art + design history elective 1	4							
ARTG 2260	4							
Elective	4							
		17	0	0				0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
JRNL 2301	4	Co-op 2	4	Co-op 2	4	Elective	4	

Journalism elective 1	4			ENGW 3302	4
ARTG 2400 (with optional ARTG 2401)	4				
ARTG 3350	4				
		16	0	0	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
JRNL 3610	4	Co-op 3	4	Co-op 3	4	Vacation		0
Journalism elective 2	4							
Art + design history elective 2	4							
ARTG 3700	4							
		16	0	0				0

**Year 5**

Fall	Hours	Spring	Hours	Hours
JRNL 5311	4	Journalism elective 3	4	
JRNL 3550 or 4650	4	ARTG 4551 or 4701	4	
ARTG 3451	4	Art + design elective	4	
ARTG 4550 or 4700	4	Elective	4	
		16	16	

Total Hours: 131

**Sample Five Years, Three Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
JRNL 1000 or ARTF 1000	1	JRNL 1101 and JRNL 1102	5	Vacation	4	Vacation		
JRNL 1150	4	ARTF 2223 (with optional ARTF 2224)	4					
ENGW 1111	4	ARTG 2250 (with optional ARTG 2251)	4					
ARTG 1250	4	Elective	4					
ARTF 1122 (with optional ARTF 1123)	4							
		17	17	0				0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
JRNL 2201	4	JRNL 2301	4	Vacation	4	Vacation		
EEAM 2000	1	Journalism elective 1	4					

Art + design history elective 1	4	ARTG 2400 (with optional ARTG 2401)	4
ARTG 2260	4	ARTG 3350	4
Elective	4		
	17	16	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours
JRNL 3610	4	Co-op 1		Co-op 1	
Journalism elective 2	4				
Art + design elective	4				
ARTG 3700	4				
	16		0		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
JRNL 3550 or 4650	4	Co-op 2		Co-op 2	
Art + design history elective 2	4				
Elective	4				
ENGW 3302	4				
	16		0		0

**Year 5**

Fall	Hours	Spring	Hours
JRNL 5311	4	Journalism elective 3	4
ARTG 3451	4	ARTG 4551 or 4701	4
ARTG 4550 or 4700	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 131

## Media and Screen Studies and Media Arts, BA

The Media and Screen Studies Program and the Department of Art + Design offer a combined major in media studies and media arts. Students pursuing the combined major are able to integrate the theory and practice of contemporary media studies with the deep appreciation of the narrative arts that is required for professional work in documentary film, game art and promotion, visualization, motion graphics, interactive art, illustration, and short animated films.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	

#### Foundation Course

Complete one of the following:	4
MSCR 1230	Introduction to Film Production
MSCR 2220	Understanding Media

#### Diversity or Globalization Course

Complete one of the following:	4
MSCR 3392	Gender and Film
MSCR 2325	Global Media
MSCR 2505	Digital Feminisms
MSCR 3437	Media and Identity

#### Writing-Intensive

Complete two of the following:	8
MSCR 2505	Digital Feminisms
MSCR 3600	Film Theory
MSCR 3420	Digital Media Culture
MSCR 3422	Media Audiences
MSCR 3700	Queer Media
MSCR 4208	TV History

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:	12	
Recommendation: Complete MSCR 4623 as one of your MSCR electives to fulfill NUpath capstone.		
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	

COMM 2655	Television Studio Production
COMM 3655	Digital Editing for TV
COMM 3750	Special Effects and Postproduction for Television
COMM 4755	Production Capstone

### Media Arts Courses

Code	Title	Hours
<b>Art + Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art + Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
<b>Drawing Fundamentals</b>		
ARTF 1120	Observational Drawing	4
or ARTF 1121	Conceptual Drawing	
<b>Art + Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2212	Survey of the Still and Moving Image	4
<b>Media Arts Basics Electives</b>		
Complete two of the following sets:		8
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2370	Animation Basics (with optional ARTD 2371)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
<b>Media Arts Capstone</b>		
ARTD 4530	Media Arts Degree Project 1	4
<b>Art + Design Electives</b>		
Complete any two courses not previously completed in ARTG, ARTE, ARTD, ARTH, or ARTS courses as long as prerequisites or corequisites have been met.		8-9

### Integrative Course

Code	Title	Hours
MSCR 3600	Film Theory	4

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to fulfill degree requirements.

### Program Requirement

128 total semester hours required

### Plan of Study

#### SAMPLE FOUR YEARS, TWO CO-OPS

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ARTF 1000 or MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4
MSCR 1220	4	ARTH 2212	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTF 1120 or 1121	4		

ARTF 2220 (with optional 2221)	4	Elective	4		
ENGW 1111	4				
		17	16	8	8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR foundation	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
Media arts basics elective	4						
ARTH 2210	4						
EEAM 2000	1						
		17	0	0		0	8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR diversity/globalization	4	Co-op		Co-op		Elective	4
MSCR writing-intensive	4					Elective	4
Media arts basics elective	4						
Art + design elective	4						
		16	0	0		0	8

#### Year 4

Fall	Hours	Spring	Hours
MSCR 3600	4	ARTD 4530	4
MSCR writing-intensive	4	MSCR elective	4
Art + design elective	4	MSCR elective	4
Elective	4	Elective	4
		16	16

Total Hours: 130

## Media Arts and Communication Studies, BA

The Department of Communication Studies and the Department of Art + Design offer a combined major in media arts and communication studies. Students interested in the combined major integrate the study of communication skills and processes with the study of the creation of the narrative arts, required for professional work in documentary film, game art and promotion, visualization, motion graphics, interactive art, illustration, and short animated films.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath attributes Creative Expression and Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

In order to graduate, students must complete Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) in their electives.

## Media Arts Courses

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Foundations</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221 )	4
<b>Drawing Fundamentals</b>		
ARTF 1120	Observational Drawing	4
or ARTF 1121	Conceptual Drawing	
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2212	Survey of the Still and Moving Image	4
<b>Degree Project</b>		
ARTD 4530	Media Arts Degree Project 1	4
<b>Media Art Basics Electives</b>		
Complete two of the following:		8-9
ARTD 2360	Introduction to Photography and ARTD 2361 and Photo Tools	
ARTD 2370	Animation Basics (with optional ARTD 2371)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
<b>Art and Design Electives</b>		
Complete any two courses not previously taken in ARTG, ARTE, ARTD, ARTH, or ARTS courses as long as prerequisites or co-requisites have been met.		8-9

## Communication Studies Courses

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

<b>Foundation Course</b>	
Complete one of the following:	
COMM 1210	Persuasion and Rhetoric
COMM 1225	Communication Theory
COMM 1231	Principles of Organizational Communication
COMM 1255	Communication in a Digital Age

<b>Cluster Course</b>	
Complete one of the following:	
COMM 1131	Sex, Relationships, and Communication
COMM 2303	Global and Intercultural Communication
COMM 2304	Communication and Gender
COMM 2501	Communication Law
COMM 2551	Free Speech in Cyberspace

<b>Writing-Intensive Courses</b>	
Complete two of the following:	
COMM 3200	Mobile Communication
COMM 3201	Health Communication
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 3500	Environmental Issues, Communication, and the Media
COMM 3501	Free Speech: Law and Practice
COMM 3530	Communication and Sexualities
COMM 3532	Theories of Conflict and Negotiation
COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4631	Crisis Communication and Image Management

<b>Communication Studies Electives</b>	
Complete three COMM courses.	
	12

## Integrative Requirement

Code	Title	Hours
<b>Bridge/Integrative Requirement</b>		
COMM 3415	Communication Criticism	4

## Communication Studies Grade Requirement

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops Plan of Study

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or COMM 1000	1	ARTF 2220 (with optional ARTF 2221)	4	Communication studies elective	4	Communication studies elective	4

ARTF 1122 (with optional ARTF 1123)	4	ARTH 2212	4	Elective	4	Elective	4
ARTH 2210	4	COMM 1112 or 2301	4				
COMM 1101	4	Drawing elective	4				
ENGW 1111	4						
	17		16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Media arts basics elective	4	Co-op		Co-op		Communication studies elective	4
Communicati studies cluster	4					Elective	4
Communication studies foundation	4						
Communicati studies writing- intensive	4						
EEAM 2000	1						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Media arts basics elective	4	Co-op		Co-op		Foreign Language	4
Communicati studies writing- intensive	4					Elective	4
Art + design elective	4						
Art + design elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
ARTD 4530	4	Foreign Language	4
COMM 3415	4	Elective	4
Foreign Language	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

## Theatre and Interaction Design, BA

This program is designed for students who want to combine a knowledge of the art of theatre with the theories and practice-based design disciplines. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design practices. Design is the practice-based discipline raising important questions about—and providing

significant answers to—how we live. Designers are needed when we don't know what is needed. Designers propose alternative futures and create new choices using design principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Theatre Requirements

A minimum grade of C is required for all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Major Elective</b>		
Complete one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Intermediate/Advanced Electives</b>		
Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	

THTR 2345	Acting for the Camera
THTR 2346	Viewpoints
THTR 2300	Classics of Global Theatre
THTR 2370	Lighting Design
THTR 2380	Costume Design
THTR 2400	Scenic Design
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 2600	Voice and Speech for the Actor
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
THTR 4345	Advanced Acting for the Camera

### Interaction Design Requirements

Code	Title	Hours
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#### Art + Design at Northeastern

ARTF 1000	Art and Design at Northeastern	1
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#### Art + Design Fundamentals

ARTF 1122	Color and Composition (with optional ARTF 1123)	4
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ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
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#### Design

ARTG 1250	Design Process Context and Systems	4
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ARTG 2250	Typography 1 (with optional ARTG 2251)	4
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ARTG 2260	Programming Basics	4
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ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	4
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ARTG 3350	Typography 2	4
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ARTG 3451	Information Design 1	4
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ARTG 3700	Interaction Design 2: Mobile	4
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#### Design Project

ARTG 4550	Design Degree Project 1	4
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#### Major Electives

##### Art + Design History

Complete two of the following: 8

ARTH 1111	Global Art and Design History: Renaissance to Modern
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ARTH 2210	Modern Art and Design History
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ARTH 2215	History of Graphic Design
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##### Art + Design Elective

Complete one of the following: 4

ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools
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ARTD 2380	Video Basics (with optional ARTD 2381)
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ARTF 1120	Observational Drawing
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ARTF 1121	Conceptual Drawing
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ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools
ARTF 2220	Movement and Time (with optional ARTF 2221)
ARTG 2252	Graphic Design 1
ARTG 3250	Physical Computing
ARTG 3460	Identity and Brand Design
ARTG 4554	Typography 3

### Integrative Requirement

Code	Title	Hours
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Note: ARTG 4550 double counts with the specified requirements above.

ARTG 4550	Design Degree Project 1	4
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THTR 4702	Capstone Rehearsal and Performance	4
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### Theatre and Interaction Design Combined Major Credit Requirement

Complete 94 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1000 or ARTF 1000	1	THTR 1101	4	Elective	4	Elective	4
THTR 1120	4	THTR 1131	4	Elective	4	Elective	4
ENGW 1111	4	ARTF 2223 (with optional ARTF 2224)	4				
ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4				
ARTG 1250	4						
	17		16		8		8

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000	1	Co-op 1		Co-op 1		Elective	4
Art + design history elective 1	4					Elective	4
THTR 2000	1						
THTR 1270	4						
ARTG 2260	4						
THTR 2325	4						
	18		0		0		8

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 2400 (with optional ARTG 2401)	4	Co-op 2		Co-op 2		Elective	4

ARTG 3350	4		Elective	4
Art + design elective 1	4			
THTR elective	4			
	16	0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>
				<b>Hours</b>
Art + design history elective 2	4	THTR 4702	4	Vacation
THTR elective	4	THTR advanced technique	4	Vacation
ARTG 3700	4	ARTG 3451	4	0
ARTG 4550	4	Elective	4	
THTR 4100	1			
	17	16	0	0

Total Hours: 132

## Theatre and Interaction Design, BS

This program is designed for students who want to combine a knowledge of the art of theatre with the theories and practice-based design disciplines. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design practices. Design is the practice-based discipline raising important questions about—and providing significant answers to—how we live. Designers are needed when we don't know what is needed. Designers propose alternative futures and create new choices using design principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Theatre Requirements

A minimum grade of C is required for all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

### Making Theatre

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4

### Major Electives

Complete one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	

### Intermediate/Advanced Electives

Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2300	Classics of Global Theatre	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
THTR 4345	Advanced Acting for the Camera	

### Interaction Design Requirements

Code	Title	Hours
<b>Art + Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art + Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optionals ARTG 2251)	4

ARTG 2260	Programming Basics	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4
<b>Design Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Major Electives</b>		
<i>Art + Design History</i>		
Complete two of the following:		8
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 2210	Modern Art and Design History	
ARTH 2215	History of Graphic Design	
<i>Art + Design Elective</i>		
Complete one of the following:		4
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2380	Video Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time	
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 3460	Identity and Brand Design	
ARTG 4554	Typography 3	

## Integrative Requirement

Code	Title	Hours
Note: ARTG 4550 double counts with the specified requirements above.		
ARTG 4550	Design Degree Project 1	4
THTR 4702	Capstone Rehearsal and Performance	4

## Theatre and Interaction Design Combined Major Credit Requirement

Complete 94 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
THTR 1000 or ARTF 1000	1	THTR 1101	4	Elective	4
THTR 1120	4	THTR 1131	4	Elective	4
ENGW 1111	4	ARTF 2223 (with optional ARTF 2224)	4		

ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4		
ARTG 1250	4				
	17		16		8
<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
EEAM 2000	1	Co-op 1		Co-op 1	Elective
Art + design history elective 1	4				Elective
THTR 2000	1				
THTR 1270	4				
ARTG 2260	4				
THTR 2325	4				
	18		0		0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
ARTG 2400 (with optional ARTG 2401)	4	Co-op 2		Co-op 2	Elective
ARTG 3350	4				Elective
Art + design history elective 1	4				
THTR elective	4				
	16		0		0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Art + design history elective 2	4	THTR 4702	4	Vacation	Vacation
THTR elective	4	THTR advanced technique	4		
ARTG 3700	4	ARTG 3451	4		
ARTG 4550 or 4700	4	Elective	4		
THTR 4100	1				
	17		16		0

Total Hours: 132

## Mechanical Engineering and Design, BSME

The combined major in mechanical engineering and design is designed to educate students in topics of both disciplines and the interface between them. Mechanical engineering involves the design, development, and manufacture of machinery and devices to transmit power or to convert energy from thermal to mechanical form in order to power the modern world and its machines. Its current practice has been heavily influenced by recent advances in computer hardware and software. Today, engineers also play a primary role in the development of new technologies in a variety of fields—energy conversion, solar energy utilization, environmental control, prosthetics, transportation, manufacturing, and new-materials development. Design is the discipline



that shapes human experiences in specific situations to improve quality. Designers pose important questions about—and provide significant answers to how we live. Designers are needed when we don't know what is needed as well as when we think we do. Students in this program will combine the disciplines in order to address complex problems with human-centered solutions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required courses. Students are responsible for satisfying these requirements with electives.

### Engineering Requirements

Code	Title	Hours
<b>Required Engineering</b>		
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475 or ME 3480	Fluid Mechanics International Applications of Fluid Mechanics	4
ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5
<b>Senior Capstone Design Project</b>		
MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5

### Technical Electives

Complete two of the following (at least one must be ME 4550 or ME 4570)		
ME 4508	Mechanical Engineering Computation and Design	
ME 4550	Mechanical Engineering Design	
ME 4555	System Analysis and Control	
ME 4570	Thermal Systems Analysis and Design	

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:		
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	2

3 semester hours from the following course count toward the engineering requirement:

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	3
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### Design Requirements

Code	Title	Hours
ARTF 1122	Color and Composition (with optional ARTF 1123)	
<b>Complete one of the following:</b>		<b>4</b>
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	

### Design Requirements

ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4

### Design Options

Complete one of the following design options:

<i>Interactive Design Option</i>		
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3700	Interaction Design 2: Mobile	

### Graphic and Information Design Option

ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	

### Experience Design Option

ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

### Art + Design History Elective

Complete any ARTH course. Recommend selecting an ARTH course that fulfills both NUpath IC and SI.

### Design Elective

Complete two ARTG courses (at least one at 3000-level or higher) as long as prerequisites have been met.

### Art + Design Elective

Complete any one ARTG, ARTE, ARTD, ARTH, ARTS course as long as prerequisites have been met.

### Supporting Courses: Mathematics/Science

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
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PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
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**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000 or ARTF 1000	Introduction to the Study of Engineering Art and Design at Northeastern	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required in each course:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 4 semester hours of academic, nonremedial, nonrepetitive courses. Recommend selecting a course to fulfill NUpath DD.		
		4

**Integrative Courses**

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
MEIE 4702	Capstone Design 2	

**Major GPA Requirement**

2.000 minimum GPA required in IE, ME, and MEIE courses

**Program Requirement**

139 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study**  
**4 Years, One Co-op in Summer 2/Fall**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ARTF 1000 or GE 1000	1	ARTF 1122 (EI)	4	Vacation	0
CHEM 1151 (ND)	4	GE 1502 (ER)	4		
CHEM 1153	0	MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3		
GE 1501	4	PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4	PHYS 1153	1		
				17	0
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
ARTG 1250 (EI)	4	ENCP 2000	1	ARTG 2250 (EI)	4
MATH 2321 (FQ)	4	MATH 2341	4	ME 3475 or 3480	4
ME 2350	4	ME 2355	4		
PHYS 1155 (ND)	3	ME 2356	1		
PHYS 1156 (AD)	1	ME 2380	4		
PHYS 1157	1	ME 2381	0		
		Art + Design Fundamental		4	
				17	8
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
ENGW 3302 or 3315 (WD)	4	ME 3455	4	MEIE 4701 (EI, WI, CE)	1
ME 2340 (WI)	4	ME 3456	1	Art + Design Elective	4
ME 2341	1	ME 4505 (AD)	4	Engineering Tech Elective	4
Art + Design History Elective	4	ME 4506	1		
Design Option	4	Design Option	4		
		Engineering Tech Elective		4	
				17	9
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	ENCP 3000	1		
		MEIE 4702 (EI, WI, CE)		5	
					0

General Elective (NUPath DD)	4
Design Elective	4
Design Elective	4
<b>0</b>	<b>18</b>

Total Hours: 139

### 4 Years, One Co-op in Spring/Summer 1

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTF 1000 or GE 1000	1 ARTF 1122 (EI)	4 Vacation	0 Vacation	0
CHEM 1151 (ND)	4 GE 1502 (ER)	4		
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	<b>17</b>	<b>17</b>	<b>0</b>	<b>0</b>

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTG 1250 (EI)	4 MATH 2341	4 Vacation	0 ENGW 3302 or 3315 (WD)	4
ENCP 2000	1 ME 2340 (WI)	4	ME 3475 or 3480	4
MATH 2321 (FQ)	4 ME 2341	1		
ME 2350	4 ME 2355	4		
PHYS 1155 (ND)	3 ME 2356	1		
PHYS 1156 (AD)	1 ME 2380	4		
PHYS 1157	1 ME 2381	0		
	<b>18</b>	<b>18</b>	<b>0</b>	<b>8</b>

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ME 3455	4 Co-op	0 Co-op	0 MEIE 4701 (EI, WI, CE)	1
ME 3456	1		Art + Design Elective	4
ME 4505 (AD)	4		Engineering Tech Elective	4
ME 4506	1			
ARTG 2250 (EI)	4			
Design Option	4			
	<b>18</b>	<b>0</b>	<b>0</b>	<b>9</b>

#### Year 4

Fall	Hours Spring	Hours
ENCP 3000	1 Art + Design Elective	4
MEIE 4702 (EI, WI, CE)	5 Design Elective	4
Art + Design History Elective	4 Design Elective	4
Design Option	4 Engineering Tech Elective	4
General Elective (NUPath DD)	4	
	<b>18</b>	<b>16</b>

Total Hours: 139

### 5 Years, Three Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTF 1000 or GE 1000	1 ARTF 1122 (EI)	4 Vacation	0 Vacation	0
CHEM 1151 (ND)	4 GE 1502 (ER)	4		
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	<b>17</b>	<b>17</b>	<b>0</b>	<b>0</b>

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321 (FQ)	4 ENCP 2000	1 Vacation	0 Co-op	0
ME 2350	4 MATH 2341	4		
PHYS 1155 (ND)	3 ME 2340 (WI)	4		
PHYS 1156 (AD)	1 ME 2341	1		
PHYS 1157	1 ME 2380	4		
ARTG 1250	4 ME 2381	0		
	Art + Design Fundamental	4		
	<b>17</b>	<b>18</b>	<b>0</b>	<b>0</b>

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ARTG 2250 (EI)	4 ME 3475 or 3480	4 Co-op	0
	ENGW 3302 or 3315 (WD)	4 Design Elective	4	
	ME 2355	4		
	ME 2356	1		

	Design Option	4			
	0	17	8	0	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	0 ENCP 3000	1 MEIE 4701 (EI, WI, CE)	1 Co-op	0	
	ME 3455	4 Art + Design Elective	4		
	ME 3456	1 Engineering Tech Elective	4		
	ME 4505 (AD)	4			
	ME 4506	1			
	Art + Design History Elective	4			
	Design Option	4			
	0	19	9	0	

<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	0 MEIE 4702 (EI, WI, CE)	5			
	Design Elective	4			
	Engineering Tech Elective	4			
	General Elective (NUPath DD)	4			
	0	17			

Total Hours: 139

## 5 Years, Three Co-ops in Spring/Summer 1

<b>Year 1</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
ARTF 1000 or GE 1000	1 ARTF 1122 (EI)	4 Vacation	0 Vacation	0	
CHEM 1151 (ND)	4 GE 1502 (ER)	4			
CHEM 1153	0 MATH 1342 (FQ)	4			
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3			
GE 1501	4 PHYS 1152 (AD)	1			
MATH 1341 (FQ)	4 PHYS 1153	1			
	17	17	0	0	

<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
ARTG 1250 (EI)	4 Co-op	0 Co-op	0 ARTG 2250 (EI)	4	
ENCP 2000	1		ME 3475 or 3480	4	

MATH 2321 (FQ)	4				
ME 2350	4				
PHYS 1155 (ND)	3				
PHYS 1156 (AD)	1				
PHYS 1157	1				
	18	0	0	8	

<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
MATH 2341	4 Co-op	0 Co-op	0 Vacation	0	
ME 2355	4				
ME 2356	1				
ME 2380	4				
ME 2381	0				
Design Option	4				
	17	0	0	0	

<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
ENCP 3000	1 Co-op	0 Co-op	0 MEIE 4701 (EI, WI, CE)	1	
ME 2340 (WI)	4		Art + Design Fundamental	4	
ME 2341	1		General Elective (NUPath DD)	4	
ME 3455	4				
ME 3456	1				
ME 4505 (AD)	4				
ME 4506	1				
Design Option	4				
	20	0	0	9	

<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
MEIE 4702 (EI, WI, CE)	5 ENGW 3302 or 3315 (WD)	4			
Art + Design History Elective	4 Art + Design Elective	4			
Design Elective	4 Design Option	4			
Engineering Tech Elective	4 Engineering Tech Elective	4			
	17	16			

Total Hours: 139

## Animation, Minor

The animation minor immerses students in the creation of animated artwork and assets for short animated films, game art and promotion, documentary films, visualization, motion graphics, illustration, and

interactive art. An intensive studio program, this curriculum seeks to immerse students in the knowledge, experience, and techniques of animation, informed by theory, experimentation, and critique. Extensive digital imaging and interactive media editing and production facilities afford students the opportunity to become proficient in the emerging practices necessary for remarkable work.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art and Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221 )	4
ARTD 2370	Animation Basics (with optional ARTD 2371 )	4
ARTD 3470	Animation 1	4

### Requirements for Art and Design Majors

*Note:* This minor is not available to students in the BFA in media arts program or any media arts combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTD 2370	Animation Basics (with optional ARTD 2371 )	4
ARTD 3470	Animation 1	4
<b>Electives</b>		
Complete two of the following:		8
ARTD 2100	Narrative Basics	
ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTD 4570	Animation 2	
ARTD 4575	Animation 3	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTH 2212	Survey of the Still and Moving Image	

### GPA Requirement

2.500 GPA required in the minor

## Art, Minor

The art minor allows students to complement any degree with a broad exploration of visual studies, fine arts, and design. Following an

introduction to the fundamentals of drawing and two-dimensional design, students select from courses in time-based media, interaction, sculpture, painting, and art history. The department's exceptional Dialogues are popular among art minors, who are able to complete a large portion of their course work during culturally immersive and focused studio residencies in places such as Ireland, Iceland, Cuba, and the Galapagos Islands.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art and Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123 )	4
<b>Elective Courses</b>		
Complete three of the following:		12
ARTF 1121	Conceptual Drawing	
ARTF 1124	Form and Structure (and ARTF 1125 )	
ARTF 2220	Movement and Time (with optional ARTF 2221 )	
ARTF 2223	Experience and Interaction (with optional ARTF 2224 )	
ARTS 2340	Painting Basics	
ARTS 2341	Figure Drawing	
ARTS 3449	Drawing in Mixed Media	
ARTE 2301	The Graphic Novel	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 2501	Art and Design Abroad: History	
ARTE 3901	Art and Design Special Topics	
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2370	Animation Basics (with optional ARTD 2371 )	
ARTD 2380	Video Basics (with optional ARTD 2381 )	
ARTH 1110	Global Art and Design History: Ancient to Medieval	
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 1200 and ARTH 1201	Visual Intelligence and Recitation for ARTH 1200	
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2210	Modern Art and Design History	
ARTH 2211	Contemporary Art and Design History	
ARTH 2212	Survey of the Still and Moving Image	

## Requirements for Art and Design Majors

*Note:* This minor is not available to students in the BA in art program or any art combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123 )	4
<b>Elective Courses</b>		
Complete three of the following:		12
ARTS 2340	Painting Basics	
ARTS 2341	Figure Drawing	
ARTS 3449	Drawing in Mixed Media	
ARTE 2301	The Graphic Novel	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 2501	Art and Design Abroad: History	
ARTE 3901	Art and Design Special Topics	
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2370	Animation Basics (with optional ARTD 2371 )	
ARTD 2380	Video Basics (with optional ARTD 2381 )	
ARTH 1110	Global Art and Design History: Ancient to Medieval	
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 1200 and ARTH 1201	Visual Intelligence and Recitation for ARTH 1200	
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2210	Modern Art and Design History	
ARTH 2211	Contemporary Art and Design History	
ARTH 2212	Survey of the Still and Moving Image	

### GPA Requirement

2.500 GPA required in the minor

### Art History, Minor

An ideal complement to many majors, the art history minor builds the techniques of visual intelligence necessary to successfully navigate an increasingly image-driven world. Students learn to interpret visual evidence as well as written documents to understand and interrogate how evolving ideas about quality and judgment have shaped the institutions of art, including the growing art market. A diverse and strong faculty brings its own research into the classroom, allowing students to gain international exposure and real-world experience with world-class museums and cultural centers in Boston, Cambridge, and the greater metropolitan area. Art history minors often have opportunities to conduct independent research, develop publishable texts, and gain exposure to the dynamic fields of visual art and curatorial practice.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses

and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

*Note:* This minor is not available to students in the BA in art program or any art combined major.

### Requirements

Code	Title	Hours
<b>Required Courses</b>		
Complete five of the following:		20
ARTH 1100	Interactive Media and Society	
ARTH 1110	Global Art and Design History: Ancient to Medieval	
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 1200 and ARTH 1201	Visual Intelligence and Recitation for ARTH 1200	
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2210	Modern Art and Design History	
ARTH 2211	Contemporary Art and Design History	
ARTH 2212	Survey of the Still and Moving Image	
ARTH 2213	Nineteenth-Century Art	
ARTH 2215	History of Graphic Design	
ARTH 5100	Contemporary Art Theory and Criticism	
ARTH 5902	Special Topics in Art and Design History	
ARTE 2501	Art and Design Abroad: History	

### GPA Requirement

2.500 GPA required in the minor

### Creative Fabrication, Minor

The creative fabrication minor is comprised of a suite of courses that introduces the student to studio principles and practices that will inform the creative, intuitive, and critical processes that are vital when realizing ideas into physical material form. The minor is designed to train and prepare the student with a skill set of traditional and emerging tools and methods for inventing, fabricating, constructing, shaping, and prototyping innovative work in a wide range of materials for a variety of products, places, and purposes. This minor offers the challenge of creating a project that demonstrates and tests the student's competence with the making of artifacts that align with the intentions and aspirations of the maker.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

**Required Courses**

Code	Title	Hours
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5

**Electives**

Code	Title	Hours
Complete four courses; two courses must be taken in the same department.		16

*Art + Design*

ARTE 3901	Art and Design Special Topics	
ARTG 3250	Physical Computing	

*Theatre*

THTR 1270	Introduction to Theatrical Design	
THTR 1131	Technical Theatre 1	
THTR 2400	Scenic Design	
THTR 2385	Fashion Construction and Pattern Making	

*Architecture*

ARCH 1110 and ARCH 1120	Fundamental Architectural Representation and Fundamental Architectural Design	
ARCH 2240	Architectonic Systems	
ARCH 3450	Advanced Architectural Communication	

*Engineering*

GE 1501	Cornerstone of Engineering 1	
GE 1502	Cornerstone of Engineering 2	
GE 2300	Engineering Structure and Function: Principles of Design in Nature	
GE 5030	Iterative Product Prototyping for Engineers	

**GPA Requirement**

2.000 GPA required

**Experience Design, Minor**

Experience design is a holistic approach that utilizes investigation into human environments in specific situations to improve quality. Given an understanding of goals, needs, and desires, it seeks to improve the various contexts by identifying and studying events and how they can be turned into beneficial practices.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Any prerequisites should be taken before registering for 2000-level courses and above.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

**Requirements for Non-Art and Design Majors**

Code	Title	Hours
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4

ARTG 1250	Design Process Context and Systems	4
ARTG 3462	Experience Design 1	4
<b>Electives</b>		<b>8-9</b>
Complete two of the following:		8
ARTD 2100	Narrative Basics	
ARTE 3901	Art and Design Special Topics	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 2260	Programming Basics	
ARTG 3250	Physical Computing	
ARTG 3463	Experience Design 2	
GE 1501	Cornerstone of Engineering 1	
GE 1502	Cornerstone of Engineering 2	
IE 2310 and IE 2311	Introduction to Industrial Engineering and Recitation for IE 2310	

**Requirements for Art and Design Majors**

Note: This minor is not open to students pursuing the BFA in design program or any design combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 3462	Experience Design 1	4
ARTG 3463	Experience Design 2	4
<b>Electives</b>		<b>8</b>
Complete two of the following:		
ARTD 2100	Narrative Basics	
ARTE 3901	Art and Design Special Topics	
ARTG 2260	Programming Basics	
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3250	Physical Computing	

**GPA Requirement**

2.500 GPA required in the minor

**Game Art, Minor**

The game art minor offers students an opportunity to become immersed in the study and practice of the visual arts and animation within the game medium. Students are afforded the opportunity to think critically and work collaboratively in multidisciplinary teams to produce art and animation assets that are critical to the success of projects in the game medium. Working in the interdisciplinary game areas, the program fosters experiential learning opportunities utilizing diverse intersections of skills merging artistic practice and expression blended with technology. Students will be immersed in experiences to develop tools to succeed, eagerness to innovate, and skills to become next-generation entrepreneurs in the ever-changing games and media landscape.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses

and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art + Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
ARTD 2370	Animation Basics (with optional ARTD 2371)	4
ARTD 3470	Animation 1	4

### Requirements for Art and Design Majors

*Note:* This minor is not available to students in the BFA in media arts program or any media arts combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTD 2370	Animation Basics (with optional ARTD 2371)	4
ARTD 3470	Animation 1	4
<b>Electives</b>		
Complete two of the following:		8
ARTD 2100	Narrative Basics	
ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
GAME 2500	Foundations of Game Design	

### GPA Requirement

2.500 GPA required in the minor

### Game Design, Minor

The game design minor allows students in other areas of study to become familiarized with the basics of game design. Game design minor students can collaborate with students in the game design major, as well as the combined majors in game art and animation and computer science and game development. Students make games and create portfolio pieces. Students will also be encouraged to apply principles from their own discipline to the game designs they create.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements

Code	Title	Hours
<b>Required Courses</b>		
GAME 1110	Games and Society	4
GAME 2500	Foundations of Game Design	4
<b>Elective Courses</b>		
Complete two of the following:		8
GAME 3700	Rapid Idea Prototyping for Games	
GAME 3800	Game Concept Development	
ARTG 2260	Programming Basics	

### GPA Requirement

2.000 GPA required in the minor

### Graphic and Information Design, Minor

Graphic design makes messages and meaning using visual form and the integration of text and image. It often has a persuasive intention and uses rules of visual composition, form, and pattern to enable storytelling or to create attention and an ambience for consideration. Information design focuses on visualizing concepts and data to enhance human understanding of complex and vital knowledge.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Any prerequisites should be taken before registering for 2000-level courses and above.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art and Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123 )	4
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251 )	4
<b>Electives</b>		
Complete two of the following:		8
ARTE 3901	Art and Design Special Topics	
ARTF 2220	Movement and Time (with optional ARTF 2221 )	
ARTH 2215	History of Graphic Design	
ARTG 2252	Graphic Design 1	
ARTG 3350	Typography 2	
ARTG 3450	Graphic Design 2	
ARTG 3451	Information Design 1	



## Requirements for Art and Design Majors

*Note:* This minor is not open to students pursuing the BFA in design program or any design combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251 )	4
<b>Electives</b>		
Complete three of the following:		12
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 3350	Typography 2	
ARTG 3450	Graphic Design 2	
ARTG 3460	Identity and Brand Design	
ARTG 4554	Typography 3	
ARTG 4555	Graphic Design Synthesis	
ARTH 2215	History of Graphic Design	
ARTE 3901	Art and Design Special Topics	

### GPA Requirement

2.500 GPA required in the minor

## Immersive Media, Minor

This is an interdisciplinary minor that provides a foundation in the design and development of immersive experiences in the exploration of human connection and interaction through media and technology. Focusing on the core principles, tools, and techniques of immersive media development, students have an opportunity to learn to tell stories, prototype new worlds, and explore creative workflows that will help shape the future of design.

The minor serves students who are interested in the following areas: human-computer interaction, enhanced realities, virtual reality, augmented reality, augmented virtuality, extended reality, and cross reality.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### COURSES

Some of the courses for the minor require prerequisites not listed here.

Code	Title	Hours
<b>Required</b>		
<i>Extended Realities</i>		
ARTD 2000	Introduction to Immersive Media	4
Complete after all required and elective courses:		
ARTG 3100	Physical and Digital Fabrication	4
<b>Electives</b>		

### Object-Oriented Programming Elective

Complete one from the following list:		4
ARTG 2260	Programming Basics	
CS 2510	Fundamentals of Computer Science 2	
EECE 2560	Fundamentals of Engineering Algorithms	
MUST 3540	Special Topics in Music Technology	
PHYS 1211	Computational Problem Solving in Physics	

### Extended Realities Electives

Complete two of the following: 8

<i>Content Creation</i>		
ARTD 2370	Animation Basics (with optional ARTD 2371)	
ARTD 3470	Animation 1	
ARTD 3471	Virtual Environment Design	
ARTD 3473	Animation for Games	
CS 1100	Computer Science and Its Applications	
CS 3540	Game Programming	
GAME 2950	Game Studio	
GAME 3700	Rapid Idea Prototyping for Games	
GE 1111	Engineering Problem Solving and Computation	
GE 1501	Cornerstone of Engineering 1	
GE 2300	Engineering Structure and Function: Principles of Design in Nature	
GE 2500	Design Analysis and Innovation	
IS 1500	Introduction to Web Development	

### Narrative Development

ARTD 2100	Narrative Basics	
ARTE 2301	The Graphic Novel	
GAME 2355	Narrative for Games	
JRNL 1101	Journalism 1: Fundamentals of Reporting	
JRNL 3610	Digital Storytelling and Social Media	
JRNL 3630	Magazine Writing	
JRNL 3370	Podcast and Radio Journalism	
MSCR 2160	Narrative Filmmaking	

### Business and Innovation

Only one course may be taken from this area:

ENTR 2301	Innovation!	
ENTR 3330	Lean Design and Rapid Prototyping	
MISM 3501	Information Visualization for Business	
MKTG 4502	Managing Customer Engagement in a Service World	
MKTG 4508	Digital Marketing	

### GPA Requirement

2.500 GPA required in the minor

## Interaction Design, Minor

Interaction design focuses on the creation of navigable interfaces and systems that allow audiences to achieve meaningful goals, connecting people to people and people to information and environments.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Any prerequisites should be taken before registering for 2000-level courses and above.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art and Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 2223	Experience and Interaction (with optional ARTF 2224 )	4
ARTG 1250	Design Process Context and Systems	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401 )	4
Choose one of the programming courses with lab course:		4
ARTG 2260	Programming Basics	
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
<b>Elective</b>		
Complete one of the following:		4
ARTF 1122	Color and Composition (with optional ARTF 1123 )	
ARTG 2250	Typography 1 (with optional ARTG 2251 )	
ARTG 2252	Graphic Design 1	
ARTG 3462	Experience Design 1	
ARTG 3700	Interaction Design 2: Mobile	

### Requirements for Art and Design Majors

*Note:* This minor is not open to students pursuing the BFA in design program or any design combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251 )	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401 )	4
<b>Electives</b>		
Complete two of the following:		8
ARTE 3901	Art and Design Special Topics	
ARTG 2260	Programming Basics	
ARTG 3462	Experience Design 1	
ARTG 3700	Interaction Design 2: Mobile	

### GPA Requirement

2.500 GPA required in the minor

## Photography, Minor

The photography minor immerses students in the creation of photographs. The curriculum seeks to involve students in the knowledge, experience, and techniques of photography, informed by theory,

experimentation, and critique. Digital imaging, editing, and production facilities afford students the opportunity to become proficient in the emerging practices necessary for a variety of creative and technical contexts.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art + Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123 )	4
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	5
ARTD 3460	Photography: Concept + Process	4
<b>Elective Courses</b>		
Complete two of the following:		8
ARTD 4565	Photography: Visual Strategies + Context	
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	
ARTH 2212	Survey of the Still and Moving Image	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	

### Requirements for Art + Design Majors

*Note:* This minor is not available to students in the BFA in media arts program or any media arts combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	5
ARTD 3460	Photography: Concept + Process	4
ARTD 4565	Photography: Visual Strategies + Context	4
<b>Elective Courses</b>		
Complete two of the following:		8
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	
ARTH 2212	Survey of the Still and Moving Image	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	

### GPA Requirement

2.500 GPA required in the minor

## Photojournalism, Minor

As our society continues to move toward a world of technology, the power of photos become that much more important. This minor will engage students on how to visually tell a compelling story. It will give students the skill sets needed to succeed in that endeavor.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* A student pursuing the minor in Photojournalism must complete a minimum of three (3) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Required Courses

Code	Title	Hours
<b>Photography Foundation</b>		
Complete one of the following:		4
ARTE 2500	Art and Design Abroad: Studio	
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2350	Photo Basics for Nonmajors	
<b>Photography Requirement</b>		
ARTD 3460	Photography: Concept + Process	4
<b>Integrative</b>		
JRNL 5310	Photojournalism	4
<b>Electives</b>		
Complete one of the following:		4
JRNL 2301	Visual Storytelling in Journalism	
JRNL 5314	Video News Reporting and Producing	

### GPA Requirement

2.000 GPA required in the minor

## Video Arts, Minor

The video arts minor is based on a multidisciplinary field focused on creative video expression and messaging. It weaves together collaborative frameworks, theories of social and cultural change, and video production (sound and image) alongside cinematic language (including documentary, imaginative, narrative, and experimental strategies). The scope of the video arts minor is a broader and more diverse tapestry than traditional video arts, and it reflects the dynamic evolution of video in multiple contexts, including the workplace. This minor enables students to explore contemporary, alternative, and other artistic means of video production in a variety of creative and technical contexts.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Any prerequisites should be taken before registering for 2000 level courses and above.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

## Requirements for Non-Art + Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 2220	Movement and Time (with optional ARTF 2221 )	4
ARTD 2380	Video Basics (with optional ARTD 2381 )	4
ARTD 3480	Video: Sound and Image	4
<b>Electives</b>		
Complete two of the following:		8
ARTD 3485	Experimental Video	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTH 2212	Survey of the Still and Moving Image	

## Requirements for Art + Design Majors

*Note:* This minor is not available to students in the BFA in media arts program or any media arts combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTD 2380	Video Basics (with optional ARTD 2381 )	4
ARTD 3480	Video: Sound and Image	4
ARTD 3485	Experimental Video	4
<b>Electives</b>		
Complete two of the following:		8
ARTE 2500	Art and Design Abroad: Studio	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTH 2212	Survey of the Still and Moving Image	

### GPA Requirement

2.500 GPA required in the minor

## Communication Studies

Website (<https://camd.northeastern.edu/communication-studies/>)

### Dale A. Herbeck, PhD

Professor and Chair

617.373.5517

617.373.8533 (fax)

commstudies@northeastern.edu

The Department of Communication Studies is committed to providing students with both the communication skills and the understanding of the communication process required to thrive in a complex and changing society. Majors are required to demonstrate a mastery of the fundamentals of effective communication, to learn the fundamentals of communication theory and practice, and to develop a distinct area of emphasis. Some of the more popular areas include argumentation and advocacy, organizational and health communication, international and intercultural communication, digital communication and social media, and media production. The curriculum is designed to enhance the understanding of human communication in a variety of contexts, to empower students to become informed and engaged citizens, and

to provide the knowledge and skills required to live a rich personal and professional life.

## Media and Screen Studies

Website (<https://camd.northeastern.edu/program/media-and-screen-studies/>)

### Dale A. Herbeck, PhD

Professor and Chair

617.373.5517

617.373.8533 (fax)

mscr@northeastern.edu

Media and screen studies (MSCR) educates students in the analysis and production of media. Taught from a liberal arts perspective, a media and screen studies degree seeks to give students the ability to think critically about the continually changing media industry and the complex world in which it exists and to apply that knowledge to media production. MSCR is a challenging degree that is not limited to what is traditionally offered at a film school or in a visual and performing arts degree. It gives students the tools to become engaged citizens equipped to meet the challenges of living in a global culture defined by technological and social change.

The Bachelor of Arts in Media and Screen Studies offers courses in analysis and practice. Required courses offer students an opportunity to obtain the critical thinking skills necessary to better understand media content, media technology, and media production. Students then decide how many production and analysis courses they want to take. Choosing from a broad range of electives, students can take more than half their major in media and film production courses, can take a majority of courses that critically examine media content and technology, or can combine courses in other ways.

Students may also enroll in one of the preexistent MSCR combined majors. Media and screen studies has combined majors with communication studies, English, journalism, political science, sociology, and theatre.

## Academic Progression Standards

Departmental probation will result from a cumulative grade-point average below 2.000. No more than two grades below a C in media and screen studies courses can be used to fulfill degree requirements. Dismissal from the major may occur as a result of two consecutive semesters on departmental probation.

## Programs

### Bachelor of Arts (BA)

- Communication Studies (p. 131)
- Communication Studies and Graphic and Information Design (p. 100)
- Communication and Media Studies (p. 133)
- Communication Studies and Sociology (p. 135)
- Communication Studies and Theatre (p. 137)
- English and Communication Studies (p. 139)
- Human Services and Communication Studies (p. 142)
- Linguistics and Communication Studies (p. 143)
- Media Arts and Communication Studies (p. 114)
- Media and Screen Studies and English (p. 149)
- Media and Screen Studies and History (p. 151)
- Media and Screen Studies and Journalism (p. 153)
- Media and Screen Studies and Media Arts (p. 113)

- Media and Screen Studies and Philosophy (p. 156)
- Media and Screen Studies and Political Science (p. 157)
- Media and Screen Studies and Sociology (p. 160)
- Media and Screen Studies and Theatre (p. 162)
- Media and Screen Studies (p. 147)
- Political Science and Communication Studies (p. 164)

### Bachelor of Science (BS)

- Business Administration and Communication Studies (p. 167)
- Communication Studies and Speech-Language Pathology and Audiology (p. 171)
- Computer Science and Communication Studies (p. 169)
- Health Science and Communication Studies (p. 172)
- Media and Screen Studies and Theatre (p. 175)
- Music and Communication Studies with Concentration in Music Industry (p. 176)
- Political Science and Communication Studies (p. 179)

### Minors

- Argumentation and Law (p. 182)
- Cinema Studies (p. 182)
- Communication Studies (p. 182)
- Digital Communications (p. 183)
- Film Production (p. 183)
- Human Communication (p. 183)
- Improvisation and Storytelling (p. 184)
- Media Production (p. 185)
- Media and Screen Studies (p. 184)
- Oratory and Public Speaking (p. 185)
- Political Communication (p. 185)
- Rhetoric (p. 186)
- Social Activism (p. 186)
- Sports, Media, and Communication (p. 186)

## Communication Studies, BA

The communication studies major offers students an opportunity to obtain the communication skills and the understanding of the communication process required to thrive in a complex and changing society. Majors are required to demonstrate a mastery of the fundamentals of effective communication, to learn the fundamentals of communication theory and practice, and to develop a distinct area of emphasis. Some of the more popular areas include argumentation and advocacy, organizational and health communication, international and intercultural communication, digital communication and social media, and media production. The curriculum is designed to enhance the understanding of human communication in a variety of contexts, to empower students to become informed and engaged citizens, and to provide the knowledge and skills required to live a rich personal and professional life.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

NUPath requirements Creative Expression/Innovation (EI), Societies and Institutions (SI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUPath requirements Natural and Designed World (ND), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), and Difference and Diversity (DD) may be met through electives in the major.

## Communication Studies Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
COMM 1000	Communication Studies at Northeastern	1
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
COMM 2301	Communication Research Methods	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two writing-intensive courses in communication studies from the following list:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	

COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4631	Crisis Communication and Image Management

### Capstone

Complete one of the following: 4

COMM 4102	Health Communication Campaigns
COMM 4530	Communication and Quality of Life
COMM 4602	Contemporary Rhetorical Theory
COMM 4608	Strategic Communication Capstone
COMM 4625	Online Communities

### Communication Studies Electives

Complete five communication studies courses not used to satisfy requirements above. 20

## Communication Studies Major Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

## Communication Studies Major Credit Requirement

Complete 52 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COMM 1000	1 ENGW 1111	4 COMM Elective	4 Elective	4
COMM 1101	4 COMM Foundational Course	4 COMM Elective	4 Elective	4
COMM 1112	4 Elective	4		
Elective	4 Elective	4		
Elective	4			
	17	16	8	8

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COMM 2301	4 Co-op	Co-op	0 COMM writing-intensive	4
COMM Cluster Course	4		COMM Elective	4
Elective	4			
Elective	4			
EEAM 2000	1			
	17	0	0	8

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COMM writing-intensive	4 Co-op	Co-op	Elective	4
COMM Elective	4		Elective	4

Elective	4			
Elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COMM Elective	4 Capstone	4		
Elective	4 Elective	4		
Elective	4 Elective	4		
Elective	4 Elective	4		
	16	16	0	0

Total Hours: 130

## Communication and Media Studies, BA

The Department of Communication Studies offers majors in both communication studies and in media and screen studies. The department also offers an integrated major that allows students to combine COMM and MSCR courses to create a unique plan of study that features courses on the theory and practice of communication along with the study of media, cultural, and creative industries. Students graduating with a communication and media studies major can pursue a graduate degree or enter careers in advertising, communication education, healthcare, journalism, law, public relations, government/politics, media and film production, and social and human services.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), Difference and Diversity (DD), Creative Expression/Innovation (EI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) may be met through electives in the major.

### Communication and Media Studies Requirements

Code	Title	Hours
<b>Introduction to College</b>		
COMM 1000	Communication Studies at Northeastern	1
or MSCR 1000	Media and Screen Studies at Northeastern	

#### Common Requirements

COMM 1101	Introduction to Communication Studies	4
MSCR 1220	Media, Culture, and Society	4
COMM 2301	Communication Research Methods	4

#### Communication Studies Foundational Course

Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	

#### Media Studies Foundational Course

Complete one of the following:		4
MSCR 1320	Media and Social Change	
MSCR 1420	Media History	
MSCR 2220	Understanding Media	

#### Diversity and Difference Cluster

Complete one of the following:		4
COMM 2304	Communication and Gender	
COMM 3304	Communication and Inclusion	
MSCR 2505	Digital Feminisms	
MSCR 3392	Gender and Film	
MSCR 3437	Media and Identity	

#### Globalization Cluster

Complete one of the following:		4
COMM 2303	Global and Intercultural Communication	
MSCR 2325	Global Media	

#### Creative Expression Cluster

Complete one of the following:		4
COMM 1112	Public Speaking	
MSCR 1230	Introduction to Film Production	
MSCR 3389	Screenwriting	

#### Writing-Intensive

Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3600	Film Theory	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

**Capstone**

Complete one of the following:	4
COMM 4102 Health Communication Campaigns	
COMM 4530 Communication and Quality of Life	
COMM 4533 Consultation Skills	
COMM 4602 Contemporary Rhetorical Theory	
COMM 4608 Strategic Communication Capstone	
COMM 4625 Online Communities	
COMM 4755 Production Capstone	
COMM 4901 Seminar in Communications	
MSCR 4623 Theories of Media and Culture	

**Elective courses**

Choose five from the following list:	20
Any COMM courses not already counting above	
Any MSCR courses not already counting above	
ARTD 2380 Video Basics (with optional ARTD 2381)	
ARTD 3480 Video: Sound and Image	

**Major Grade Requirement**

No more than three grades below a C in COMM and MSCR courses may be used to fulfill major requirements.

**Program Requirement**

128 total semester hours required

## Communication Studies and Graphic and Information Design, BA

The Department of Communication Studies and the Department of Art + Design offer a combined major in communication studies and graphic and information design. Students interested in the combined major integrate the study of communication skills and processes with the design of message and meaning, integrating text, image, and data.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Difference and Diversity (DD) may be met through electives in the major.

**Communication Studies Requirements**

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	
<b>Communication Electives</b>		
Complete three COMM courses.		12
<b>Graphic and Information Design Requirements</b>		
Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2220)	4
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4

**Design**

ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4

**Degree Project**

ARTG 4550	Design Degree Project 1	4
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**Art and Design Electives**

Complete one course with the corresponding tools course, if indicated, from the following: 4-5

ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTG 2260	Programming Basics	
ARTG 2400	Interaction Design 1: Responsive	
ARTG 3450	Graphic Design 2	
ARTG 3460	Identity and Brand Design	
ARTG 4554	Typography 3	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Courses</b>		
COMM 2200 or ARTG 4550	Visual Communication Design Degree Project 1	4

**Communication Studies Grade Requirement**

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

**Communication Studies and Graphic and Information Design Major Credit Requirement**

84 semester hours required in the major

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or COMM 1000	1	COMM 1112 or 2301	4	Communication studies elective	4	A + D Foundation	4
COMM 1101	4	Communication studies foundation course	4	ARTG 2250 (with optional ARTG 2251)	4	Elective	4

ARTF 1122 (with optional ARTF 1123)	4	ARTG 1250	4		
Art History Elective	4	Elective	4		
ENGW 1111	4				
		17	16	8	8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication studies writing-intensive 1	4	Communication studies elective 1	4	Communication studies elective 2	4	Co-op	0
ARTG 3350	4	Design option 2	4	Elective	4		
Design option 1	4	Art + Design elective	4				
Elective	4	Elective	4				
		EEAM 2000	1				
		16	17	8	0		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Communication writing-intensive 2	4	Communication studies elective 3	4	Co-op	0
		Design elective	4	Elective	4		
		Elective	4				
		ENGW 3314 or 3315	4				
		0	16	8	0		

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ARTG 4550	4	Vacation	0	Co-op	0
		COMM 2200	4				
		Elective	4				
		Elective	4				
		0	16	0	0		

Total Hours: 130

**Communication Studies and Sociology, BA**

The communication studies department and the sociology department offer an interdisciplinary combined major in communication studies and sociology. The combined major integrates the study of communication skills and processes with the study of social behaviors.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.



## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

NUPath requirements Societies and Institutions (SI) and Ethical Reasoning (ER) are met through the major course requirements.

NUPath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Difference and Diversity (DD), and Analyzing and Using Data (AD) may be met through electives in the major.

## Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1000	Communication Studies at Northeastern	1
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Courses</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	

COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4631	Crisis Communication and Image Management

## Communication Studies Electives

Complete three COMM courses. 12

## Sociology Requirements

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
<b>Introductory Electives</b>		
Complete two of the following:		8
SOCL 1228	Social Problems	
SOCL 1245	Sociology of Poverty	
SOCL 1255	Sociology of the Family	
SOCL 1260	Gender in a Changing Society	
SOCL 1295	Drugs and Society	
<b>Intermediate-Level Elective</b>		
Complete one of the following:		4
SOCL 2358	Current Issues in Cities and Suburbs	
SOCL 3440	Sociology of Human Service Organizations	
SOCL 3450	Class, Power, and Social Change	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 3487	Applied Sociology: Practice and Theory	
<b>Advanced-Level Elective</b>		
Complete one of the following:		4
SOCL 4518	Law and Society in a Digital World	
SOCL 4520	Race, Class, and Gender	
SOCL 4528	Computers and Society	
SOCL 4580	Special Topics in Sociology	
SOCL 4992	Directed Study	
<b>Capstone and Integrative Requirements</b>		
Code	Title	Hours
<b>Integrative Course</b>		
Complete one of the following:		4
COMM 3320	Political Communication	
COMM 3532	Theories of Conflict and Negotiation	
SOCL 1246	Environment and Society	
<b>Capstone/Senior Seminar Option</b>		
Complete one of the following two options:		8
<i>Communications Capstone Option</i>		
Complete one COMM course and one SOCL course from the following list:		
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4625	Online Communities	
SOCL 3000 to SOCL 4999		
<i>Sociology Senior Seminar Option</i>		

Complete SOCL 4600 and one COMM course from the following list:

SOCL 4600	Senior Seminar
COMM 3000 to COMM 4999	

### Communication Studies Grade Requirement

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

### Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### Communication Studies and Sociology Combined Major Credit Requirement

Complete 80 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000	1	ENGW 1111	4	Communication Studies cluster course	4	Introductory Sociology elective	4
COMM 1101	4	Communication Studies foundation course	4	Elective	4	Elective	4
COMM 1112 or 2301	4	SOCL 2320	4				
SOCL 1101	4	SOCL 2321	4				
SOCL 3300	4						
	17		16		8		8

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication Studies elective	4	CO-OP	0	CO-OP	0	Communication Studies elective	4
Elective	4					Communication Studies writing-intensive	4
Introductory Sociology elective	4						
Elective	4						
EEAM 2000	1						
	17		0		0		8

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication Studies writing-intensive	4	CO-OP	0	CO-OP	0	Communication Studies elective	4
Intermediate Sociology elective	4					Elective	4
Advanced Writing in the Discipline	4						
Elective	4						
	16		0		0		8

##### Year 4

Fall	Hours	Spring	Hours
Elective	4	Communication Studies or Sociology capstone	4
Elective	4	Communication Studies or Sociology capstone elective	4
Integrative course	4	Elective	4
Advanced Sociology elective	4	Elective	4
	16		16

Total Hours: 130

## Communication Studies and Theatre, BA

The Departments of Theatre and Communication Studies offer an interdisciplinary combined major that unites the artistic dimensions of theatre with the practical skills and theories in communication studies. The program provides both the creative study of theater performance, literature, playwriting, and directing with the ability to research and deliver a compelling speech and think critically and write effectively. The two disciplines unite in shared values of original personal expression, professional collaboration, and experiences in the cultural, social, and ethical impact of theatre as human communication.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Creative Expression/Innovation (EI), Societies and Institutions (SI), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Difference and Diversity (DD) may be met through electives in the major.

## Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1000	Communication Studies at Northeastern	1
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1231	Principles of Organizational Communication	
COMM 1225	Communication Theory	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Courses</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	
<b>Communication Studies Electives</b>		
Complete three COMM courses.		12

## Theatre Requirements

A minimum grade of C is required in all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Choose one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Intermediate or Advanced Technique</b>		
Choose two of the following:		8
THTR 2310	History of Musical Theatre	
THTR 2330	Playwriting	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Integrative Requirements</b>		
Choose from one of the following:		4
THTR 4702	Capstone Rehearsal and Performance	
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
<b>Communication Studies Major Grade Requirement</b>		
No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.		
<b>Program Requirement</b>		
130 total semester hours required		

## Plan of Study

### Sample Four Years, Two Co-ops in Spring/Summer

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Total
COMM 1000 or THTR 1000	1	COMM 1112 or 2301	4	Communication studies foundation course	4	Vacation	4	0
COMM 1101	4	THTR 1131	4	Communication studies elective	4			16
THTR 1100	1	Foreign language course or elective	4					18
THTR 1101	4	ENGW 1111	4					16
THTR 1120	4							8
Foreign language elective or THTR elective	4							0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Total
Communication studies cluster course	4	Co-op #1	0	Co-op #1	0	Elective	4	8
Communication studies elective	4					Elective	4	16
THTR 2000	1							17
THTR 2325	4							21
Theatre text and context	4							25
EEAM 2000	1							26

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Total
THTR 1270	4	Comm writing intensive	4	Optional Co-op #2	0	Optional Co-op #2	0	8
THTR intermediate or advanced	4	Comm elective	4					16
Foreign language or elective	4	Elective	4					20
ENGW 3314 or 3315	4	Elective	4					24

#### Year 4

Fall	Hours	Spring	Hours	Total
Communication studies writing-intensive	4	Integrative course	4	8

THTR Intermediate or advanced elective 2	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 132

## English and Communication Studies, BA

The English department and the communication studies department offer an interdisciplinary combined major in English and communication studies. Broadly speaking, students in the combined major in English and communication studies at Northeastern integrate the study of literature and writing with studies of media, social, corporate, and political communications.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### English Requirements

Code	Title	Hours
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#### English Course-Level Requirement

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

#### Introduction to College

ENGL 1000	English at Northeastern	1
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#### Foundational Courses

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	

#### Diversity

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:

ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 2470	Asian-American Literature	
ENGL 3663	The African American Novel	

ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
<b>Pre-Nineteenth-Century Literature</b>	
Complete one of the following: 4	
ENGL 1600	Introduction to Shakespeare
ENGL 1700	Global Literatures 1
ENGL 2296	Early African-American Literature
ENGL 3101	Early Literatures
ENGL 3120	17th- and 18th-Century Literatures
ENGL 3618	Milton
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>	
Complete one of the following: 4	
ENGL 2301	The Graphic Novel
ENGL 2330	The American Renaissance
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3140	19th-Century Literatures
ENGL 3619	Emerson and Thoreau
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3720	19th-Century Major Figure
ENGL 3730	20th- and 21st-Century Major Figure
<b>Theories and Methods</b>	
Complete one of the following: 4	
ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3700	Narrative Medicine
ENGL 4410	Research in Rhetoric and Writing
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender

LING 3458	Topics in Linguistics	
<b>Comparative Literature</b>		
Complete one of the following: 4		
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1500	British Literature to 1800	
ENGL 1502	American Literature to 1865	
ENGL 2150	Literature and Digital Diversity	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2470	Asian-American Literature	
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
ENGL 3487	Film and Text (Abroad)	
ENGL 3663	The African American Novel	
<b>Writing</b>		
Complete one of the following: 4		
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Writing Seminar	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	
<b>Capstone</b>		
ENGL 4710	Capstone Seminar	
or ENGL 4720	Capstone Project	
<b>English Electives</b>		
Complete two additional ENGL electives. 8		
<b>Communication Studies Requirements</b>		
<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following: 4		
COMM 1210	Persuasion and Rhetoric	
COMM 1231	Principles of Organizational Communication	
COMM 1225	Communication Theory	

COMM 1255	Communication in a Digital Age
<b>Cluster Course</b>	
Complete one of the following: 4	
COMM 1131	Sex, Relationships, and Communication
COMM 2303	Global and Intercultural Communication
COMM 2304	Communication and Gender
COMM 2501	Communication Law
COMM 2551	Free Speech in Cyberspace

<b>Writing-Intensive Courses</b>	
Complete two of the following: 8	
COMM 3200	Mobile Communication
COMM 3201	Health Communication
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 3500	Environmental Issues, Communication, and the Media
COMM 3501	Free Speech: Law and Practice
COMM 3530	Communication and Sexualities
COMM 3532	Theories of Conflict and Negotiation
COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4631	Crisis Communication and Image Management

<b>Communication Studies Electives</b>	
Complete three additional COMM courses. 12	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative English Course</b>		
Complete one of the following: 4		
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3381	The Practice and Theory of Teaching Writing	

<b>Integrative Communication Studies Course</b>		
COMM 3415	Communication Criticism	4
or COMM 4602	Contemporary Rhetorical Theory	

**Communication Studies Grade Requirements**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ENGL 1000 or COMM 1000	1	Communication Studies foundational course	4	Communication Studies cluster course	4
ENGL 1400	4	English diversity course	4	Communication Studies elective	4
COMM 1101	4	English Pre-19th Century Literature elective	4	Communication Studies elective	4
COMM 1112 or 2301	4	ENGL 1160 or 1410	4		
Elective	4				
		17		16	8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
English 19th-20th-21st Century Literature elective	4	CO-OP	4	CO-OP	4
English Theories and Methods course	4			Communication Studies writing-intensive	4
Foreign Language	4			Communication Studies elective	4
Elective	4				
EEAM 2000	1				
		17		0	0
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
English Comparative Literature elective	4	CO-OP	4	CO-OP	4
English Writing elective	4			Elective	4
Communication Studies writing-intensive	4				
Foreign Language	4				
		16		0	0
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
English elective	4	English capstone	4		
English elective	4	Integrative COMM Course	4		

Integrative ENGL course	4 Elective	4
Elective	4 Elective	4
		16
		16

Total Hours: 130

## Human Services and Communication Studies, BA

The intersection of communications studies and human services practices spans several domains. Nonprofit organizations depend on communications professionals to effectively represent their work to the community, partner organizations, and funders. Knowledge and skills developed in communications studies also service human services professionals working in the political realm as they seek to promote impactful social policies.

The human services major is designed to prepare students for careers in social change by providing them with the theoretical and skill-based background necessary for practice and research. Students will develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at the individual and structural levels. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, and internship opportunities.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Human Services Requirements

Code	Title	Hours
<b>Human Services Overview</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	

HUSV 2960	Intercultural Studies through Human Services	
<b>Human Services Elective</b>		
Complete two additional HUSV courses.		8

### Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Courses</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	
<b>Communication Studies Electives</b>		
Complete three COMM courses		12
<b>Capstone</b>		
Complete one of the following capstone/senior seminar options:		
<b>Code Title Hours</b>		
<b>Communications Capstone Option</b>		
Complete one of the following courses:		4
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	

COMM 4625	Online Communities	
Complete one additional HUSV elective.		4
<b>Human Services Capstone Option</b>		
HUSV 4700	Senior Seminar in Human Services	4
Complete one course in the following range:		4
COMM 3000 to COMM 4999		

### Integrative Course

Code	Title	Hours
HUSV 3590	Nonprofit Communications	4

### Communication Studies Major Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000 or HUSV 1000	1	MATH 1215	4	Communication Studies foundation course	4	Communication Studies cluster course	4
HUSV 1101	4	HUSV 2300	4	Communicati Studies elective	4	Communicati Studies elective	4
ENGW 1111	4	HUSV Elective	4				
COMM 1101	4	COMM 1112 or 2301	4				
Elective	4						
		17	16	8	8		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 2970	4	CO-OP	CO-OP			Communication Studies writing- intensive	4
Communicati Studies elective	4					Elective	4
Elective	4						
HUSV Elective	4						
EEAM 2000	1						
		17	0	0	8		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Human Services Diverse Populations	4	CO-OP	CO-OP			Communication Studies writing- intensive	4
HUSV 3570	4					Elective	4
ENGW 3315	4						
Elective	4						
		16	0	0	8		

Year 4			
Fall	Hours	Spring	Hours
HUSV 3900	4	Capstone	4
HUSV 3590	4	Elective	4
Additional COMM/ HUSV Elective	4	Elective	4
Elective	4	HUSV 4994	6
		16	18

Total Hours: 132

### Linguistics and Communication Studies, BA

In the combined major in linguistics and communication studies, students learn about the formal structures and analysis of human languages across multiple levels (sounds, words, phrases and sentences, meaning) while simultaneously mastering the fundamentals of effective communication and of communication theory and practice. Students receive extensive training in writing and speaking, both for a technical audience and more generally; and they explore the role of language and communication in society, both from a broad theoretical perspective and in narrower, more focused and applied domains.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4



LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete two of the following (not counted elsewhere):		8
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	
or LING 4971	Junior/Senior Honors Project 2	
or LING 4991	Directed Study Research	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	
PSYC 3464	Psychology of Language	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	

## Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Required Courses</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
COMM 2301	Communication Research Methods	4
<b>Foundation Course</b>		
Complete one course from the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one course from the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Course</b>		
Complete one course from the following:		4

COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 3610		
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	

## Communication Studies Electives

Complete two additional COMM courses 8

## Integrative Requirement

Code	Title	Hours
<b>Sociolinguistics</b>		
LING 3442	Sociolinguistics	4
<b>Communication Studies Integrative Course</b>		
Complete one of the following, not used to fulfill above requirements:		4
COMM 3415	Communication Criticism	
COMM 4602	Contemporary Rhetorical Theory	
<b>Capstone Experience</b>		
Complete one of the following, not used to fulfill above requirements:		4
LING 4654	Seminar in Linguistics	
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4533	Consultation Skills	
COMM 4602	Contemporary Rhetorical Theory	
COMM 4608	Strategic Communication Capstone	
COMM 4625	Online Communities	

## Communication Studies Grade Requirement

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

## Linguistics and Communication Studies Combined Major Credit Requirement

Complete 76 semester hours in the major.

## Program Requirement

128 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Summer 2/Fall Co-ops**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 1000	1 LING 2350	4 COMM Studies Elective	4 Elective	4
LING 1150	4 LING 3412	4 Elective	4 Elective	4
COMM 1101	4 COMM Studies Foundation Course	4		
COMM 1112	4 Elective	4		
ENGW 1111	4			
	17	16	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Linguistic Structure or Linguistics Elective	4 Linguistic Structure or Linguistics Elective	4 COMM Studies Elective	4 COOP	
COMM 2301	4 LING 3442 (Or Linguistics Elective)	4 Elective	4	
COMM Studies Cluster Course	4 COMM Studies Elective	4		
Foreign Language Course	4 Foreign Language Course	4		
EEAM 2000 or EESC 2000	1			
	17	16	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COOP	Linguistic Structure or Linguistics Elective	4 COMM Studies Writing Intensive	4 COOP	
	LING 3442 (or Linguistics Elective)	4 Elective	4	
	ENGW 3315	4		
	Foreign Language Course	4		
	0	16	8	0

Year 4		
Fall	Hours Spring	Hours
COOP	Linguistic Structure or Linguistics Elective	4

COMM 3415 or 4602	4
COMM Studies Writing Intensive	4
Integrative Capstone Experience	4
0	16

Total Hours: 130

**Five Years, Three Summer 2/Fall Co-ops**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 1000	1 LING 2350	4 Vacation	0 Vacation	0
LING 1150	4 LING 3412	4		
COMM 1101	4 COMM Studies Foundation Course	4		
COMM 1112	4 Elective	4		
ENGW 1111	4			
	17	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Linguistic Structure or Linguistics Elective	4 Linguistic Structure or Linguistics Elective	4 Vacation	0 COOP	0
COMM 2301	4 COMM Studies Elective	4		
COMM Studies Cluster Course	4 Foreign Language Course	4		
Foreign Language Course	4 COMM Studies Elective	4		
	EEAM 2000 or EESC 2000	1		
	16	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COOP	Linguistic Structure or Linguistics Elective	4 COMM Studies Elective	4 COOP	0
	LING 3442 (or Linguistics Elective)	4 Elective	4	
	ENGW 3315	4		
	Foreign Language Course	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COOP	0 Linguistic Structure or Linguistics Elective	4 Elective	4 COOP	0
	LING 3442 (or Linguistics Elective)	4 Elective	4	
	COMM Studies Writing Intensive	4		
	Elective	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
COOP	0 COMM 3415 or 4602	4
	Integrative Capstone Experience	4
	COMM Studies Elective	4
	Elective	4
	0	16

Total Hours: 130

## Media Arts and Communication Studies, BA

The Department of Communication Studies and the Department of Art + Design offer a combined major in media arts and communication studies. Students interested in the combined major integrate the study of communication skills and processes with the study of the creation of the narrative arts, required for professional work in documentary film, game art and promotion, visualization, motion graphics, interactive art, illustration, and short animated films.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath attributes Creative Expression and Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

In order to graduate, students must complete Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) in their electives.

### Media Arts Courses

Code	Title	Hours
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#### Art and Design at Northeastern

ARTF 1000	Art and Design at Northeastern	1
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#### Art and Design Foundations

ARTF 1122	Color and Composition (with optional ARTF 1123)	4
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ARTF 2220	Movement and Time (with optional ARTF 2221)	4
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#### Drawing Fundamentals

ARTF 1120	Observational Drawing	4
or ARTF 1121	Conceptual Drawing	

#### Art and Design History

ARTH 2210	Modern Art and Design History	4
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ARTH 2212	Survey of the Still and Moving Image	4
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#### Degree Project

ARTD 4530	Media Arts Degree Project 1	4
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#### Media Art Basics Electives

Complete two of the following:		8-9
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ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools
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ARTD 2370	Animation Basics (with optional ARTD 2371)
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ARTD 2380	Video Basics (with optional ARTD 2381)
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#### Art and Design Electives

Complete any two courses not previously taken in ARTG, ARTE, ARTD, ARTH, or ARTS courses as long as prerequisites or co-requisites have been met.		8-9
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### Communication Studies Courses

Code	Title	Hours
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#### Communication Studies Common Requirements

COMM 1101	Introduction to Communication Studies	4
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COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

#### Foundation Course

Complete one of the following:		4
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COMM 1210	Persuasion and Rhetoric
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COMM 1225	Communication Theory
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COMM 1231	Principles of Organizational Communication
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COMM 1255	Communication in a Digital Age
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#### Cluster Course

Complete one of the following:		4
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COMM 1131	Sex, Relationships, and Communication
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COMM 2303	Global and Intercultural Communication
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COMM 2304	Communication and Gender
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COMM 2501	Communication Law
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COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Courses</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	

**Communication Studies Electives**

Complete three COMM courses. 12

**Integrative Requirement**

Code	Title	Hours
<b>Bridge/Integrative Requirement</b>		
COMM 3415	Communication Criticism	4

**Communication Studies Grade Requirement**

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

**Program Requirement**

128 total semester hours required

**Plan of Study****Sample Four Years, Two Co-ops Plan of Study****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or COMM 1000	1	ARTF 2220 (with optional ARTF 2221)	4	Communication studies elective	4	Communication studies elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTH 2212	4	Elective	4	Elective	4
ARTH 2210	4	COMM 1112 or 2301	4				
COMM 1101	4	Drawing elective	4				
ENGW 1111	4						
	17		16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Media arts basics elective	4	Co-op	Co-op	Communication studies elective	4		

Communication studies cluster	4			Elective	4
Communication studies foundation	4				
Communication studies writing-intensive	4				
EEAM 2000	1				
	17		0	0	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Media arts basics elective	4	Co-op	Co-op	Foreign Language	4		
Communication studies writing-intensive	4					Elective	4
Art + design elective	4						
Art + design elective	4						
	16		0	0			8

**Year 4**

Fall	Hours	Spring	Hours
ARTD 4530	4	Foreign Language	4
COMM 3415	4	Elective	4
Foreign Language	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

**Media and Screen Studies, BA**

The Bachelor of Arts in Media and Screen Studies offers courses in analysis and practice. Required courses offer students an opportunity to obtain the critical-thinking skills necessary to better understand media content, media technology, and media production. Students then decide how many production and analysis courses they want to take. Choosing from a broad range of electives, students can take more than half their major in media and film production courses, can take a majority of courses that critically examine media content and technology, or can combine courses in other ways.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), and Analyzing and Using Data (AD) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Introduction to College</b>		
MSCR 1000	Media and Screen Studies at Northeastern	1
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
MSCR 1420	Media History	4
<b>Foundation Course (Production or Theory)</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3392	Gender and Film	
MSCR 3437	Media and Identity	
<b>Writing-Intensives</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3700	Queer Media	
MSCR 4208	TV History	
<b>Capstone (Production or Theory)</b>		
Complete one of the following:		4
MSCR 4623	Theories of Media and Culture	
COMM 4755	Production Capstone	
<b>Media and Screen Studies Electives</b>		
Complete five courses from the following list or media and screen studies courses not used to satisfy requirements above:		20
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	

MSCR 2160	Narrative Filmmaking
MSCR 2336	American Film and Culture
MSCR 3389	Screenwriting
MSCR 3446	Documentary Production
MSCR 3920	Topics in Film Studies
COMM 1450	Sound Production for Digital Media
COMM 2550	Television Field Production
COMM 2655	Television Studio Production
COMM 3655	Digital Editing for TV
COMM 3750	Special Effects and Postproduction for Television

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to fulfill degree requirements.

### Media and Screen Studies Credit Requirement

52 total semester hours required in the major

### Program Requirement

128 total semester hours required

### Plan of Study

Sample Four Years, Two Co-ops

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR 1000	1	MSCR 1320	4	Media and screen studies elective	4
MSCR 1220	4	ENGW 1111	4	Elective	4
Elective	4	Foreign language core course	4		
Elective	4	Elective	4		
Foreign language core requirement	4				
		17		16	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR 1420	4	Media and screen studies elective	4	Elective	4
				Co-op	0
MSCR 1230 or 2220	4	Media and screen studies diversity/globalization course	4	Elective	4
Foreign language core course	4	Elective	4		
Elective	4	Elective	4		
		EEAM 2000	1		
		16		17	
				8	
				0	

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Media and screen studies elective	4 Media and screen studies elective	4 Co-op	0
	Media and screen studies writing-intensive	4 Elective	4	
	MSCR Elective	4		
	Elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	0 MSCR 4623	4
	Media and screen studies writing-intensive	4
	Elective	4
	Elective	4
	0	16

Total Hours: 130

## Media and Screen Studies and English, BA

The media and screen studies program and the Department of English offer a combined major in media and screen studies and English. The combined major integrates the analysis, research, and production of traditional and emerging media along with the study of the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures. Majors become familiar with writing practices and media from the Middle Ages through the present, from the quill pen to computer code.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4

or ENGL 1410	Introduction to Research on Writing	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2470	Asian-American Literature	
ENGL 2760	Writing in Global Contexts	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3140	19th-Century Literatures	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3400	Opening the Archive	
ENGL 3700	Narrative Medicine	
ENGL 4410	Research in Rhetoric and Writing	

LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
<b>Comparative Literature</b>		
Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 2150	Literature and Digital Diversity	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2470	Asian-American Literature	
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
ENGL 3487	Film and Text (Abroad)	
ENGL 3663	The African American Novel	
<b>Writing</b>		
Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Writing Seminar	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	
<b>Capstone</b>		
ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	
<b>English Electives</b>		
Complete two additional ENGL electives.		8
<b>Integrative Requirement</b>		
<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>Integrative Courses</b>		
MSCR 3600	Film Theory	4

ENGL 1450	Reading and Writing in the Digital Age	4
or ENGL 3340	Technologies of Text	

MSCR writing-intensive	4	MSCR writing-intensive	4
ENGL elective	4	ENGL 1450 or 3340	4
	16		16
			8
			0

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000 or ENGL 1000	1	MSCR 1320 or 1420	4	MSCR elective	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Foreign Language	4	Elective	4
ENGL 1400	4	ENGL pre-19th-century literature elective	4				
ENGL 1160 or 1410	4	Foreign Language	4				
Foreign Language	4						
	17		16		8		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR elective	4	Co-op	4	Co-op	4	Elective	4
ENGL 19th-, 20th-, and 21st-century literature elective	4					Elective	4
ENGL diversity elective	4						
MSCR diversity/globalization	4						
EEAM 2000	1						
	17		0		0		8
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL theories and methods elective	4	MSCR elective	4	Elective	4	Co-op	4
ENGL elective	4	ENGL comparative elective	4	Elective	4		4

Year 4					
Fall	Hours	Spring	Hours	Summer 2	Hours
Co-op		ENGL writing elective	4		
		MSCR 3600	4		
		ENGL 4710 or 4720	4		
		Elective	4		
	0		16		0

Total Hours: 130

### Media and Screen Studies and History, BA

The Media and Screen Studies Program and the Department of History offer a combined major in media and screen studies and history. The combined major integrates the analysis, research, and production of traditional and emerging media along with the study of local and regional histories as well as of the global exchanges between nations, regions, and cultures.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4



or MSCR 1420 Media History

Foundation Course	
Complete one of the following:	4
MSCR 1230 Introduction to Film Production	
MSCR 2220 Understanding Media	
Diversity or Globalization Course	
Complete one of the following:	4
MSCR 3392 Gender and Film	
MSCR 2325 Global Media	
MSCR 2505 Digital Feminisms	
MSCR 3437 Media and Identity	
Writing-Intensive	
Complete two of the following:	8
MSCR 2505 Digital Feminisms	
MSCR 3600 Film Theory	
MSCR 3420 Digital Media Culture	
MSCR 3422 Media Audiences	
MSCR 3700 Queer Media	
MSCR 4208 TV History	

**Media and Screen Studies Electives**

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

**History Requirements**

Code	Title	Hours
History Colloquium		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
Introductory-Level Course		
Complete one course in the following range, not used to fulfill another requirement:		4
HIST 1001–HIST 1999		
History Seminar and Historical Writing		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
Pre-1800 History Elective		
Complete one course from the following:		4
HIST 1187	Introduction to Latin American History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	

HIST 2370 Renaissance to Enlightenment	
Intermediate/Advanced History Cluster	
Complete three courses in the following range:	12
HIST 2303–HIST 5999	
Advanced History	
Complete one course in the following range:	4
HIST 3000–HIST 5999	
Capstone	
HIST 4701	Capstone Seminar

**Integrative Requirement**

Code	Title	Hours
HIST 1357	History of Information in the United States: Media, Technology, Law	4

**Media and Screen Studies Grade Requirement**

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

130 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4
MSCR 1220	4	MSCR foundation course	4	Elective	4
HIST 1200 and HIST 1201	5	Intro-level HIST course	4		
ENGW 1111	4	Foreign Language	4		
Foreign Language	4				
		18	16	8	8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR diversity/globalization	4	Co-op	4	Co-op	4
MSCR elective	4			Elective	4
HIST 2301 and HIST 2302	5				
Elective	4				
EEAM 2000	1				
		18	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MSCR writing-intensive	4 Co-op	Co-op	Elective	4
Pre-1800 history elective	4		Elective	4
Intermediate/advanced history elective 1	4			
MSCR elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours
MSCR writing-intensive	4 MSCR elective	4
Intermediate/advanced history elective 2	4 Intermediate/advanced history elective 3	4
Advanced history elective	4 HIST 4701	4
HIST 1357	4 Elective	4
	16	16

Total Hours: 132

## Media and Screen Studies and Journalism, BA

A Bachelor of Arts in Journalism and Media and Screen Studies is designed for the student who is interested in pursuing a career as a journalist specializing in the film industry.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), Difference and Diversity (DD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### Journalism Requirements

Code	Title	Hours
<b>Journalism Foundations</b>		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox (A grade of C or higher is required)	5
JRNL 1150	Understanding Today's News	4
JRNL 2201	Journalism 2: Intermediate Reporting (A grade of C or higher is required)	4

### Journalism and Advanced Writing

JRNL 2301	Visual Storytelling in Journalism (A grade of C or higher is required)	4
<b>Television News</b>		
JRNL 5314	Video News Reporting and Producing	4
<b>Ethics and Issues</b>		
JRNL 4650	Ethics and Issues in Journalism	4
<b>Journalism Electives</b>		
Complete three courses in the following range:		12
JRNL 2000–JRNL 5999		

## Integrative Requirement

The following course also counts toward the media and screen studies requirements above.

Code	Title	Hours
<b>Integrative Course</b>		
MSCR 4623	Theories of Media and Culture	4

## Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

## Program Requirement

129 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops Spring/Summer 1

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
MSCR 1000 or JRNL 1000	1 MSCR 1230 or 2220	4 Foreign language	4 Foreign language	4	
MSCR 1220	4 MSCR 1320 or 1420	4 Elective	4 Elective	4	
JRNL 1150	4 JRNL 1101 and JRNL 1102	5			
ENGW 1111	4 Foreign language	4			
Elective	4				
	17	17	8	8	
Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
EEAM 2000	1 Co-op	0 Co-op	0 Elective	4	
MSCR elective 1	4		Elective	4	
MSCR diversity or globalization	4				
JRNL 2201	4				
Journalism elective 1	4				
	17	0	0	8	
Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
MSCR 4623	4 Co-op	0 Co-op	0 Elective	4	

MSCR writing intensive 1	4		Elective	4
JRNL 2301	4			
JRNL 5314	4			
	16	0	0	8

### Year 4

Fall	Hours Spring	Hours
MSCR elective 2	4 MSCR elective 3	4
MSCR writing intensive 2	4 Journalism elective 3	4
JRNL 4650	4 Elective	4
Journalism elective 2	4 Elective	4
	16	16

Total Hours: 131

## Media and Screen Studies and Media Arts, BA

The Media and Screen Studies Program and the Department of Art + Design offer a combined major in media studies and media arts. Students pursuing the combined major are able to integrate the theory and practice of contemporary media studies with the deep appreciation of the narrative arts that is required for professional work in documentary film, game art and promotion, visualization, motion graphics, interactive art, illustration, and short animated films.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

## Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

## Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
Recommendation: Complete MSCR 4623 as one of your MSCR electives to fulfill NUPATH capstone.		
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

## Media Arts Courses

Code	Title	Hours
<b>Art + Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art + Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
<b>Drawing Fundamentals</b>		
ARTF 1120	Observational Drawing	4
or ARTF 1121	Conceptual Drawing	
<b>Art + Design History</b>		
ARTH 2210	Modern Art and Design History	4

ARTH 2212	Survey of the Still and Moving Image	4
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## Media Arts Basics Electives

Complete two of the following sets:		8
ARTD 2360	Introduction to Photography and ARTD 2361 and Photo Tools	
ARTD 2370	Animation Basics (with optional ARTD 2371)	
ARTD 2380	Video Basics (with optional ARTD 2381)	

## Media Arts Capstone

ARTD 4530	Media Arts Degree Project 1	4
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## Art + Design Electives

Complete any two courses not previously completed in ARTG, ARTE, ARTD, ARTH, or ARTS courses as long as prerequisites or corequisites have been met.		8-9
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## Integrative Course

Code	Title	Hours
MSCR 3600	Film Theory	4

## Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to fulfill degree requirements.

## Program Requirement

128 total semester hours required

## Plan of Study

### SAMPLE FOUR YEARS, TWO CO-OPS

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ARTF 1000 or MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4
MSCR 1220	4	ARTH 2212	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTF 1120 or 1121	4		
ARTF 2220 (with optional 2221)	4	Elective	4		
ENGW 1111	4				
		17		16	
				8	
				8	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR foundation	4	Co-op		Co-op	
MSCR elective	4			Elective	4
Media arts basics elective	4				
ARTH 2210	4				
EEAM 2000	1				
		17		0	
				0	
				8	

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MSCR diversity/globalization	4 Co-op	Co-op	Elective	4
MSCR writing-intensive	4		Elective	4
Media arts basics elective	4			
Art + design elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours
MSCR 3600	4 ARTD 4530	4
MSCR writing-intensive	4 MSCR elective	4
Art + design elective	4 MSCR elective	4
Elective	4 Elective	4
	16	16

Total Hours: 130

## Media and Screen Studies and Philosophy, BA

The Media and Screen Studies Program and the Department of Philosophy and Religion offer a combined major in media and screen studies and philosophy. The combined major integrates the analysis, research, and production of traditional and emerging media along with the study of questions and theories related to morality, society, religion, and the natural and social sciences.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 46).

NUPath requirements Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Societies and Institutions (SI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUPath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), and Difference and Diversity (DD) may be met through electives in the major.

**Media and Screen Studies Requirements**

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

**Media and Screen Studies Electives**

Code	Title	Hours
(NUPath capstone recommendation: Complete MSCR 4623 as one of your MSCR electives if a philosophy capstone course is not selected for "Restricted Philosophy Electives.")		
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

**Philosophy Requirements**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Restricted Philosophy Electives**

Complete three of the following with at least one course at the 4000 or 5000 level: 12

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3343	Existentialism
PHIL 3360	Scientific Approaches to Philosophy
PHIL 3435	Moral Philosophy
PHIL 3460	Philosophy and Literature
PHIL 4510	Philosophy of Science
PHIL 4500	Theory of Knowledge
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

### Philosophy Electives

Complete three additional electives from the philosophy department. 12

### Integrative Requirement

Code	Title	Hours
MSCR 3600	Film Theory	4

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements

### Major Credit Requirement

Complete 76 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Elective	4	Elective	4
PHIL 1115	4	PHIL 2325 or POLS 2325	4				
ENGW 1111	4	Foreign Language	4				
Foreign Language	4						
		17			16		
				8			8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000	1	Restricted PHIL elective 1	4	Elective	4	Co-op	4
MSCR elective	4	MSCR writing-intensive	4	Elective	4		4
PHIL 2330	4	PHIL elective	4				
MSCR diversity/globalization	4	Elective	4				
PHIL elective	4						
		17			16		

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Restricted PHIL elective 2	4	Elective	4	Co-op	4
		MSCR writing-intensive	4	Elective	4		4
		PHIL elective	4				
		MSCR elective	4				
		0			16		

#### Year 4

Fall	Hours	Spring	Hours
Co-op		MSCR 3600	4
		MSCR elective	4
		Restricted PHIL elective 3	4
		Elective	4
		0	16

Total Hours: 130

### Media and Screen Studies and Political Science, BA

The Media and Screen Studies Program and the Department of Political Science offer a combined major in media and screen studies and political science. The combined major integrates the analysis, research, and production of traditional and emerging media along with courses on American government, comparative politics, international relations, and research methods.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI) and Difference and Diversity (DD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

## Media Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320 or MSCR 1420	Media and Social Change Media History	4
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3392	Gender and Film	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3600	Film Theory	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

## Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following (NUpath capstone recommendation: Complete MSCR 4623 as one of your MSCR electives if a political science capstone is not taken for a political science elective):		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	

COMM 3750	Special Effects and Postproduction for Television
COMM 4755	Production Capstone

## Political Science Requirements

Code	Title	Hours
<b>Required Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Politics in Media/Art</b>		
Complete two courses. Consult academic adviser for additional courses.		8
POLS 2368	Music and Politics in America and Abroad	

### Elective Courses

Complete two POLS courses or complete a concentration. 8  
NUpath capstone recommendation: Complete a POLS capstone course as one of your POLS electives if MSCR 4623 is not taken for a MSCR elective.

## Political Science Concentration (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 159)
- Campaigns and Elections (p. 159)
- Comparative Politics (p. 159)
- Identity, Culture, and Politics (p. 159)
- International Relations and Diplomacy (p. 159)
- Law and Legal Studies (p. 159)
- Public Policy (p. 159)
- Security Studies (p. 160)

## Integrative Requirements

Code	Title	Hours
<b>Required Courses</b>		
MSCR 3437 or COMM 3320	Media and Identity Political Communication	4
POLS 3320	Politics and Mass Media	4

## Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

### Concentrations

#### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

#### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

#### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

#### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

#### CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

#### CONCENTRATION IN PUBLIC POLICY

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	



POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 3425	U.S. Foreign Policy

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Sample Four Years, Two Co-ops**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4
MSCR 1220	4	POLS 1155	4	Elective	4
POLS 1150	4	MSCR foundation	4		
ENGW 1111	4	Foreign Language	4		
Foreign Language	4				
		17	16		8

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1160	4	Co-op		Co-op	4
POLS 2400	4			Elective	4
MSCR diversity/globalization	4				
MSCR elective	4				
EEAM 2000	1				
		17	0		0

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Political thought elective	4	MSCR writing-intensive	4	Elective	4
MSCR writing-intensive	4	Politics in media/art elective	4	Elective	4
MSCR elective	4	MSCR elective	4		
POLS 3320	4	POLS elective	4		
		16	16		8

Year 4		
Fall	Hours	Spring
Co-op	Politics in media/art elective	4
	POLS elective	4
	Elective	4
	MSCR 3437 or COMM 3320	4
		0
		16

Total Hours: 130

**Media and Screen Studies and Sociology, BA**

The Media and Screen Studies Program and the Department of Sociology and Anthropology offer a combined major in media and screen studies and sociology. The combined major integrates the analysis, research, and production of traditional and emerging media along with the critical perspective needed for studying the social and cultural arrangements in which people live, for understanding how societies function, for investigating the conditions under which people change their institutions, and for describing the modes and conditions of cooperation that make social life possible.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

**Media and Screen Studies Requirements**

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4

or MSCR 1420 Media History

#### Foundation Course

Complete one of the following: 4

MSCR 1230 Introduction to Film Production

MSCR 2220 Understanding Media

#### Diversity or Globalization Course

Complete one of the following: 4

MSCR 2325 Global Media

MSCR 2505 Digital Feminisms

MSCR 3392 Gender and Film

MSCR 3437 Media and Identity

#### Writing-Intensive

Complete two of the following: 8

MSCR 2505 Digital Feminisms

MSCR 3420 Digital Media Culture

MSCR 3422 Media Audiences

MSCR 3600 Film Theory

MSCR 3700 Queer Media

MSCR 4208 TV History

### Media and Screen Studies Electives

Complete three courses from MSCR or from the following: 12

ARTD 2380 Video Basics

ARTD 3480 Video: Sound and Image

ARTD 3485 Experimental Video

COMM 1450 Sound Production for Digital Media

COMM 2550 Television Field Production

COMM 2655 Television Studio Production

COMM 3655 Digital Editing for TV

COMM 3750 Special Effects and Postproduction for Television

COMM 4755 Production Capstone

### Sociology Requirements

Code Title Hours

#### Core Courses in Sociology

ANTH 1101 Peoples and Cultures 4

SOCL 1101 Introduction to Sociology 4

SOCL 2320 Statistical Analysis in Sociology 4

SOCL 2321 Research Methods in Sociology 4

SOCL 3300 Social Theory 4

SOCL 4600 Senior Seminar 4

#### Foundational Competency—Courses Numbered SOCL 1200 to SOCL 2900

Complete two of the following: 8

SOCL 1228 Social Problems

SOCL 1245 Sociology of Poverty

SOCL 1260 Gender in a Changing Society

SOCL 1280 The Twenty-First-Century Workplace

#### Foundational Competency—Courses Numbered 3000 to 4999

Complete one of the following: 4

ANTH 3120 Consumer Cultures

ANTH 4580 Special Topics in Anthropology

SOCL 3465 Globalization and the Evolution of Human Societies

SOCL 4518 Law and Society in a Digital World

SOCL 4520 Race, Class, and Gender

SOCL 4580 Special Topics in Sociology

### Integrative Requirement

Code Title Hours

#### Integrative Courses

MSCR 3437 Media and Identity 4

SOCL 3450 Class, Power, and Social Change 4

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements

### Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign language core course	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Elective	4	Elective	4
SOCL 1101	4	Foreign language core course	4				
ANTH 1101	4	SOCL 3300	4				
ENGW 1111	4						
	17		16		8		8

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR diversity/globalization	4	Co-op	4	Co-op	4	Elective	4
MSCR elective	4					Elective	4
Foreign language core course	4						
EEAM 2000	1						
SOCL 2320	4						
	17		0		0		8

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 2321	4	Co-op	4	Co-op	4	Elective	4

SOCL foundational competency elective 1	4		Elective	4
MSCR writing- intensive	4			
MSCR elective	4			
	16	0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
SOCL foundational competency elective 2	4	MSCR 3437	4	
MSCR elective	4	SOCL 4600	4	
MSCR writing- intensive	4	SOCL foundational competency elective	4	
SOCL 3450	4	Elective	4	
	16		16	
Total Hours: 130				

**Media and Screen Studies and Theatre, BA**

This major is designed for students who want to combine a knowledge of the art of theatre with the theories and conceptual frameworks of media and film studies. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design with related studies in screenwriting, media technology, and media production. Students have an opportunity to develop a personalized technique for the practices of making theatre, film, and television as engaged citizens and creative artists.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirement Natural and Designed World (ND) must be met through general electives.

**Media and Screen Studies Requirements**

Code	Title	Hours
<b>Media and Screen Studies Common Requirement</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Courses</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3392	Gender and Film	
MSCR 3437	Media and Identity	
<b>Writing Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3700	Queer Media	
MSCR 4208	TV History	
<b>Media and Screen Studies Electives</b>		
Code	Title	Hours
Complete three courses from MSCR or from the following:		
ARTD 2380	Video Basics	12
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

**Theatre Requirements**

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete one of the following:		4

THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
<b>Intermediate or Advanced Technique</b>		
Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	

### Integrative Requirement

Code	Title	Hours
Choose one of the following courses:		4
MSCR 4623	Theories of Media and Culture	
THTR 4702	Capstone Rehearsal and Performance	

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements

### Theatre Grade Requirement

A minimum grade of C is required for all theatre courses.

### Program Requirement

130 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4	Elective	4
MSCR 1220	4	MSCR Foundation	4	Elective	4	Elective	4
THTR 1101	4	THTR 1131	4				
THTR 1120	4	THTR 1270	4				
ENGW 1111	4						
		17		16		8	8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR Diversity/Globalization	4	Co-op		Co-op		Foreign language core course	4
MSCR Elective	4					Elective	4
THTR 2325	4						
THTR texts and context elective	4						
EEAM 2000	1						
THTR 1100	1						
		18		0		0	8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR Writing Intensive	4	Co-op		Co-op		Elective	4
MSCR Elective	4					Elective	4
Intermediate or advanced technique elective	4						
Foreign language core course	4						
THTR 2000	1						
		17		0		0	8

Year 4			
Fall	Hours	Spring	Hours
MSCR Writing Intensive	4	MSCR Elective	4
Intermediate or advanced technique elective	4	Integrative course	4
Foreign language core course	4	Elective	4

Elective	4	Elective	4
	16		16

Total Hours: 132

## Political Science and Communication Studies, BA

The combined major in political science and communication studies offers students the opportunity to integrate the study of politics and government with different forms and mediums of communication. Students complete the core courses in political science along with core courses in communication studies that cover public speaking and persuasion. This combined major highlights the important role played by different forms of communication in shaping politics and government.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Methodology</b>		
POLS 2399	Research Methods in Political Science	4
or COMM 2301	Communication Research Methods	
<b>Political Science Upper-Division Electives</b>		
Complete two courses in the following range:		8
POLS 3300 to POLS 5999		
<b>Political Science Electives</b>		
Complete two courses in the following range:		8
POLS 2000 to POLS 5999		

### Political Science Concentration (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 165).

- American Political Institutions (p. 165)
- Campaigns and Elections (p. 165)
- Comparative Politics (p. 165)
- Identity, Culture, and Politics (p. 165)
- International Relations and Diplomacy (p. 165)
- Law and Legal Studies (p. 166)
- Public Policy (p. 166)
- Security Studies (p. 166)

### Communication Studies Requirements

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

### Communication Studies Electives

Code	Title	Hours
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	

**Communication Studies Electives**

Complete three additional communication studies courses.	12
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**Integrative Requirements**

Code	Title	Hours
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**Integrative Courses**

POLS 3320	Politics and Mass Media	4
or COMM 3320	Political Communication	

**Capstone Requirement**

Complete one of the following. This course also counts toward the political science or communication studies elective requirement:	4
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COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4533	Consultation Skills	
COMM 4602	Contemporary Rhetorical Theory	
COMM 4608	Strategic Communication Capstone	
COMM 4625	Online Communities	
COMM 4755	Production Capstone	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**Political Science and Communication Studies Combined Major Credit Requirement**

Complete 84 semester hours in the major.

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
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Complete four of the following:	16
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POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
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**Required Courses**

POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:	8
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POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
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**Theoretical Requirement**

Complete one of the following:	4
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POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

**Regional Requirements**

Complete two of the following:	8
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POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

**Experiential/Practicum Requirement**

Complete one of the following:	4
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POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
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**Core Course**

POLS 3418	Nationalism	4
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**Electives**

Complete three of the following:	12
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POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
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**Experiential/Practicum Requirement**

Complete one of the following:	4
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POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following: 12

POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3408	International Security
POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES**

**Code Title Hours**

Complete four of the following: 16

POLS 2330	American Political Thought
POLS 3300	The U.S. Congress
POLS 3302	Judicial Process and Behavior
POLS 3324	Law and Society
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

**CONCENTRATION IN PUBLIC POLICY**

**Code Title Hours**

**Core Requirement**

POLS 3307	Public Policy and Administration	4
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**Electives**

Complete three of the following: 12

POLS 2335	Budgeting and Taxation
POLS 2340	Business and Government
POLS 2345	Urban Policies and Politics
POLS 2350	State and Local Politics
POLS 2357	Growth and Decline of Cities and Suburbs
POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 3425	U.S. Foreign Policy

**CONCENTRATION IN SECURITY STUDIES**

**Code Title Hours**

Complete four of the following: 16

POLS 3408	International Security
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3425	U.S. Foreign Policy
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study**

**Sample Four Years, Two Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1000 or COMM 1000	1	POLS 1155	4	Communication Studies Foundation Course	4	Communication Studies Cluster Course	4

POLS 1150	4	COMM 1112 or 2301	4	Communication Studies Elective	4	Elective	4
COMM 1101	4	Foreign Language 2	4				
ENGW 1111	4	Elective	4				
Foreign Language 1	4						
		17			16		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	Co-op		Co-op		Communication Studies Writing Intensive	4
POLS 2400	4					Elective	4
Communication Studies Elective	4						
Foreign Language Culture Course	4						
EESH 2000 or EEAM 2000	1						
		17			0	0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Political Thought Course	4	Co-op		Co-op		Communication Studies Writing Intensive	4
POLS 2399 or COMM 2301	4					Political Science Elective	4
Communication Studies Elective	4						
POLS Upper-Division Elective 1	4						
		16			0	0	

**Year 4**

Fall	Hours	Spring	Hours
POLS Upper-Division Elective 2	4	Capstone	4
Political Science Elective	4	Elective	4
Integrative Course	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 130

## Business Administration and Communication Studies, BS

The combined major between business administration and communication studies provides students with a robust overview of business and communication studies. This combined major seeks to prepare students for career opportunities in growing industry markets such as public relations, marketing communications, and digital media.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Business Core Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BUSN 1102	Personal Skill Development for Business	1
or COMM 1000	Communication Studies at Northeastern	
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
<b>Business Statistics</b>		
MGSC 2301	Business Statistics	4
<b>Business Core Option 1</b>		
INTB 1203	International Business and Global Social Responsibility	4
or ORGB 3201	Organizational Behavior	
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Business Core Option 2</b>		
ACCT 2301	Managerial Accounting	4
or ENTR 2301	Innovation!	
or MISM 2301	Management Information Systems	
or SCHM 2301	Supply Chain and Operations Management	

### Business Concentration Required

A concentration is required and may be chosen from the following list:

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)

- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

### Supporting Business Courses

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
<b>Macroeconomics and Microeconomics</b>		
Complete one of the following:		4
ECON 1115	Principles of Macroeconomics	
ECON 1116	Principles of Microeconomics	

### Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 1113	Business and Professional Speaking	
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	



COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 3500	Environmental Issues, Communication, and the Media
COMM 3501	Free Speech: Law and Practice
COMM 3530	Communication and Sexualities
COMM 3532	Theories of Conflict and Negotiation
COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4631	Crisis Communication and Image Management

**Communication Studies Electives**

Complete three additional electives. Choose from any communication studies courses not used to satisfy requirements above or related electives outside of communication studies. 12

ARTF 2220	Movement and Time
ARTD 2360	Introduction to Photography
ARTD 2380	Video Basics
ARTD 3460	Photography: Concept + Process
ARTD 3480	Video: Sound and Image
JRNL 1101	Journalism 1: Fundamentals of Reporting
JRNL 3425	Public Relations Principles
JRNL 3625	Public Relations Practice
JRNL 3610	Digital Storytelling and Social Media
JRNL 5311	Design for Storytelling
JRNL 5314	Video News Reporting and Producing
JRNL 5316	The Newsroom
MSCR 1230	Introduction to Film Production
MSCR 2302	Advertising and Promotional Culture

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
MKTG 4504	Advertising and Brand Promotion	4
<b>Capstone</b>		
Complete one of the following:		4
STRT 4501	Strategy in Action	
COMM 4608	Strategic Communication Capstone	
COMM 4533	Consultation Skills	

**Business GPA Requirement**

Minimum 2.000 GPA in business courses required

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BUSN 1102 or COMM 1000	1	COMM 1112, 1113, or 2301	4	Communication studies elective	4	Elective	4
ACCT 1201	4	MGSC 2301	4	NUpath course	4	Elective	4
ENGW 1111	4	Communication studies foundation course	4				
COMM 1101	4	MKTG 2201	4				
MATH 1231	4						
		17		16		8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
FINA 2201	4	COOP 3945	0	COOP 3945	0	Elective	4
BUSN 1103 or EEAM 2000	1					Elective	4
Business core option	4						
Communication studies cluster course	4						
ECON 1115 or 1116	4						
		17		0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Business core option 1	4	COOP 3945	0	COOP 3945	0	Communication studies elective	4
MKTG 4504	4					NUpath course	4
Communication studies writing-intensive 1	4						
Concentration course	4						
		16		0		0	

**Year 4**

Fall	Hours	Spring	Hours
Concentration course	4	Concentration course	4
Communication studies writing-intensive 2	4	COMM 4608, STRT 4501, or COMM 4533	4

Communication studies elective	4	COMM 3409, ENGW 3304, ENGW 3314, or ENGW 3315	4
Concentration course	4	Elective	4
	16		16

Total Hours: 130

## Computer Science and Communication Studies, BS

The computer science and communication studies combined major integrates practical skills and theory. Students will gain both a strong computer science foundation and a deep understanding of the major conceptual frameworks for human communication—plus how to apply this knowledge to solve problems in today's society.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
CS 4550	Web Development	4
<b>Khoury Elective</b>		

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 12 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	12
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Communication Studies Courses

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	
<b>Communication Studies Electives</b>		
Complete three courses in the following range: <sup>1</sup>		12
COMM 1131 to COMM 4996		

<sup>1</sup> Special Topics in Communication Studies (COMM 4912), and Junior/Senior Honors Project 1 (COMM 4970) are excluded.

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
COMM 3409	Advocacy Writing <sup>1</sup>	

<sup>2</sup> If Advocacy Writing (COMM 3409) is selected it will also satisfy a communication studies elective requirement. One additional general elective will be then required in its place.

### Required General Electives

Code	Title	Hours
Complete 32 credits of general electives.		32

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Communication Studies Grade Requirement

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, IS

### Communication Studies GPA Requirement

Minimum 2.000 GPA required in all COMM courses

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Elective	4
CS 1800 and CS 1802	5 CS 3200	4 MATH 1341	4 Elective	4
CS 2500 and CS 2501	5 COMM 1112 or 2301	4		
ENGW 1111	4 Elective	4		
COMM 1101	4			
19		17	9	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210	1 Co-op	0 Co-op	0 Elective	4
Communication studies foundation course	4		Elective	4
Khoury elective	4			
CS 3000	4			
Elective	4			
17		0	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Communication studies cluster course	4 Co-op	0 Co-op	0 Elective	4
Communication studies writing-intensive course	4		ENGW 3302 or 3315	4
Khoury elective	4			
Elective	4			
16		0	0	8
Year 4				
Fall	Hours Spring	Hours		
Khoury elective	4 CS 4500	4		

Communication studies writing-intensive course	4	CS 4550	4
Communication studies elective	4	Communication studies elective	4
Computing and social issues	4	Communication studies elective	4
	16		16

Total Hours: 134

## Communication Studies and Speech-Language Pathology and Audiology, BS

The combined Bachelor of Science in Communication Studies and Speech-Language Pathology and Audiology offers an interdisciplinary approach to human communication and its disorders. Coursework focuses on the scientific and theoretical frameworks of speech, language, and hearing. Students will also be introduced to the fundamentals of communication theory, and they have an opportunity to acquire the practical skills necessary to thrive in a complex and changing society. The curriculum is enhanced by experiential learning opportunities in a clinical setting that prepare the students for a variety of professional careers.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### First-Year Seminar

Code	Title	Hours
COMM 1000	Communication Studies at Northeastern	1
or SLPA 1000	College: An Introduction	

### Communication Studies Requirements

Code	Title	Hours
	No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.	

#### Communication Studies Common Requirements

COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

#### Foundation Course

Complete one of the following:		
COMM 1210	Persuasion and Rhetoric	4

COMM 1231	Principles of Organizational Communication
COMM 1225	Communication Theory
COMM 1255	Communication in a Digital Age

#### Cluster Course

Complete one of the following: 4

COMM 1131	Sex, Relationships, and Communication
COMM 2303	Global and Intercultural Communication
COMM 2304	Communication and Gender
COMM 2501	Communication Law
COMM 2551	Free Speech in Cyberspace

#### Writing-Intensive Courses

Complete two of the following (COMM 3201 is strongly recommended): 8

COMM 3200	Mobile Communication
COMM 3201	Health Communication
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 3500	Environmental Issues, Communication, and the Media
COMM 3501	Free Speech: Law and Practice
COMM 3530	Communication and Sexualities
COMM 3532	Theories of Conflict and Negotiation
COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4631	Crisis Communication and Image Management

#### Communication Studies Electives

Complete three COMM courses. 12

### Speech-Language Pathology and Audiology Requirements

Code	Title	Hours
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All courses in these sections must be completed with a C or better.

#### SLPA Requirements

SLPA 1101	Introduction to Communication Disorders	4
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4
SLPA 1200	Phonetics	4
SLPA 1203	Introduction to Audiology	4
SLPA 1205	Speech and Hearing Science	4
SLPA 2000	Introduction to Co-op	1
or EEAM 2000	Professional Development for Co-op	
SLPA 4651	Speech Disorders across the Life Span	4
SLPA 5107	Clinical Procedures	4
SLPA 5110	Language Disorders across the Life Span	4
SLPA 6219	Aural Rehabilitation	4

### Supporting Courses

Code	Title	Hours
PSYC 1101	Foundations of Psychology	4
ENGW 1111	First-Year Writing	4
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
HLTH 2100	Interprofessional Ethics for Individual and Population Health	4
PHTH 2300	Communication Skills for the Health Professions	4
PSYC 2320	Statistics in Psychological Research	4

### Integrative Course

Code	Title	Hours
COMM 3201 or COMM 4102	Health Communication (WI) Health Communication Campaigns	

Note: The selected integrative course counts toward the COMM writing-intensive (COMM 3201) or COMM elective (COMM 4102) as appropriate.

### Communication Studies Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

### Program Requirements

133 total semester hours required

### Plan of Study

#### Sample 4 Years, 2 Co-ops

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
COMM 1000 or SLPA 1000	1	Communication studies foundation course	4	COMM 1112	4	Communication studies elective	4	
COMM 1101	4	SLPA 1101	4	Communicati studies elective	4	General elective	4	
BIOL 2217 and BIOL 2218	5	SLPA 1205	4					
PSYC 1101	4	BIOL 2219 and BIOL 2220	5					
ENGW 1111	4							
		18			17			8
Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
EEAM 2000 or SLPA 2000	1	Co-op	0	Co-op	0	Vacation	0	
Communicati studies cluster course	4							

SLPA 1203	4				
PHYS 1145 and PHYS 1146	5				
SLPA 1103	4				
		18			0
					0
					0
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
COMM 3409 or ENGW 3306	4	PSYC 2320 or MATH 2280	4	Vacation or optional co-op #2	0
Communicati studies elective	4	SLPA 1102	4		
PHTH 2300	4	Communication studies writing-intensive	4		
HLTH 2100 or PHIL 1165	4	SLPA 1200	4		
		16			0
					0
Year 4					
Fall	Hours	Spring	Hours		
SLPA 5110	4	SLPA 4651	4		
SLPA 5107	4	SLPA 6219	4		
General elective	4	COMM 3201	4		
General elective	4	General elective	4		
		16			16

Total Hours: 133

A general elective or a COMM elective (e.g., COMM 1120) can be taken to fulfill the NUPath Formal/Quantitative Reasoning (FQ) requirement.

## Health Science and Communication Studies, BS

The combined Bachelor of Science degree program in health science and communication studies offers an interdisciplinary approach to public health communication. Students combine courses from health sciences and communication studies to learn about health and illness and the important role of communication in shaping the public's understanding of health issues. The interdisciplinary curriculum is enhanced by experiential learning opportunities and is designed to prepare students for challenging careers that involve crafting messages about health, developing strategies for promoting healthcare services, and specific applications such as disease awareness and prevention.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Communication Studies Major Requirements

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4

Code	Title	Hours
<b>Foundation Course</b>		

Complete one of the following: 4

COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	

#### Cluster Course

Complete one of the following: 4

COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

#### Writing-Intensive

Complete two of the following: 8

COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	

#### Communication Studies Electives

Complete three additional communication studies courses. 12

### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	<i>The American Healthcare System</i> <i>Comparative Healthcare Systems</i>	4
PHTH 2210	Foundations of Biostatistics	4
PHTH 2300	Communication Skills for the Health Professions	4

or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4

#### Life Sciences

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
MATH 1241	Calculus 1	4
PSYC 1101	Foundations of Psychology	4
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

### Other Requirements

Code	Title	Hours
<b>Intro to College</b>		

HSCI 1000 or COMM 1000	College: An Introduction Communication Studies at Northeastern	1
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#### Professional Development

HSCI 2000 or EEAM 2000	Professional Development for Bouvé Co-op Professional Development for Co-op	1
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#### Writing

ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions (or other Advanced Writing course)	4

#### Electives

Complete 28 semester hours of electives. 28

### Integrative Course

Code	Title	Hours
<b>Capstone</b>		
HSCI 4720 or HSCI 4730 or COMM 4102 or COMM 4530	Health Science Capstone—Service Health Science Capstone—Research Health Communication Campaigns Communication and Quality of Life	4

### Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

### Communication Studies Major Requirement

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

### Program Requirement

133 total semester hours required

## Plan of Study Four Years, Two Co-ops

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSCI 1000 or COMM 1000	1 BIOL 1113	4 Public health core	4 Vacation	0
PHTH 1260	4 BIOL 1114	1 Elective	4	
BIOL 1111	4 CHEM 1161 and CHEM 1162 and CHEM 1163	5		
BIOL 1112	1 Elective	4		
MATH 1241	4 ENGW 1111	4		
PSYC 1101	4			
	18	18	8	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Public health core	4 Co-op	Co-op	ENGW 3306	4
HSCI 2000 or EEAM 2000	1 Elective	4	Elective	4
COMM 1101	4			
COMM 1112 or 2301	4			
COMM elective	4			
	17	4	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Public health core	4 Co-op	Co-op	Public health core	4
Foundation course	4 Elective	4	Public health core	4
Public health core	4			
Cluster course	4			
	16	4	0	8
Year 4				
Fall	Hours Spring	Hours		
Public health core	4 HSCI 4720, 4730, COMM 4102, or COMM 4530	4		
Elective	4 COMM elective	4		
COMM WI course	4 COMM WI course	4		
COMM elective	4 Elective	4		
	16	16		

Total Hours: 133

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSCI 1000 or COMM 1000	1 BIOL 1113	4 Vacation	0 Vacation	0
PHTH 1260	4 BIOL 1114	1		
PSYC 1101	4 ENGW 1111	4		
BIOL 1111	4 CHEM 1161 and CHEM 1162 and CHEM 1163	5		
BIOL 1112	1 Elective	4		
MATH 1241	4			
	18	18	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Public health core	4 HSCI 2000 or EEAM 2000	1 Vacation	0 Co-op	0
Public health core	4 Public health core	4		
COMM 1101	4 Foundation course	4		
COMM 1112 or 2301	4 Elective	4		
	Cluster course	4		
	16	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3306	4 Vacation	0 Vacation	0
	Public health core	4		
	COMM electives	8		
	0	16	0	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHTH 4202	4 Co-op	0 Co-op	0 Vacation	0
PHTH 4540	4			
COMM elective	4			
COMM WI course	4			
	16	0	0	0
Year 5				
Fall	Hours Spring	Hours		
PHTH 4120	4 HSCI 4720, 4730, COMM 4102, or COMM 4530	4		
HSCI 4700	0 Electives	12		
COMM WI course	4			

## Five Years, Two Co-ops in Summer 2/Fall

This is a sample plan of study.

Electives	8	
	16	16
Total Hours: 133		

## Media and Screen Studies and Theatre, BS

This major is designed for students who want to combine a knowledge of the art of theatre with the theories and conceptual frameworks of media and film studies. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design with related studies in screenwriting, media technology, and media production. Students have an opportunity to develop a personalized technique for the practices of making theatre, film, and television as engaged citizens and creative artists.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirement Natural and Designed World (ND) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8

MSCR 2505	Digital Feminisms
MSCR 3600	Film Theory
MSCR 3420	Digital Media Culture
MSCR 3422	Media Audiences
MSCR 3700	Queer Media
MSCR 4208	TV History

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### Theatre Requirements

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
<b>Intermediate or Advanced Technique</b>		
Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	



THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 2600	Voice and Speech for the Actor
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2

### Integrative Requirement

Code	Title	Hours
Choose one of the following courses:		4
MSCR 4623	Theories of Media and Culture	
THTR 4702	Capstone Rehearsal and Performance	

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

### Theatre Grade Requirement

A minimum grade of C is required for all theatre courses.

### Program Requirement

130 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Elective	4	Electives	4
THTR 1101	4	THTR 1131	4				
THTR 1120	4	THTR 1270	4				
ENGW 1111	4						
		17	16	8	8		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR diversity/globalization	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
THTR 2325	4						
THTR texts and context elective	4						
EEAM 2000	1						
THTR 1100	1						
		18	0	0	8		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR writing-intensive	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
Intermediate or advanced technique elective	4						
THTR 2000	1						
Elective	4						
		17	0	0	8		

Year 4			
Fall	Hours	Spring	Hours
MSCR writing-intensive	4	MSCR elective	4
Intermediate or advanced technique elective	4	Integrative course	4
Elective	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 132

### Music and Communication Studies with Concentration in Music Industry, BS

The Bachelor of Science in Music with Concentration in Music Industry, the first such undergraduate program offered in Boston, is designed for students with an interest in fields such as artist management; the music products industry; the recording industry; arts administration; contracting and legal issues; financial and economics aspects of the music industry; and broadcast, mobile, and online media technologies.

The Department of Communication Studies is committed to providing students with both the communication skills and the understanding of the communication process required to thrive in a complex and changing society. Majors are required to demonstrate a mastery of the fundamentals of effective communication, to learn the fundamentals of communication theory and practice, and to develop a distinct area of emphasis. Some of the more popular areas include argumentation and advocacy, organizational and health communication, international and intercultural communication, digital communication and social media, and media production. The curriculum is designed to enhance the understanding of human communication in a variety of contexts, to empower students to become informed and engaged citizens, and to provide the knowledge and skills required to live a rich personal and professional life.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

NUPath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and Ethical Reasoning (ER) are met through the major course requirements.

NUPath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Difference and Diversity (DD) may be met through electives in the major.

## Music Industry Requirements

Code	Title	Hours
<b>Introduction to College</b>		
MUSC 1000	Music at Northeastern	1
<b>Music Core</b>		
MUSC 1001	Music in Everyday Life	4
<b>Music Theory Placement</b>		
All students must take a theory placement exam. Students who do not place into MUSC 1201 must first take the following:		
MUSC 1119	Fundamentals of Western Music Theory	4
<b>Music Theory Requirement</b>		
MUSC 1201	Music Theory 1	4
<b>Introductory Music Industry</b>		
MUSI 1230	Introduction to Music Industry	4
<b>Music in Context</b>		
Choose one course from Western Art Music, Global Music / Ethnomusicology, or Contemporary / Popular Music categories.		
<i>Western Art Music</i>		
MUSC 2107	Introduction to Opera	
MUSC 2312	Historical Traditions: Classical	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2380	The World of Choral Music	
MUSC 3352	Sounding Human	
<i>Global Music / Ethnomusicology</i>		
MUSC 2101	Black Popular Music	
MUSC 2130	Music of Asia	
MUSC 2313	Topics in World Music	
MUSC 2330	Musical Communities of Boston	
MUSC 3353	Music and the Racial Imagination	
MUSI 3351	Music and Social Justice	
MUSI 3360	Global Music Industries in Context	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 5900	Ethnography in Creative Industries	
<i>Contemporary / Popular Music</i>		
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	

MUSC 2311	Topics in American Music
MUSC 2317	Punk Rock
MUSC 2320	40,000 Years of Music Technology
MUSC 2340	Divas, DJs, and Double Standards
MUSC 2351	Music, Sound, and the Screen
MUSC 2380	The World of Choral Music
MUSC 3352	Sounding Human
MUSC 3353	Music and the Racial Imagination
MUSC 3560	Topics in Music since 1900
MUSI 3360	Global Music Industries in Context
MUSI 3401	Hip Hop in the Music Industry
MUSI 3540	Special Topics in Music Industry

## Music Industry Electives

Complete three of the following:		12
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2210	Introduction to Songwriting	
MUSC 2211	Advanced Songwriting	
MUSC 3353	Music and the Racial Imagination	
MUSI 1204	Analyzing Popular Genres	
MUSI 2231	Music Licensing for Media	
MUSI 2232	Music Recording 1	
MUSI 2234	Festivals	
MUSI 2235	Copyright in the Creative Industries	
MUSI 2330	Performing Arts Administration	
MUSI 2331	Music Recording 2	
MUSI 2341	Music Supervision 1	
MUSI 2540	Special Topics in Music Industry	
MUSI 3332	Artist Management	
MUSI 3333	The Record Industry	
MUSI 3334	Music Products Industry	
MUSI 3338	Music Industry Marketing and Promotion	
MUSI 3340	Concert Promotion and Venue Management	
MUSI 3351	Music and Social Justice	
MUSI 3360	Global Music Industries in Context	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 4530	Music Entrepreneurship	
MUSI 4601	Seminar in Music Industry	
MUSI 5900	Ethnography in Creative Industries	
MUST 1220	Introduction to Music Technology	

## Business Course

ACCT 1209	Financial Accounting and Reporting	4
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## Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	

COMM 1231	Principles of Organizational Communication
COMM 1225	Communication Theory
COMM 1255	Communication in a Digital Age

**Cluster Course**

Complete one of the following: 4

COMM 1131	Sex, Relationships, and Communication
COMM 2303	Global and Intercultural Communication
COMM 2304	Communication and Gender
COMM 2501	Communication Law
COMM 2551	Free Speech in Cyberspace

**Writing-Intensive Courses**

Complete two of the following: 8

COMM 3200	Mobile Communication
COMM 3201	Health Communication
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 3500	Environmental Issues, Communication, and the Media
COMM 3501	Free Speech: Law and Practice
COMM 3530	Communication and Sexualities
COMM 3532	Theories of Conflict and Negotiation
COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4631	Crisis Communication and Image Management

**Communication Studies Electives**

Complete three COMM courses. 12

**Integrative Requirement**

Code	Title	Hours
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Complete one of the integrative options below. If a communication studies course is taken, an additional music industry course is required, chosen from the list of music industry electives above.

**Music Option**

Complete one of the following:

MUSI 4601	Seminar in Music Industry
MUSI 4530	Music Entrepreneurship
MUSI 5900	Ethnography in Creative Industries

**Communication Studies Option**

Complete two of the following. One communication studies course is required:

COMM 4608	Strategic Communication Capstone
or COMM 4625	Online Communities
MUSC 2000 to MUSC 5999	
MUSI 2000 to MUSI 5999	
MUST 2000 to MUST 5999	

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Music Major Grade Requirement**

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 1000 or COMM 1000	1	ENGW 1111	4	Elective	4	Elective	4
MUSC 1001	4	MUSC 1201	4	Elective	4	Elective	4
MUSI 1230	4	Communication studies foundational course	4				
COMM 1101	4	Music in context elective	4				
COMM 1112 or 2301	4						
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication studies cluster course	4	Communication studies elective	4	Elective	4	Co-op	4
Elective	4	Elective	4	Elective	4		
Music industry elective	4	Music industry elective	4				
Elective	4	Elective	4				
		EEAM 2000		1			
		16		17		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ENGW 3314 or 3315	4	Communication studies elective	4	Co-op	4
		Communicati studies elective	4	Communicati studies writing-intensive	4		
		ACCT 1209		4			
		Elective		4			
		0		16		8	

**Year 4**

Fall	Hours	Spring	Hours
Co-op	Communication studies writing-intensive	4	
	Music industry elective	4	
	Integrative course	4	
	Capstone	4	
	0	16	

Total Hours: 130

## Political Science and Communication Studies, BS

The combined major in political science and communication studies offers students the opportunity to integrate the study of politics and government with different forms and mediums of communication. Students complete core courses in political science along with core courses in communication studies that cover public speaking and persuasion. This combined major highlights the important role played by different forms of communication in shaping politics and government.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Methodology</b>		
POLS 2399	Research Methods in Political Science	4
or COMM 2301	Communication Research Methods	
<b>Political Science Upper-Division Electives</b>		

Complete two courses in the following range: 8

POLS 3300 to POLS 5999

### Political Science Electives

Complete two courses in the following range: 8

POLS 2000 to POLS 5999

### Political Science Concentration (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 180).

- American Political Institutions (p. 180)
- Campaigns and Elections (p. 180)
- Comparative Politics (p. 180)
- Identity, Culture, and Politics (p. 180)
- International Relations and Diplomacy (p. 181)
- Law and Legal Studies (p. 181)
- Public Policy (p. 181)
- Security Studies (p. 181)

### Communication Studies Requirements

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

### Communication Studies Electives

Code	Title	Hours
<b>Foundation course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing Intensive</b>		
Complete two writing intensive courses in communication studies.		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	

COMM 3530	Communication and Sexualities
COMM 3532	Theories of Conflict and Negotiation
COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4631	Crisis Communication and Image Management

**Communication Studies Electives**

Complete three additional Communication Studies courses. 12

**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3320	Politics and Mass Media	4
or COMM 3320	Political Communication	

**Capstone Requirement**

Complete one of the following. This course also counts toward the political science or communication studies elective requirement: 4

COMM 4102	Health Communication Campaigns
COMM 4530	Communication and Quality of Life
COMM 4533	Consultation Skills
COMM 4602	Contemporary Rhetorical Theory
COMM 4608	Strategic Communication Capstone
COMM 4625	Online Communities
COMM 4755	Production Capstone
POLS 4701	Political Science Senior Capstone
POLS 4703	Senior Thesis

**Political Science and Communication Studies Combined Major Credit Requirement**

Complete 84 semester hours in the major.

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	

POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study**

Sample Four Years, Two Co-ops

<b>Year 1</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1000 or COMM 1000	1	POLS 1155	4	Communication Studies Foundation Course	4	Communication Studies Cluster Course	4
POLS 1150	4	COMM 1112 or 2301	4	Communication Studies Elective	4	Elective	4
COMM 1101	4	Elective	4				
ENGW 1111	4	Elective	4				
Elective	4						
		17		16		8	

<b>Year 2</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	Co-op		Co-op		Communication Studies Writing Intensive	4
POLS 2400	4					Elective	4
Communication Studies Elective	4						
Elective	4						
EESH 2000 or EEAM 2000	1						
		17		0		0	

<b>Year 3</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Political Thought Course	4	Co-op		Co-op		Communication Studies Writing Intensive	4
POLS 2399 or COMM 2301	4					Political Science Elective	4
Communication Studies Elective	4						
POLS Upper-Division Elective 1	4						
		16		0		0	

<b>Year 4</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS Upper-Division Elective 2	4	Capstone	4				
Political Science Elective	4	Elective	4				

Integrative Course	4 Elective	4
Elective	4 Elective	4
		16
		16

Total Hours: 130

### Argumentation and Law, Minor

The argumentation and law minor is intended for students contemplating law school, students interested in legal issues, or students in fields affected by law (such as journalism, strategic communication, or public policy). To prepare students for successful careers in these areas, this minor combines courses in argumentation, rhetoric, and law. Students are exposed to the principles of argumentation, the fundamentals of free speech, the basics of intellectual property, and issues related to privacy.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

#### Requirements

Code	Title	Hours
<b>Argumentation</b>		
Complete two of the following:		8
COMM 1120	Principles of Argumentation	
COMM 1210	Persuasion and Rhetoric	
COMM 2100	Elements of Debate	
COMM 3310	Rhetoric and Justice	
COMM 3311	Arguing Human Rights	
COMM 3409	Advocacy Writing	

#### Law

Complete two of the following:		8
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 2501	Communication Law	
COMM 2525	Communication and Privacy	
COMM 2551	Free Speech in Cyberspace	
COMM 3308	Rhetoric and Propaganda	
COMM 3309	Rhetoric of Fascism	
COMM 3414	Great Speakers and Speeches	
COMM 3501	Free Speech: Law and Practice	
LPSC 1101	Introduction to Law	
LPSC 2301	Introduction to Law, Policy, and Society	
LPSC 3303	Topics in Law and Public Policy	
LPSC 3307	Understanding the Modern Supreme Court	

#### GPA Requirement

2.000 GPA required in the minor

### Cinema Studies, Minor

The interdisciplinary cinema studies minor appeals to students aspiring to supplement their major program of study with courses that promote the study of film, television, and digital media. In addition to film analysis and film theory, students choose from electives on culture and film, film and television history, and gender and film. This results in a minor that combines the academic study of cinema along with the crafts of filmmaking and screenwriting.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Media and Screen Studies majors may not declare the cinema studies minor. Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

#### Requirements

Code	Title	Hours
MSCR 2895	Film Analysis	4
MSCR 3600	Film Theory	4

#### Electives

Code	Title	Hours
Complete three of the following:		12
ARTH 2212	Survey of the Still and Moving Image	
MSCR 2220	Understanding Media	
MSCR 2336	American Film and Culture	
MSCR 3389	Screenwriting	
MSCR 3392	Gender and Film	
MSCR 4208	TV History	
MUSC 1113	Film Music	

#### GPA Requirement

2.000 GPA required in the minor

### Communication Studies, Minor

The communication studies minor is designed for students interested in acquiring practical skills along with a broad-based understanding of communication theory and research. This minor seeks to provide the knowledge necessary to understand the challenges and opportunities of a diverse and democratic society and the skills to perform effectively and ethically as citizens. Three electives offer students an opportunity to develop an area of expertise (such as strategic communication or media production) within the communication studies minor.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Communication studies majors may not declare the communication studies minor. Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Requirements

Code	Title	Hours
<b>Required Courses</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1231	Principles of Organizational Communication	
COMM 1225	Communication Theory	
COMM 1255	Communication in a Digital Age	
<b>Electives</b>		
Complete three of the following or any unused foundational courses from above:		12
COMM 1120 to COMM 4799		

## GPA Requirement

2.000 GPA required in the minor

### Digital Communications, Minor

The digital communications minor appeals to students interested in studying the relationship between communication, technology, and society. The minor offers students an opportunity to obtain the tools and methods for studying, analyzing, and critically reflecting upon their everyday engagements with digital forms of community and expression. Students pursuing the digital communications minor explore the ethical questions that sit at the core of the digital technologies that shape culture, politics, and the economy. Courses in the minor cover areas of digital communication such as social media, networks and organizing, internet policy and cybersecurity, online communities and collaboration, and children's development and new media.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Requirements

Code	Title	Hours
<b>Foundational Courses</b>		
Complete two of the following:		8
COMM 1255	Communication in a Digital Age	
COMM 2105	Social Networks	
COMM 2525	Communication and Privacy	
COMM 2551	Free Speech in Cyberspace	
COMM 2625	Communication, Technology, and Society	
ENGL 1450	Reading and Writing in the Digital Age	
MSCR 2505	Digital Feminisms	
	or WMNS 2505 Digital Feminisms	
<b>Advanced Courses</b>		
Complete two of the following:		8

COMM 3200	Mobile Communication
COMM 4605	Youth and Communication Technology
COMM 4625	Online Communities

## GPA Requirement

2.000 GPA required in the minor

### Film Production, Minor

The interdisciplinary film production minor appeals to students interested in film production. This minor is particularly appealing to students studying art and art history, English, and theatre. In addition to a foundational course in film production, students take a combination of courses dealing with documentary filmmaking, film analysis, screenwriting, and storytelling. The film production minor is designed to prepare students for graduate school, careers in media production, and positions in the entertainment industry.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Required Course

Code	Title	Hours
MSCR 1230	Introduction to Film Production	4

## Electives

Code	Title	Hours
Complete four of the following:		
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
MSCR 2160	Narrative Filmmaking	
MSCR 2895	Film Analysis	
MSCR 3389	Screenwriting	
MSCR 3446	Documentary Production	
THTR 2345	Acting for the Camera	

## GPA Requirement

2.000 GPA required in the minor

### Human Communication, Minor

The human communication minor is intended for students interested in studying the role of interpersonal communication in relationships, including romantic relationships, friendships, and relationships in groups or in organizations. Successful students gain an in-depth understanding of how communication can affect the quality of relationships, the satisfaction that is derived from relationships, and whether a relationship is likely to last or dissolve. Courses in the minor focus on research-validated theories, concepts, and models that aid students in understanding the many different types of relationships that exist in their personal and professional lives.



## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Foundational Courses

Code	Title	Hours
Complete two of the following:		8
COMM 1131	Sex, Relationships, and Communication	
COMM 1231	Principles of Organizational Communication	
COMM 2131	Dark Side of Interpersonal Communication	
COMM 2135	Sex and Interpersonal Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2500	Analyzing Conversations in Everyday Life	
COMM 2534	Group Communication	
COMM 2535	Family Communication	

## Advanced Courses

Code	Title	Hours
Complete two of the following:		8
COMM 2301	Communication Research Methods	
COMM 3230	Interpersonal Communication	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	

## GPA Requirement

2.000 GPA required in the minor

## Improvisation and Storytelling, Minor

The minor in improvisation and storytelling is intended for students interested in integrating the creativity of actor training and the practical techniques of public speaking. Students are encouraged to choose courses to empower their voice and speech, cultivate their onstage persona, and develop high-impact presentation skills to enhance career prospects. This minor, which features classes offered by the Department of Theatre and the Department of Communication Studies, seeks to create more confident, creative, and compelling communicators.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Common Requirements

Code	Title	Hours
COMM 1511	Communication and Storytelling	4
THTR 1125	Improvisation	4

## Communication Studies Elective

Code	Title	Hours
Complete one of the following:		4
COMM 1112	Public Speaking	
COMM 1113	Business and Professional Speaking	
COMM 1210	Persuasion and Rhetoric	

## Theatre Elective

Code	Title	Hours
Complete one of the following:		4
THTR 1130	Introduction to Acting	
THTR 1160	The Professional Voice	
THTR 2345	Acting for the Camera	

## GPA Requirement

2.000 GPA required in the minor

## Media and Screen Studies, Minor

The media and screen studies minor appeals to students interested in how media shapes society and is designed to prepare students for careers in arts and industry, politics, and popular culture. The minor offers students an opportunity to obtain the analytical skills necessary for the rigorous analysis of media within the humanities and social sciences. Students with a media and screen studies minor often find employment in film and television production, media marketing, film/media journalism, and other positions within the entertainment industry.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Media and screen studies majors may not declare the media and screen studies minor. Students must complete a minimum of three (3) courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Required Courses

Code	Title	Hours
MSCR 1220	Media, Culture, and Society	4
MSCR 2220	Understanding Media	4

## Electives

Code	Title	Hours
Complete three courses in the following range:		12
MSCR 2000 to MSCR 4999		

## GPA Requirement

2.000 GPA required in the minor

## Media Production, Minor

The media production minor is designed to foster an awareness of the important cultural, rhetorical, and critical contexts of media development. Successful students develop creative and artistic abilities through studying contemporary practices and standards and developing original creative work. The technical aspects of camera operation, audio design, lighting design, digital editing, and live broadcast are also covered.

### Minor Requirements

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Required Courses

Code	Title	Hours
COMM 1450	Sound Production for Digital Media	4
COMM 2350	Producing for the Entertainment Industry	4
COMM 2550	Television Field Production	4
COMM 2655	Television Studio Production	4

### Elective Courses

Code	Title	Hours
Complete two of the following:		8
COMM 2650	The Business of Entertainment	
COMM 2750	Beyond Television	
COMM 3307	Production Practicum Abroad	
COMM 3450	Voice-Over Artist	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### GPA Requirement

2.000 GPA required in the minor

## Oratory and Public Speaking, Minor

The oratory and public speaking minor is designed for students aspiring to develop exemplary oral communication skills. The courses that comprise the minor provide a coherent program of study that includes the principles of argumentation, the practice of public speaking, and the theory of narrative and storytelling.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Foundational Course

Code	Title	Hours
COMM 1112	Public Speaking	4

## Electives

Code	Title	Hours
Complete four of the following:		16
COMM 1113	Business and Professional Speaking	
COMM 1210	Persuasion and Rhetoric	
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 1511	Communication and Storytelling	
COMM 2100	Elements of Debate	
COMM 2113	Interviewing	
COMM 3450	Voice-Over Artist	

### GPA Requirement

2.000 GPA required in the minor

## Political Communication, Minor

The political communication minor is a joint program offered through the departments of communication studies, political science, and journalism. The minor appeals to students interested in the electoral process, campaign rhetoric, and the role of media in political life. It is intended to address the interests and needs of students considering careers in the political sphere, either as candidates, employees, volunteers, or reporters in political organizations and campaigns. The political communication minor is designed to prepare students for careers in communication, law, politics, public administration, public policy, and other professions that deal with issues in public settings.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Introductory Courses

Code	Title	Hours
Complete two of the following:		8
COMM 1210	Persuasion and Rhetoric	
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 1412	Social Movement Communication	
JRNL 1150	Understanding Today's News	
POLS 1150	American Government	

### Intermediate/Advanced Courses

Code	Title	Hours
Complete four courses from the following lists (at least one course must be taken from each department):		16
<b>Communication Studies</b>		
COMM 3320	Political Communication	
COMM 3409	Advocacy Writing	
COMM 4602	Contemporary Rhetorical Theory	
<b>Journalism</b>		
JRNL 2350	The History of Journalism: How the News Became the News	

JRNL 3550	The First Amendment and the Media
<b>Political Science</b>	
POLS 3310	Public Opinion, Voting, and Elections

### GPA Requirement

2.000 GPA required in the minor

### Rhetoric, Minor

The rhetoric minor appeals to students interested in history, theory, and the criticism of civic discourse and cultural practices. The minor integrates courses from the Department of Communication Studies and the Department of English that explore the nature and function of rhetoric in politics, the professions, and the media. The rhetoric minor offers students an opportunity to be better citizens, members of the community, and leaders in the workplace by learning how to use language strategically, to speak with integrity, and to appreciate the power of their own voice.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where indicated.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Foundational Course

Code	Title	Hours
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
ENGL 1160	Introduction to Rhetoric	

### Electives

Code	Title	Hours
Note: For English majors, only one course from the major may also count toward this elective section of the minor.		
Complete four of the following:		16
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3501	Free Speech: Law and Practice	
COMM 4602	Contemporary Rhetorical Theory	
ENGL 3325	Rhetoric of Law	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3404	African American Rhetorical Traditions	

### GPA Requirement

2.000 GPA required in the minor

### Social Activism, Minor

The social activism minor appeals to students interested in exploring a variety of perspectives and practical approaches to social activism. The minor allows students to explore social movements, public advocacy, and citizenship in a wide array of situations. These opportunities arise from

the wealth of advocacy organizations in Boston, the access Northeastern students have to co-op experiences nationally and internationally, and Northeastern's service-learning program. Completing course work in a variety of departments provides an interdisciplinary perspective and allows students to apply different skill sets and knowledge bases for careers as lawyers, nonprofit activists, community organizers, lobbyists, and volunteers.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Introductory Courses

Code	Title	Hours
Note: Only one course may be taken from each department/program.		
Complete two of the following:		8

#### Communication Studies

COMM 1412	Social Movement Communication
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#### Political Science

POLS 1150	American Government
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#### Sociology

SOCL 1228	Social Problems
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SOCL 1246	Environment and Society
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#### Theatre

THTR 1215	Activism and Performance
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### Intermediate/Advanced Courses

Code	Title	Hours
Note: Only one course may be taken from each department/program.		
Complete three of the following:		12

#### Law and Public Policy

LPSC 2301	Introduction to Law, Policy, and Society
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LPSC 2302	Global Human Rights: A Social and Economic Perspective
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#### Political Science

POLS 2395	Environmental Politics and Policy
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#### Sociology

SOCL 3468	Social Movements
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### Service-Learning

Code	Title	Hours
HUSV 1101	Social Change and Human Services	4

### GPA Requirement

2.000 GPA required in the minor

### Sports, Media, and Communication, Minor

The sports, media, and communication minor appeals to students preparing for careers as sports journalists or advertising/public relations professionals specializing in a sports-related area. The minor includes courses examining the prominent role of sports in society with a special

emphasis on gender, race, and public policy. When combined with Northeastern's signature co-op program, the result is an innovative minor that blends theory with practice and prepares students for a broad range of professional opportunities.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Foundational Course

Code	Title	Hours
COMM 2110	Sports, Media, and Communication	4

## Electives

Code	Title	Hours
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### Sports Elective

Complete one of the following: 4

COMM 2700	Sports Promotion in the 21st Century	
JRNL 3455	Sports Writing	

### Intermediate Elective

Complete one of the following: 4

ANTH 2365	Sport, Culture, and Society	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2350	Producing for the Entertainment Industry	
COMM 2655	Television Studio Production	
COMM 2800	Sport and Spectacle	
COMM 3451	Advertising Practices	
ECON 3481	Economics of Sports	

### Advanced Elective

Complete one of the following: 4

COMM 4631	Crisis Communication and Image Management	
COMM 4994	Internship in Communication	
JRNL 3945	Internship	
JRNL 4650	Ethics and Issues in Journalism	
JRNL 5310	Photojournalism	
JRNL 5314	Video News Reporting and Producing	

## GPA Requirement

2.000 GPA required in the minor

## School of Journalism

Website (<https://camd.northeastern.edu/journalism-at-northeastern/>)

**Jonathan Kaufman, MA**  
Professor and Director

617.373.3236  
617.373.8773 (fax)

The School of Journalism seeks to prepare students for careers in news and related communication fields. The program prepares future journalists and professional communicators in writing, editing, digital and social media, photography, video and audio production, design, and public relations. These skills have broad applications. Graduates of the program also go on to work in government, business, law, and teaching.

Students can graduate in four years with two co-ops. The school strongly advises students to obtain cooperative education experience. The program offers some of the best co-ops and internships anywhere.

Graduates work for some of the world's best newspapers and magazines, radio and television stations, online publications, wire services, public relations departments, and advertising agencies.

## Academic Progression Standards

Journalism majors and minors must be in good standing in accordance with university-wide requirements to remain in the major or minor.

## Programs

### Bachelor of Arts (BA)

- Journalism (p. 187)
- Journalism and English (p. 189)
- Journalism and Political Science (p. 191)
- Media and Screen Studies and Journalism (p. 153)

### Bachelor of Science (BS)

- Computer Science and Journalism (p. 195)
- Criminal Justice and Journalism (p. 197)
- Data Science and Journalism (p. 199)
- Journalism and Interaction Design (p. 111)

## Minors

- Journalism Practice (p. 203)
- Journalism Studies (p. 204)
- Photojournalism (p. 130)
- Public Relations (p. 204)
- Sports, Media, and Communication (p. 186)

## Journalism, BA

Website (<https://camd.northeastern.edu/program/journalism-ba/>)

If you're a news junkie; love to write; want to tell people what's going on in your hometown, around the world, or in an organization, a journalism major at Northeastern University is designed to give you the skills and experience you need to tell your story.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), Difference and Diversity (DD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Journalism Major Requirements

Students transferring from outside institutions must complete a minimum of five 4-credit journalism courses at Northeastern, and these must include:

Code	Title	Hours
JRNL 2201	Journalism 2: Intermediate Reporting	
JRNL 2301	Visual Storytelling in Journalism	
JRNL 4650	Ethics and Issues in Journalism	

Code	Title	Hours
<b>Introduction to College</b>		
JRNL 1000	Journalism at Northeastern	1

<b>Journalism Courses</b>		
A grade of C or higher is required:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

<b>Required Journalism</b>		
JRNL 1150	Understanding Today's News	4
JRNL 2350	The History of Journalism: How the News Became the News	4
JRNL 3550	The First Amendment and the Media	4
JRNL 4650	Ethics and Issues in Journalism	4

<b>Journalism Electives</b>		
Complete three journalism electives.		12

<b>Journalism-Related Requirement</b>		
HIST 1130	Introduction to the History of the United States	4

### Journalism Major Credit Requirement

Complete 49 semester hours in the major.

### Upper-Division Electives

Complete three general electives numbered 3000 or above that do not double-count with the major or NUpath.

### Program Requirement

129 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000	1	JRNL 1101 and JRNL 1102	5	Elective	4	Elective	4
JRNL 1150	4	Foreign language	4	Elective	4	Elective	4
ENGW 1111	4	Elective	4				
HIST 1130	4	Elective	4				
Elective	4						
		17		17		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2201	4	JRNL 2350	4	Elective	4	Co-op	0
Journalism elective 1	4	Journalism elective 2	4	Elective	4		
Foreign language	4	EEAM 2000	1				
Elective	4	Foreign language	4				
		16		17		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	JRNL 2301	4	Elective	4	Co-op	0
		JRNL 3550		4		Elective	
		Elective		4			
		Elective		4			
		0		16		8	

Year 4			
Fall	Hours	Spring	Hours
Co-op	0	JRNL 3610	4
		JRNL 4650	
		Journalism elective 3	
		Elective	
		0	

Total Hours: 131

#### Sample Four Years, Two Co-ops Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000	1	JRNL 1101 and JRNL 1102	5	Elective	4	Elective	4
JRNL 1150	4	Foreign language	4	Elective	4	Elective	4
ENGW 1111	4	Elective	4				
HIST 1130	4	Elective	4				

Elective	4				
	17	17	8	8	
<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
JRNL 2201	4	Co-op	0	Co-op	0
Journalism elective 1	4				Elective
EEAM 2000	1				
Foreign language	4				
Elective	4				
	17	0	0	0	8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
JRNL 2301	4	Co-op	0	Co-op	0
JRNL 2350	4				Elective
Journalism elective 2	4				
Foreign language	4				
	16	0	0	0	8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
JRNL 3550	4	JRNL 4650	4		
JRNL 3610	4	Journalism elective 3	4		
Elective	4	Elective	4		
Elective	4	Elective	4		
	16	16			

Total Hours: 131

## Journalism and English, BA

The School of Journalism and the English Department offer an interdisciplinary combined major in Journalism and English. Broadly speaking, students in the Combined Major in Journalism and English at Northeastern integrate the study of journalism with the study of language, literature and writing.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

NUpath requirements Interpreting Culture (IC), Analyzing and Using Data (AD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Journalism Major Requirements

Code	Title	Hours
<b>Journalism Introductory Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundations</b>		
Must receive a C or better in the following:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Law and Ethics</b>		
JRNL 3550 or JRNL 4650	The First Amendment and the Media Ethics and Issues in Journalism	4
<b>Journalism Electives</b>		
Take three JRNL courses		12

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160 or ENGL 1410	Introduction to Rhetoric Introduction to Research on Writing	4
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	

or JWSS 3685 Modern and Contemporary Jewish Literature

### Pre-Nineteenth-Century Literature

Complete one of the following: 4

ENGL 1600 Introduction to Shakespeare

ENGL 1700 Global Literatures 1

ENGL 2296 Early African-American Literature

ENGL 3101 Early Literatures

ENGL 3120 17th- and 18th-Century Literatures

ENGL 3678 Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

or JWSS 3678 Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

### Nineteenth-, Twentieth-, and Twenty-First-Century Literature

Complete one of the following: 4

ENGL 2330 The American Renaissance

ENGL 2301 The Graphic Novel

ENGL 2440 The Modern Bestseller

ENGL 2600 Irish Literary Culture (Abroad)

ENGL 2610 Contemporary Israeli Literature and Art (Abroad)

ENGL 3140 19th-Century Literatures

ENGL 3685 Modern and Contemporary Jewish Literature

or JWSS 3685 Modern and Contemporary Jewish Literature

ENGL 3720 19th-Century Major Figure

ENGL 3730 20th- and 21st-Century Major Figure

### Theories and Methods

Complete one of the following: 4

ENGL 1140 Grammar: The Architecture of English

ENGL 1160 Introduction to Rhetoric

ENGL 1410 Introduction to Research on Writing

ENGL 2150 Literature and Digital Diversity

ENGL 3325 Rhetoric of Law

ENGL 3340 Technologies of Text

ENGL 3370 Writing Cultures

ENGL 3381 The Practice and Theory of Teaching Writing

ENGL 3400 Opening the Archive

ENGL 3700 Narrative Medicine

ENGL 4410 Research in Rhetoric and Writing

LING 1150 Introduction to Language and Linguistics

LING 2350 Linguistic Analysis

LING 3450 Syntax

LING 3452 Semantics

LING 3454 History of English

LING 3456 Language and Gender

LING 3458 Topics in Linguistics

### Comparative Literature

Complete one of the following: 4

ENGL 1450 Reading and Writing in the Digital Age

ENGL 1502 American Literature to 1865

ENGL 2150 Literature and Digital Diversity

ENGL 2420 Contemporary Poetry

ENGL 2430 Contemporary Fiction

ENGL 2451 Postcolonial Women Writers

ENGL 2455 American Women Writers

ENGL 2510 Horror Fiction

ENGL 2520 Science Fiction

ENGL 2600 Irish Literary Culture (Abroad)

ENGL 2620 What Is Nature?

ENGL 2690 Boston in Literature

ENGL 3487 Film and Text (Abroad)

ENGL 3663 The African American Novel

### Writing

Complete one of the following: 4

ENGL 2700 Creative Writing

ENGL 2710 Style and Editing

ENGL 2740 Writing and Community Engagement

ENGL 2760 Writing in Global Contexts

ENGL 2770 Writing to Heal

ENGL 2780 Visual Writing: Writing Visuals

ENGL 2850 Writing for Social Media: Theory and Practice

ENGL 3375 Writing Boston

ENGL 3376 Creative Nonfiction

ENGL 3377 Poetry Workshop

ENGL 3378 Fiction Workshop

ENGL 3380 Writing Seminar

ENGL 3382 Publishing in the 21st Century

ENGL 3384 The Writer's Marketplace

### Capstone

ENGL 4710 Capstone Seminar 4

or ENGL 4720 Capstone Project

### English Electives

Complete two additional ENGL electives. 8

### Integrative Requirement

Code	Title	Hours
JRNL 3630	Magazine Writing	4
ENGL 2740	Writing and Community Engagement	4
or ENGL 2850	Writing for Social Media: Theory and Practice	

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

129 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

##### SPRING/SUMMER 1

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000 or ENGL 1000	1	JRNL 1101 and JRNL 1102	5	Foreign language	4	Foreign language	4

JRNL 1150	4 ENGL 1160 or 1410	4 Elective	4 Elective	4
ENGW 1111	4 English diversity requirement	4		
ENGL 1400	4 Elective	4		
pre-nineteenth-century literature requirement	4			
	17	17	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
JRNL 2201	4 Co-op	0 Co-op	0 Elective	4
EEAM 2000 or EESH 2000	1		Elective	4
Nineteenth-century, twentieth-, and twenty-first-century literature requirement	4			
Theories and methods requirement	4			
Elective	4			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
JRNL 2301	4 Co-op	0 Co-op	0 English elective 1	4
Journalism elective 1	4		Elective	4
Comparative literature requirement	4			
English writing requirement	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
JRNL 3610	4 JRNL 3550 or 4650	4	
Journalism elective 2	4 Journalism elective 3	4	
ENGL 2740 or 2850	4 JRNL 3630	4	
English elective 2	4 ENGL 4710	4	
	16	16	0

Total Hours: 131

**Journalism and Political Science, BA**

This interdisciplinary combined major offers students an opportunity to integrate the study and practice of journalism and political science. Successful students will gain a deep understanding of both disciplines, allowing them to seek out areas such as political writing, campaigns, and law school.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (CI), Interpreting Culture (IC), Understanding Societies and Institutions (SI), Analyzing and Using Data (AD), Engaging Difference and Diversity (DD), and Employing Ethical Reasoning (ER) are met through the major requirements. All other Nupath requirements must be met through electives.

**Journalism Major Requirements**

Code	Title	Hours
<b>Journalism Introductory Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundations</b>		
Must receive a C or better in the following:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Ethics</b>		
JRNL 4650	Ethics and Issues in Journalism	4
<b>Journalism Electives</b>		
Take three JRNL courses.		12

**Political Science Requirements**

Code	Title	Hours
<b>Political Science Foundation Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4

**Political Thought**



Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Capstone or Thesis**

Complete one of the following:		4
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**Political Science Electives**

Complete three POLS electives or complete a concentration from the following list:	12
POLS 2000 to POLS 5999	

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 192)
- Campaigns and Elections (p. 192)
- Comparative Politics (p. 192)
- Identity, Culture, and Politics (p. 192)
- International Relations and Diplomacy (p. 193)
- Law and Legal Studies (p. 193)
- Public Policy (p. 193)
- Security Studies (p. 193)

**Integrative Requirement**

Code	Title	Hours
JRNL 3550	The First Amendment and the Media	4
COMM 3320	Political Communication	4
or POLS 3320	Politics and Mass Media	

**Journalism and Political Science Combined Major Credit Requirement**

Complete 84 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

129 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	

POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study  
Sample 4 Years, 2 Co-ops  
Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000	1	JRNL 1101	4	Foreign language	4	Foreign language	4
JRNL 1150	4	JRNL 1102	1	Elective	4	Elective	4
POLS 1150	4	POLS 1155	4				
ENGW 1111	4	POLS 1160	4				
Elective	4	Foreign language	4				
		17		17		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2201	4	JRNL 2301	4	Elective	4	Co-op	0
Journalism elective 1	4	Journalism elective 2	4	Elective	4		
POLS 2399	4	POLS 2400	4				
Political science elective 1	4	Political science elective 2	4				
		EEAM 2000 or EESH 2000	1				
		16		17		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	JRNL 3610	4	Elective	4	Co-op	0
		Journalism elective 3	4	Elective	4		
		Political thought requirement	4				
		Political science elective 3	4				
		0		16		8	

Year 4					
Fall	Hours	Spring	Hours	Summer 2	Hours
Co-op	0	JRNL 3550	4		
		JRNL 4650	4		
		POLS 4701 or 4703	4		
		POLS 3320 or COMM 3320	4		
		0		16	

Total Hours: 131

## Media and Screen Studies and Journalism, BA

A Bachelor of Arts in Journalism and Media and Screen Studies is designed for the student who is interested in pursuing a career as a journalist specializing in the film industry.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), Difference and Diversity (DD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	

MSCR 3700	Queer Media
MSCR 4208	TV History

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		
ARTD 2380	Video Basics	12
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### Journalism Requirements

Code	Title	Hours
<b>Journalism Foundations</b>		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox (A grade of C or higher is required)	5
JRNL 1150	Understanding Today's News	4
JRNL 2201	Journalism 2: Intermediate Reporting (A grade of C or higher is required)	4

### Journalism and Advanced Writing

JRNL 2301	Visual Storytelling in Journalism (A grade of C or higher is required)	4
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### Television News

JRNL 5314	Video News Reporting and Producing	4
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### Ethics and Issues

JRNL 4650	Ethics and Issues in Journalism	4
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### Journalism Electives

Complete three courses in the following range:		12
JRNL 2000–JRNL 5999		

### Integrative Requirement

The following course also counts toward the media and screen studies requirements above.

Code	Title	Hours
<b>Integrative Course</b>		
MSCR 4623	Theories of Media and Culture	4

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

### Program Requirement

129 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MSCR 1000 or JRNL 1000	1 MSCR 1230 or 2220	4 Foreign language	4 Foreign language	4
MSCR 1220	4 MSCR 1320 or 1420	4 Elective	4 Elective	4
JRNL 1150	4 JRNL 1101 and JRNL 1102	5		
ENGW 1111	4 Foreign language	4		
Elective	4			
	17	17	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EEAM 2000	1 Co-op	0 Co-op	0 Elective	4
MSCR elective 1	4		Elective	4
MSCR diversity or globalization	4			
JRNL 2201	4			
Journalism elective 1	4			
	17	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MSCR 4623	4 Co-op	0 Co-op	0 Elective	4
MSCR writing intensive 1	4		Elective	4
JRNL 2301	4			
JRNL 5314	4			
	16	0	0	8

Year 4		
Fall	Hours Spring	Hours
MSCR elective 2	4 MSCR elective 3	4
MSCR writing intensive 2	4 Journalism elective 3	4
JRNL 4650	4 Elective	4
Journalism elective 2	4 Elective	4
	16	16

Total Hours: 131

## Computer Science and Journalism, BS

The computer science and journalism combined major supports students who understand that journalism now takes place in both print and the digital world. Students will learn the principles, practices, and responsibilities of the journalism profession while gaining a deep

understanding of the systems and technologies that support digital media.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4200 or IS 4300	Information Retrieval Human Computer Interaction	4

## Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 12 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	12
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

## Journalism Major Requirements

Students transferring from outside institutions must complete a minimum of five 4-credit journalism courses at Northeastern, and these must include:

Code	Title	Hours
JRNL 2201	Journalism 2: Intermediate Reporting	
JRNL 2301	Visual Storytelling in Journalism	
JRNL 4650	Ethics and Issues in Journalism	

Code	Title	Hours
<b>Journalism Courses</b>		
A grade of C or higher is required:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

<b>Required Journalism</b>		
JRNL 1150	Understanding Today's News	4
JRNL 2350	The History of Journalism: How the News Became the News	4
JRNL 3550	The First Amendment and the Media	4
JRNL 4650	Ethics and Issues in Journalism	4

<b>Journalism Electives</b>		
Complete two JRNL courses.		8

<b>Journalism-Related Requirement</b>		
HIST 1130	Introduction to the History of the United States	4

**Supporting Courses**

Code	Title	Hours
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<b>Mathematics Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering	4

<b>Computing and Social Issues</b>		
Complete one of the following:		4

AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Writing Requirement**

Code	Title	Hours
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<b>College Writing</b>		
ENGW 1111	First-Year Writing	4

**Advanced Writing in the Disciplines**

*This course already fulfills a Journalism requirement above*

JRNL 2301	Visual Storytelling in Journalism
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**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Interpreting Culture
- Engaging Difference and Diversity
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, IS courses

**Journalism GPA Requirement**

Minimum 2.000 GPA required in all JRNL courses

**Program Requirement**

134 total semester hours required

**Plan of Study**

**Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1**

<b>Year 1</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4		
CS 2500 and CS 2501	5	JRNL 1101 and JRNL 1102	5				
JRNL 1150	4	JRNL 2350	4				
ENGW 1111	4						
		19		18		9	
						0	
<b>Year 2</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	Co-op		Co-op		Elective	4
CS 3000	4					Elective	4
Khoury elective	4						
JRNL 2201	4						
HIST 1130	4						
		17		0		0	
						8	

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Khoury elective	4 Co-op	Co-op	Elective	4
Khoury elective	4		Elective	4
JRNL 2301	4			
Journalism elective 1	4			
	16	0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 4500	4 JRNL 4650	4 Elective	4	
JRNL 3610	4 Computing and social issues	4 Elective	4	
JRNL 3550	4 Journalism elective 2	4		
IS 4200	4 Elective	4		
	16	16	8	0

Total Hours: 135

## Sample Pattern, Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 1800 and CS 1802	5 CS 3200	4		
CS 2500 and CS 2501	5 JRNL 1101 and JRNL 1102	5		
JRNL 1150	4 JRNL 2350	4		
ENGW 1111	4			
	19	18	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210	1 Co-op	0 Co-op	0 Vacation	0
CS 3500	5			
MATH 1341	4			
JRNL 2201	4			
HIST 1130	4			
	18	0	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 Co-op	0 Co-op	0 Elective	4
Khoury elective	4		Elective	4
JRNL 2301	4			
Journalism elective 1	4			
	16	0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Khoury elective	4 Co-op	0 Co-op	0 Elective	4
JRNL 3550	4		Elective	4
JRNL 3610	4			
Elective	4			
	16	0	0	8

Year 5		
Fall	Hours Spring	Hours
Khoury elective	4 CS 4500	4
JRNL 4650	4 Computing and social issues	4
IS 4200	4 Elective	4
Journalism elective 2	4 Elective	4
	16	16

Total Hours: 135

## Criminal Justice and Journalism, BS

The School of Criminology and Criminal Justice and School of Journalism offer a combined major in criminal justice and journalism. Criminology and criminal justice courses provide a foundation for understanding crime and our criminal justice system. Journalism courses provide students with the skills and experience needed to succeed as a journalist. Together, the combined major is designed to prepare students to report important stories about crime and justice.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
	What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.	
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4

**Current Crime and Justice Issues**

These courses introduce students to topical issues related to crime and justice.

Complete one of the following:	4
CRIM 1300 The Death Penalty	
CRIM 1400 Human Trafficking	
CRIM 1500 Corruption, Integrity, and Accountability	

**Crime Problems and Criminal Justice Institutions**

The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students with a deeper look at a range of crime problems.

Complete one of the following:	4
CRIM 2310 Courts: The Third Branch of Government	
CRIM 2320 Youth Crime and Justice	
CRIM 2330 Punishment in the Age of Mass Incarceration	
CRIM 2340 Corporate Security: Securing the Private Sector	
CRIM 2350 Policing a Democratic Society	
CRIM 3010 Criminal Violence	
CRIM 3030 Global Criminology	
CRIM 3040 Psychology of Crime	
CRIM 3050 Organized Crime	
CRIM 3060 Political Crime and Terrorism	
CRIM 3070 Corporate and White-Collar Crime	
CRIM 3540 Addiction and Recovery	

**Systemic Issues**

These courses consider systemic issues facing the criminal justice system.

Complete one of the following:	4
CRIM 3110 Gender, Crime, and Justice	
CRIM 3120 Race, Crime, and Justice	

**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? These courses study harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3600 Criminal Justice Research Methods	4
CRIM 3700 Analyzing and Using Data on Crime and Justice	4

**Solutions and Reform**

How do we reinvent criminal justice institutions and their practice? The capstone experience is project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.

CRIM 4949 Senior Capstone Seminar	4
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**Criminal Justice Elective**

These courses round out our knowledge of crime and justice.

Complete one additional criminal justice elective from the 3000, 4000, or 5000 level.	4
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**Journalism Requirements**

Code	Title	Hours
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**Introductory Journalism Course**

JRNL 1150	Understanding Today's News	4
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**Journalism Foundation Courses**

A grade of C or better is required.		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

**Ethics**

JRNL 4650	Ethics and Issues in Journalism	4
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**Journalism Electives**

Code	Title	Hours
Complete three additional journalism courses.		12

**Supporting Courses**

Code	Title	Hours
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**Introduction**

CRIM 1000 or JRNL 1000	Criminal Justice at Northeastern Journalism at Northeastern	1
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**Computer or Data Science**

Complete one of the following:		
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
JRNL 3700	Data Storytelling	

**Co-op Integration Requirements**

Complete before the first co-op:		
EESH 2000 or EEAM 2000	Professional Development for Co-op	
Complete after a criminal justice co-op:		
CRIM 3000	Co-op Integration Seminar 2	

**Integrative Requirements**

Code	Title	Hours
JRNL 3550	The First Amendment and the Media	4
CRIM 1700	Crime, Media, and Politics	4

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

129 total semester hours required

## Plan of Study

### Four Years, Two Co-ops

#### Spring/Summer 1

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1000 or JRNL 1000	1	Criminology thematic elective	4	Elective	4	Elective	4
CRIM 1100	4	JRNL 1101 and JRNL 1102	5	Elective	4	Elective	4
JRNL 1150	4	Computer or data requirement	4				
ENGW 1111 Elective	4	Elective	4				
	17		17		8		8

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1110	4	Co-op	Co-op			Criminology survey elective	4
CRIM 1120	4					Elective	4
JRNL 2201	4						
Journalism elective 1	4						
EESH 2000 or EEAM 2000	1						
	17		0		0		8

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1700	4	Co-op	Co-op			Elective	4
CRIM 3600	4					Elective	4
JRNL 2301	4						
Journalism elective 2	4						
CRIM 3000	1						
	17		0		0		8

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3700	4	CRIM 4949	4				
Criminology systemwide elective	4	Criminology elective	4				
JRNL 3550	4	JRNL 4650	4				
JRNL 3610	4	Journalism elective 3	4				
	16		16				

Total Hours: 132

### Data Science and Journalism, BS

The data science and journalism combined major offers students an opportunity to gain the skills to be able to engage in both the print and digital worlds of journalism. Students study the collection, manipulation,

storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data. Combined with learning the principles, practices, and responsibilities of journalism, students can extract meaning from massive information flows and utilize it in effective investigative reporting.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

### Programming Sequence Pathways

Choose one of the two options. 12

#### Computer Science Option

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	

#### Data Science Option

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

### Computer Science Required Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4

### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4

### Khoury Elective Courses



With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Journalism Major Requirements

Students transferring from outside institutions must complete a minimum of five 4-credit journalism courses at Northeastern, and these must include:

Code	Title	Hours
JRNL 2201	Journalism 2: Intermediate Reporting	
JRNL 2301	Visual Storytelling in Journalism	
JRNL 4650	Ethics and Issues in Journalism	

Code	Title	Hours
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#### Journalism Courses

A grade of C or higher is required:

JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

#### Required Journalism

JRNL 1150	Understanding Today's News	4
JRNL 3550	The First Amendment and the Media	4
JRNL 4650	Ethics and Issues in Journalism	4

#### Journalism Electives

Complete three JRNL courses. 12

### Supporting Courses

Code	Title	Hours
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#### Mathematics Requirement

MATH 1341	Calculus 1 for Science and Engineering	4
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#### Statistics Foundation

ECON 2350	Statistics	4
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### Writing Requirement

Code	Title	Hours
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#### College Writing

ENGW 1111	First-Year Writing	4
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#### Advanced Writing in the Disciplines

*This course already fulfills a Journalism requirement above.*

JRNL 2301	Visual Storytelling in Journalism	
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#### Computing and Social Issues

Complete one of the following: 4

AFAM 2600	Issues in Race, Science, and Technology	
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CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
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CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

### Integrative Requirement

Code	Title	Hours
Complete one of the following: 4		
JRNL 3700	Data Storytelling	
JRNL 5500	Coding for Digital Storytelling	

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives. 20		

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, IS courses

### Journalism GPA Requirement

Minimum 2.000 GPA required in all JRNL courses

### Program Requirement

131 total semester hours required

### Plan of Study

#### Sample Pattern, Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	0
CS 1800 and CS 1802	5 CS 3200	4 MATH 1341	4	
CS 2500 and CS 2501	5 JRNL 1101 and JRNL 1102	5		
JRNL 1150	4 JRNL 3550	4		
ENGW 1111	4			
<hr/>				
	19	18	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
JRNL 2301	4 CS 1210	1 ECON 2350	4 Co-op	
JRNL 2201	4 DS 3000	4 Elective	4	
JRNL elective 1	4 DS 4200	4		
Computing and social issues	4 JRNL 3610	4		
	JRNL 3700 or 5500	4		
	16	17	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4300	4 Elective	4 Co-op	
	DS 4400	4 Elective	4	
	JRNL 4650	4		
	JRNL elective 2	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CY 4170	4 Elective	4	
	DS 4420	4 Elective	4	
	JRNL elective 3	4		
	Khoury Elective	4		
	0	16	8	0

Total Hours: 135

### Sample Pattern, Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 1800 and CS 1802	5 CS 3200	4		
CS 2500 and CS 2501	5 JRNL 1101 and JRNL 1102	5		
JRNL 1150	4 Elective	4		
ENGW 1111	4			
	19	18	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 1210	1 Vacation	Co-op	0
MATH 1341	4 DS 3000	4		
JRNL 2201	4 JRNL 2301	4		
Computing and social issues	4 JRNL elective	4		

JRNL 3700 or 5500	4			
17	17	0	0	

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4200	4 ECON 2350	4 Co-op	
	DS 4300	4 Elective	4	
	JRNL 3550	4		
	JRNL elective	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4400	4 Elective	4 Co-op	
	Khoury elective	4 Elective	4	
	JRNL 4650	4		
	JRNL elective	4		
	0	16	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	CY 4170	4
	DS 4420	4
	JRNL 3610	4
	Elective	4
	0	16

Total Hours: 135

## Journalism and Interaction Design, BS

The School of Journalism and the Department of Art and Design offer an interdisciplinary combined major in journalism and interaction design. Broadly speaking, students in the combined major in journalism and interaction design at Northeastern integrate the study of journalism with the study of art and design.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), Difference and Diversity (DD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

**Introduction to College**

Code	Title	Hours
JRNL 1000	Journalism at Northeastern	1
or ARTF 1000	Art and Design at Northeastern	

**Journalism Major Requirements**

Code	Title	Hours
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**Journalism Introductory Course**

JRNL 1150	Understanding Today's News	4
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**Journalism Foundations**

Must receive a C or better in the following:

JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

**Law and Ethics**

JRNL 3550 or JRNL 4650	The First Amendment and the Media Ethics and Issues in Journalism	4
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**Journalism Electives**

Take three JRNL courses		12
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**Art and Design Core**

Code	Title	Hours
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
<b>Art and Design History</b>		
Complete two of the following:		8
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 2210	Modern Art and Design History	
ARTH 2215	History of Graphic Design	

**Design Requirements**

Code	Title	Hours
<b>Design Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2260	Programming Basics	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4

**Degree Project**

Complete one of the following:		8
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ARTG 4550	Design Degree Project 1
ARTG 4700	Interaction Team Degree Project 1

**Design Elective**

Code	Title	Hours
Complete one of the following:		4
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124	Form and Structure (with optional ARTF 1125)	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 3450	Graphic Design 2	
ARTG 3460	Identity and Brand Design	
ARTG 4552		
ARTG 4553		
ARTG 4554	Typography 3	

**Integrative Requirements**

Code	Title	Hours
JRNL 5311	Design for Storytelling	4
Complete one of the following:		4
ARTG 4551	Design Degree Project 2	
or ARTG 4701	Interaction Team Degree Project 2	

**Program Requirement**

131 total semester hours required

**Plan of Study**

**Sample Five Years, Three Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000 or ARTF 1000	4	JRNL 1101 and JRNL 1102	5	Elective	4	Vacation	
JRNL 1150	4	ARTF 2223 (with optional ARTF 2224)	4	Elective	4		
ENGW 1111	4	ARTG 2250 (with optional ARTG 2251)	4				
ARTG 1250	4	Elective	4				
ARTF 1122 (with optional ARTF 1123)	4						
		17	17		8		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2201	4	Co-op 1		Co-op 1		Vacation	

EEAM 2000	1			
Art + design history elective 1	4			
ARTG 2260	4			
Elective	4			
	17	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
JRNL 2301	4 Co-op 2	Co-op 2	Elective	4
Journalism elective 1	4		ENGW 3302	4
ARTG 2400 (with optional ARTG 2401)	4			
ARTG 3350	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
JRNL 3610	4 Co-op 3	Co-op 3	Vacation	0
Journalism elective 2	4			
Art + design history elective 2	4			
ARTG 3700	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
JRNL 5311	4 Journalism elective 3	4
JRNL 3550 or 4650	4 ARTG 4551 or 4701	4
ARTG 3451	4 Art + design elective	4
ARTG 4550 or 4700	4 Elective	4
	16	16

Total Hours: 131

**Sample Five Years, Three Co-ops****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
JRNL 1000 or ARTF 1000	1 JRNL 1101 and JRNL 1102	5 Vacation	Vacation	
JRNL 1150	4 ARTF 2223 (with optional ARTF 2224)	4		
ENGW 1111	4 ARTG 2250 (with optional ARTG 2251)	4		
ARTG 1250	4 Elective	4		

ARTF 1122 (with optional ARTF 1123)	4			
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
JRNL 2201	4 JRNL 2301	4 Vacation	Vacation	
EEAM 2000	1 Journalism elective 1	4		
Art + design history elective 1	4 ARTG 2400 (with optional ARTG 2401)	4		
ARTG 2260	4 ARTG 3350	4		
Elective	4			
	17	16	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours
JRNL 3610	4 Co-op 1	Co-op 1	
Journalism elective 2	4		
Art + design elective	4		
ARTG 3700	4		
	16	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
JRNL 3550 or 4650	4 Co-op 2	Co-op 2	
Art + design history elective 2	4		
Elective	4		
ENGW 3302	4		
	16	0	0

**Year 5**

Fall	Hours Spring	Hours
JRNL 5311	4 Journalism elective 3	4
ARTG 3451	4 ARTG 4551 or 4701	4
ARTG 4550 or 4700	4 Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 131

**Journalism Practice, Minor**

With the explosion of websites, podcasts, and social media, more and more people find themselves using the skills of a journalist in the dissemination of information in both their private and professional lives. This minor is intended for those students who wish to bring more professionalism and sophistication to the things they post online or who hope to offer a skill set that will make them more versatile and employable in their chosen field. It will also serve those who may be

considering a career in journalism but find themselves too late in their college careers to switch majors.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* Any student wishing to satisfy a minor in both journalism studies and journalism practice must take eight unique courses. No double counting. Journalism majors are not eligible for a minor in journalism practice.

### Required Courses

Code	Title	Hours
<b>Required Courses</b>		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
<b>Restricted Elective</b>		
Complete one course from the following:		4
JRNL 3610	Digital Storytelling and Social Media	
JRNL 3625	Public Relations Practice	
JRNL 3630	Magazine Writing	
JRNL 3680	Advanced Reporting	
JRNL 5310	Photojournalism	
JRNL 5311	Design for Storytelling	
JRNL 5314	Video News Reporting and Producing	
JRNL 5360	Global Reporting	
<b>Elective</b>		
Complete one additional JRNL course.		4

### GPA Requirement

2.000 GPA required in the minor

### Journalism Studies, Minor

With an ever-growing array of information options available, and with the news media making news in the early days of the new administration in Washington, interest in the workings of journalism has never been higher. This minor is intended for those students who wish for a sophisticated media literacy, an understanding of the field that goes deeper than what can be gained in our popular Understanding Today's News course.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* Any student wishing to satisfy a minor in both journalism studies and journalism practice must take eight unique courses. No double counting. Journalism majors are not eligible for a minor in journalism studies.

### Required Courses

Code	Title	Hours
<b>Foundation</b>		
JRNL 1150	Understanding Today's News	4

JRNL 2350	The History of Journalism: How the News Became the News	4
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<b>Law</b>		
JRNL 3550	The First Amendment and the Media	4
<b>Elective</b>		
Take one JRNL course.		4

### GPA Requirement

2.000 GPA required in the minor

### Photojournalism, Minor

As our society continues to move toward a world of technology, the power of photos become that much more important. This minor will engage students on how to visually tell a compelling story. It will give students the skill sets needed to succeed in that endeavor.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* A student pursuing the minor in Photojournalism must complete a minimum of three (3) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Required Courses

Code	Title	Hours
<b>Photography Foundation</b>		
Complete one of the following:		4
ARTE 2500	Art and Design Abroad: Studio	
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2350	Photo Basics for Nonmajors	
<b>Photography Requirement</b>		
ARTD 3460	Photography: Concept + Process	4
<b>Integrative</b>		
JRNL 5310	Photojournalism	4
<b>Electives</b>		
Complete one of the following:		4
JRNL 2301	Visual Storytelling in Journalism	
JRNL 5314	Video News Reporting and Producing	

### GPA Requirement

2.000 GPA required in the minor

### Public Relations, Minor

Effective communication to the key publics is essential in today's complex business and media environment. The public relations minor is for students who want to acquire critical communication skills, including writing, audio, video, and the effective use of data and design. Successful students will also be equipped with theoretical and practical knowledge needed to be a good communication practitioner. This minor may complement relevant majors such as business administration, communication studies, sociology, and psychology, though any student with an interest in public relations is welcome.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* A student pursuing the minor in public relations must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

## Required Courses

Code	Title	Hours
<b>Required Core</b>		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 3425	Public Relations Principles	4
<b>Restricted Elective</b>		
Complete one of the following:		4
JRNL 5400	Media and Advocacy in Theory and Practice	
JRNL 5480	Research for Media Strategy	
<b>Elective</b>		
Complete one additional JRNL course.		4

## GPA Requirement

2.000 GPA required in the minor

## Sports, Media, and Communication, Minor

The sports, media, and communication minor appeals to students preparing for careers as sports journalists or advertising/public relations professionals specializing in a sports-related area. The minor includes courses examining the prominent role of sports in society with a special emphasis on gender, race, and public policy. When combined with Northeastern's signature co-op program, the result is an innovative minor that blends theory with practice and prepares students for a broad range of professional opportunities.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Foundational Course

Code	Title	Hours
COMM 2110	Sports, Media, and Communication	4

## Electives

Code	Title	Hours
<b>Sports Elective</b>		
Complete one of the following:		4
COMM 2700	Sports Promotion in the 21st Century	
JRNL 3455	Sports Writing	
<b>Intermediate Elective</b>		
Complete one of the following:		4

ANTH 2365	Sport, Culture, and Society
COMM 1450	Sound Production for Digital Media
COMM 2550	Television Field Production
COMM 2350	Producing for the Entertainment Industry
COMM 2655	Television Studio Production
COMM 2800	Sport and Spectacle
COMM 3451	Advertising Practices
ECON 3481	Economics of Sports

## Advanced Elective

Complete one of the following:		4
COMM 4631	Crisis Communication and Image Management	
COMM 4994	Internship in Communication	
JRNL 3945	Internship	
JRNL 4650	Ethics and Issues in Journalism	
JRNL 5310	Photojournalism	
JRNL 5314	Video News Reporting and Producing	

## GPA Requirement

2.000 GPA required in the minor

## Music

Website (<http://camd.northeastern.edu/music/>)

### Daniel Strong Godfrey, PhD

Professor and Chair

617.373.2440

617.373.4129 (fax)

The Department of Music offers its music majors, music minors, and combined majors a cross-disciplinary approach to the study and practice of music, underscored by real-world experiential learning and cutting-edge technology. The music faculty are dedicated to three continuously interacting and integrated dimensions: the creation of music; its production and promotion; and the study of its history, meaning, and impact on cultures around the globe—past, present, and future.

There are three concentrations in music: the Bachelor of Arts in Music, the Bachelor of Science in Music with Concentration in Music Technology, and the Bachelor of Science in Music with Concentration in Music Industry. Students in all three concentrations begin with a core of shared offerings, including a uniquely probing, cross-cultural, and interdisciplinary introduction to music, Music in Everyday Life (MUSC 1001), together with shared requirements in introductory theory and musicianship. With a common perspective offered by these courses, students then branch out to focus on their individual disciplines but also to interact and bring unique aspects of their disciplines together in a collaborative learning environment with other students.

Our signature program is the Bachelor of Arts in Music, designed to offer a variety of flexible advising paths that allow a focus on history, theory, ethnomusicology, performance, composition, humanics, or other directions tailored to the students' individual interests.

The Bachelor of Science in Music with Concentration in Music Technology focuses on the creative application of digital sound technologies to a broad range of artistic, social, and industrial purposes, including experimental composition, film, video, theatre, game design,

mobile applications, sound design for urban environments, and beyond, with a new emphasis on digital signal processing, computation for sound, artificial intelligence, and auditory cognitive neuroscience. A focus is maintained throughout on imaginative exploration, collaboration across disciplines, and real-world experience.

The Bachelor of Science in Music with Concentration in Music Industry, the first such undergraduate program offered in Boston, is designed for students with an interest in fields such as artist management; the music products industry; the recording industry; arts administration; contracting and legal issues; financial and economic aspects of the music business; and broadcast, mobile, and online media technologies. All the foregoing include an emphasis on the development of critical frameworks for entrepreneurial leadership in the cultural industries.

While most music courses are designed for music majors, music minors and combined majors in music, and a variety of other disciplines, the Department of Music also offers elective survey courses and other study opportunities open to students across the Northeastern University campus. Also available are private lessons in a wide variety of instruments and voice, including a focus on genres ranging from traditional concert music to jazz to fusion, rock, and a variety of popular idioms.

An extensive concert series presents not only guest performers and ensembles from around the world but also performances by the Northeastern University Symphony Orchestra; the Northeastern University Wind Ensemble and Concert Band; the Northeastern University Choral Society; and the Jazz Ensemble, Jazz Choir, Contemporary Music Ensemble, Blues/Rock Fusion Ensemble, Rock Ensemble, World Music Ensemble, and Chamber Music Ensembles, along with individual student recitals and performances by an array of student-run music groups.

In addition to co-op, Dialogues of Civilization, and a range of other opportunities for experiential learning and study throughout the United States and abroad, students may immediately begin to participate in student organizations—such as Green Line Records, NU Sound, Live Music Association, Songwriting Club, and a variety of other groups—that allow students actively to pursue their passions and aspirations.

In addition to the three primary majors outlined above, there are six combined majors offered, integrating music disciplines with others both in and beyond the College of Arts, Media and Design. While students are encouraged to consider double majoring in the Bachelor of Arts in Music and other disciplines outside music, the BA cannot be combined with the concentration in music industry or the concentration in music technology.

Students may double count only one course between a concentration and a minor. Students may double count only one course between two different music minors. Should a student place out of a course in a minor, it must be replaced with another course relevant to the minor.

### Academic Progression Standards

Students must maintain at least a B– average in all major courses and complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

### Programs

#### Bachelor of Arts (BA)

- Music (p. 206)

#### Bachelor of Science (BS)

- Music with Concentration in Music Technology (p. 212)
- Music with Concentration in Music Industry (p. 209)
- Computer Science and Music with Concentration in Music Technology (p. 215)
- Electrical Engineering and Music with Concentration in Music Technology, BSEE (p. 217)
- Game Design and Music with Concentration in Music Technology (p. 108)
- Music and Communication Studies with Concentration in Music Industry (p. 176)
- Physics and Music with Concentration in Music Technology (p. 224)
- Psychology and Music (p. 226)

#### Minor

- Music (p. 229)
- Ethnomusicology (p. 228)
- Music Composition (p. 230)
- Music Industry (p. 230)
- Music Performance (p. 230)
- Music Recording (p. 231)
- Music Technology (p. 232)
- Musical Theatre (p. 232) (offered by the Department of Theatre)
- Performing Arts Administration (p. 233) (offered by the Department of Theatre)
- Songwriting (p. 233)

### Music, BA

The Bachelor of Arts in Music at Northeastern engages students in the study of how music works and the many contexts in which it is created and received.

Students encounter a wide range of musical repertoires, theoretical approaches, and research strategies. While many students opt to major in music alone, many others enroll as part of a double major. This is especially true of young scholars who are aiming for careers in engineering, sciences, business, and fields in the humanities and social sciences who still want to pursue their interests in music. Students in the BA concentration take a variety of classes in history, theory, and ethnomusicology, and they may be active performers, participating in our many ensembles and taking private lessons. Students also participate in a wide array of co-ops and are encouraged to explore opportunities that conform to their interests.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

- NUpath requirements Creative Expression/Innovation (EI) and Interpreting Culture (IC) are met through the major course requirements.
- NUpath requirements Formal and Quantitative Reasoning (FQ), Societies and Institutions (SI), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.
- NUpath requirements Natural and Designed World (ND) must be met through general electives.

## Introduction to College

Code	Title	Hours
MUSC 1000	Music at Northeastern	1

## Music Theory and Musicianship

Code	Title	Hours
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### Music Theory Placement

All students must take a music theory placement exam. Students who do not place into MUSC 1201 must first take the following course:

MUSC 1119	Fundamentals of Western Music Theory
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### Required Music Theory

A grade of C or higher is required in each course:

MUSC 1201	Music Theory 1	4
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Choose two courses from the following list: 8

MUSC 1119	Fundamentals of Western Music Theory
MUSC 1202	Music Theory 2
MUSC 2111	Algebra and Geometry of Music
MUSC 2208	Jazz Improvisation
MUSC 2350	Acoustics and Psychoacoustics of Music
MUSC 3541	Music Analysis Seminar
MUSI 1204	Analyzing Popular Genres

## Music in Context

Choose one from each category below. From the categories "Western Art Music," "Global Music / Ethnomusicology," and "Contemporary / Popular Music," at least two must be at the 2000-level or higher. Courses may not double-count across the five areas. Many, but not all, Music in Context courses at the 2000-level or higher fulfill the Writing Intensive in the discipline requirement. Please check Writing Intensive status of courses as needed.

Code	Title	Hours
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### Introductory Class

MUSC 1001	Music in Everyday Life	4
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### Western Art Music

Complete one of the following: 4

MUSC 1100	Topics in Western Music
MUSC 1116	Beethoven

MUSC 1144	Music and Technology: Stone Age to Digital Age
MUSC 2107	Introduction to Opera
MUSC 2312	Historical Traditions: Classical
MUSC 2320	40,000 Years of Music Technology
MUSC 2340	Divas, DJs, and Double Standards
MUSC 2380	The World of Choral Music
MUSC 3352	Sounding Human
<i>Global Music / Ethnomusicology</i>	
Complete one of the following: 4	
MUSC 1131	Music of Latin America and the Caribbean
MUSC 2101	Black Popular Music
MUSC 2130	Music of Asia
MUSC 2313	Topics in World Music
MUSC 2330	Musical Communities of Boston
MUSC 3353	Music and the Racial Imagination
MUSI 3351	Music and Social Justice
MUSI 3360	Global Music Industries in Context
MUSI 3401	Hip Hop in the Music Industry
MUSI 5900	Ethnography in Creative Industries
<i>Contemporary / Popular Music</i>	
Complete one of the following: 4	
MUSC 1112	Jazz
MUSC 1113	Film Music
MUSC 2101	Black Popular Music
MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2310	Popular Music Since 1945
MUSC 2311	Topics in American Music
MUSC 2317	Punk Rock
MUSC 2320	40,000 Years of Music Technology
MUSC 2340	Divas, DJs, and Double Standards
MUSC 2351	Music, Sound, and the Screen
MUSC 2380	The World of Choral Music
MUSC 3352	Sounding Human
MUSC 3353	Music and the Racial Imagination
MUSC 3560	Topics in Music since 1900
MUSI 3360	Global Music Industries in Context
MUSI 3401	Hip Hop in the Music Industry
<b>Creative</b>	
Complete one of the following 4-semester-hour courses or choose four 1-semester-hour ensembles and/or lessons from the list below: 4	
MUST 1220	Introduction to Music Technology
MUST 1301	Introduction to Composition
MUST 2320	Sound Design
MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2208	Jazz Improvisation
MUSC 2209	Conducting
MUSC 2210	Introduction to Songwriting
<i>Ensembles and Lessons</i>	
MUSC 1901	Music Lessons 1



MUSC 1902	Music Lessons 2
MUSC 1904	Chorus
MUSC 1905	Concert Band
MUSC 1906	Orchestra
MUSC 1907	Wind Ensemble
MUSC 1911	Jazz Ensemble
MUSC 1912	Rock Ensemble
MUSC 1913	Blues/Rock Ensemble
MUSC 1914	Create Your Own Music
MUSC 1915	Chamber Ensemble
MUSC 1917	Jazz Choir and Combo
MUSC 1918	World Music Ensemble
MUSC 1919	Fusion Ensemble
MUSC 1920	Pep Band

**Capstone**

Code	Title	Hours
Complete one of the following:		4
MUSC 4651	Music Research Capstone	
MUSI 4601	Seminar in Music Industry	
MUSI 5900	Ethnography in Creative Industries	
MUST 4611	Music Technology Capstone/Senior Recital	

**Music Electives**

Code	Title	Hours
Complete three additional courses in music (MUSC, MUSI, or MUST). At least two must be at the 2000-level or higher.		12

**Major Credit Requirement**

Complete 49 semester hours in the major.

**Major GPA Requirement**

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, No Co-op**

Year 1			
Fall	Hours	Spring	Hours
MUSC 1001		4 Music theory course	4
MUSC 1201		4 Music in context course	4
ENGW 1111		4 Music elective	4
MUSC 1000		1 Elective	4
Elective		4	
		17	16

**Year 2**

Fall	Hours	Spring	Hours
Music in context course		4 Music in context course	4
Music elective		4 Music elective	4
Elective		4 Elective	4
Elective		4 Elective	4
		16	16

**Year 3**

Fall	Hours	Spring	Hours
Music in context course		4 Elective	4
Music theory course		4 Elective	4
Elective		4 Elective	4
Elective		4 Elective	4
		16	16

**Year 4**

Fall	Hours	Spring	Hours
Elective		4 Capstone course	4
Elective		4 Elective	4
Elective		4 Elective	4
Elective		4 Elective	4
		16	16

Total Hours: 129

**Sample Four Years, Two Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
MUSC 1001	4	Music in context elective (1)		4	Elective	4	Vacation	
ENGW 1111	4	MUSC 1201	4	Elective	4			
MUSC 1119	4	Language (2)	4					
MUSC 1000	1	Elective	4					
Language 1	4							
		17	16	8	0			

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Music in context course (2)	4	Co-op 1		Co-op 1		Elective	4
Music elective (1)	4			Elective (on-line)	4	Elective	4
Music theory course	4					or Dialogue	
Language Elective (3)	4						
EEAM 2000	1						
		17	0	4	8		

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Music in context course (3)	4 Co-op 2	Co-op 2	Elective	4
Music elective (2)	4	Elective (on-line)	4 Elective	4
Elective	4		or Dialogue	
ENGW 3314	4			
	16	0	4	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Music in context course (4)	4 Music Capstone	4 Vacation	Vacation	
Music elective (3)	4 Elective	4		
Music theory course	4 Elective	4		
Elective	4 Elective	4		
	16	16	0	0

**Year 5**

Fall	Hours Spring	Hours
	0	0

Total Hours: 130

**Music with Concentration in Music Industry, BS**

The Bachelor of Science in Music with Concentration in Music Industry, the first such undergraduate program offered in Boston, is designed for students with an interest in all aspects of the music industries, including songwriting, recording, production, technology, products, label operations, promotion, marketing, management, finance, economics, legal issues, licensing, and intellectual property. Our program encourages learners to become entrepreneurial thought leaders and ethical change agents in the music industries.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and Analyzing and Using Data (AD) are met through the major course requirements.

NUpath requirements Difference and Diversity (DD) and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

**Music Industry Requirements**

Code	Title	Hours
<b>Music Core</b>		
MUSC 1000	Music at Northeastern	1
MUSC 1001	Music in Everyday Life	4
<b>Music Theory Placement</b>		
All students must take a theory placement exam. Students who do not place into MUSC 1201 must first take the following:		
MUSC 1119	Fundamentals of Western Music Theory	4
<b>Music Theory Requirement</b>		
MUSC 1201	Music Theory 1	4
MUSI 1204	Analyzing Popular Genres	4
<b>Music in Context</b>		
Choose one from each of these categories: Western Art Music, Global Music / Ethnomusicology, Contemporary / Popular Music, and Creative. Of the courses from Western Tradition, Ethnomusicology, and Contemporary, at least two must be at the 2000-level or higher. Courses may not double count across these areas. Many, but not all, Music in Context courses at the 2000-level or higher fulfill the Writing Intensive in the Discipline requirement. Please check Writing Intensive status of courses as needed. Students may use MUSC 2210, MUSC 2211, MUSI 2331, MUSI 3341, or MUST 1220 to fulfill both Creating and Producing and Music In Context Creative; but will also need to take one additional Music Industry elective.		
<i>Western Art Music (complete one):</i>		4
MUSC 1100	Topics in Western Music	
MUSC 1116	Beethoven	
MUSC 1144	Music and Technology: Stone Age to Digital Age	
MUSC 2107	Introduction to Opera	
MUSC 2312	Historical Traditions: Classical	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 3352	Sounding Human	
MUSC 2380	The World of Choral Music	
<i>Global Music / Ethnomusicology (complete one):</i>		4
MUSC 1131	Music of Latin America and the Caribbean	
MUSC 2101	Black Popular Music	
MUSC 2130	Music of Asia	
MUSC 2313	Topics in World Music	
MUSC 2330	Musical Communities of Boston	
MUSC 3353	Music and the Racial Imagination	
MUSI 3351	Music and Social Justice	
MUSI 3401	Hip Hop in the Music Industry	

MUSI 3360	Global Music Industries in Context	
MUSI 5900	Ethnography in Creative Industries	
<i>Contemporary / Popular Music (complete one):</i>		4
MUSC 1112	Jazz	
MUSC 1113	Film Music	
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2311	Topics in American Music	
MUSC 2317	Punk Rock	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2380	The World of Choral Music	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3353	Music and the Racial Imagination	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 3360	Global Music Industries in Context	
<i>Creative (complete one):</i>		4
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2208	Jazz Improvisation	
MUSC 2209	Conducting	
MUSC 2210	Introduction to Songwriting	
MUST 1220	Introduction to Music Technology	
MUST 1301	Introduction to Composition	
MUST 2320	Sound Design	
<i>Music Ensemble: May substitute four 1-semester-hour applied courses (ensembles and/or lessons) for one 4-semester-hour creative course.</i>		
MUSC 1901	Music Lessons 1	
MUSC 1902	Music Lessons 2	
MUSC 1904	Chorus	
MUSC 1905	Concert Band	
MUSC 1906	Orchestra	
MUSC 1907	Wind Ensemble	
MUSC 1911	Jazz Ensemble	
MUSC 1912	Rock Ensemble	
MUSC 1913	Blues/Rock Ensemble	
MUSC 1914	Create Your Own Music	
MUSC 1915	Chamber Ensemble	
MUSC 1917	Jazz Choir and Combo	
MUSC 1918	World Music Ensemble	
MUSC 1919	Fusion Ensemble	
MUSC 1920	Pep Band	

**Music Industry**

MUSI 1230	Introduction to Music Industry	4
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**Music Industry Electives**

Complete seven music industry electives, taking a minimum of one course in each of the following four categories and at least three courses from a single category. 28

*Creating and Producing*

Note: MUSI 1230 is not a prerequisite for the following courses:

MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2210	Introduction to Songwriting	
MUSC 2211	Advanced Songwriting	
MUSI 2232	Music Recording 1	
MUSI 2331	Music Recording 2	
MUSI 3341	Music Recording 3—Mixing and Mastering	
MUST 1220	Introduction to Music Technology	
<i>Legal Aspects</i>		
Note: MUSI 1230 is a prerequisite for the following courses:		
MUSI 2231	Music Licensing for Media	
MUSI 2235	Copyright in the Creative Industries	
MUSI 3333	The Record Industry	
MUSI 2341	Music Supervision 1	
<i>Music Business and Management</i>		
MUSI 2330	Performing Arts Administration	
MUSI 3332	Artist Management	
MUSI 3334	Music Products Industry	
MUSI 3338	Music Industry Marketing and Promotion	
MUSI 3340	Concert Promotion and Venue Management	
MUSI 4530	Music Entrepreneurship	
<i>Music Industry Studies</i>		
MUSC 3353	Music and the Racial Imagination	
MUSI 2234	Festivals	
MUSI 3351	Music and Social Justice	
MUSI 3360	Global Music Industries in Context	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 4601	Seminar in Music Industry	
MUSI 5900	Ethnography in Creative Industries	

**Business Course Requirements**

Code	Title	Hours
<b>Economics</b>		
ECON 1116	Principles of Microeconomics	4
<b>Accounting</b>		
ACCT 1209	Financial Accounting and Reporting	4
<b>Business Elective</b>		
Complete one business course in the following subject areas:		4
ACCT, BUSN, ENTR, FINA, HRMG, INTB, MGMT, ORGB, MGSC, MISM, MKTG, SCHM, or STRT		

**Capstone for Music Industry**

Code	Title	Hours
Complete one of the following: 4		
MUSI 4530	Music Entrepreneurship	
MUSI 4601	Seminar in Music Industry	
MUSI 5900	Ethnography in Creative Industries	

**Music Industry Major Credit and Grade Requirement**

Complete 77 semester hours in the major.

Students must maintain at least a 2.667 GPA (B– average) in the requirements of the major and also complete all required music courses

with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MUSC 1000	1 ACCT 1209	4 Music in context course	4 Vacation	
MUSC 1001	4 ECON 1116	4 Elective	4	
MUSC 1119	4 MUSC 1201	4		
MUSI 1230	4 Music industry elective	4		
ENGW 1111	4			
	17	16	8	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MUSI 1204	4 Co-op	Co-op	Elective	4
Music industry elective	4 Elective (online)	4	Elective	4
Music industry elective	4		or Dialogue of Civilizations	
Elective	4			
EEAM 2000	1			
	17	4	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Business elective	4 Co-op	Co-op	Elective	4
Music industry elective	4 Elective (online)	4	Elective	4
Music in context course	4		or Dialogue of Civilizations	
Music industry elective	4			
	16	4	0	8

Year 4		
Fall	Hours Spring	Hours
Music industry elective	4 Music industry elective	4
Music in context course	4 Music industry capstone	4
Elective	4 Elective	4

ENGW 3314	4 Music in context course	4
	16	16

Total Hours: 130

#### Sample Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MUSC 1001	4 MUSC 1201	4 Elective	4 Vacation	0
MUSC 1119	4 ACCT 1209	4 Elective	4	
MUSI 1230	4 ECON 1116	4		
ENGW 1111	4 Music industry elective	4		
MUSC 1000	1			
	17	16	8	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MUSI 1204	4 Music industry elective	4 Vacation	0 Co-op 1	0
Music industry elective	4 Business elective	4		
Music in context course	4 Music in context course	4		
Elective	4 Elective	4		
	EEAM 2000	1		
	16	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op 1	0 Music in context course	4 Elective	4 Co-op 2	0
	Music industry elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op 2	0 Music industry elective	4 Vacation	Co-op 3	0
	Music in context course	4		
	Music industry elective	4		
	Elective	4		
	0	16	0	0

Year 5		
Fall	Hours Spring	Hours
Co-op 3	0 Music industry capstone	4
	Music industry elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 130

### Sample Five Years, Three Co-ops in Spring/Summer 1

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
MUSC 1001	4 MUSC 1201	4 Elective	4 Vacation	0	
MUSC 1119	4 ACCT 1209	4 Elective	4		
MUSI 1230	4 ECON 1116	4			
ENGW 1111	4 Music industry elective	4			
MUSC 1000	1				
	17	16	8	0	

Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
MUSI 1204	4 Co-op 1	0 Co-op 1	0 Elective	4	
EEAM 2000	1		Elective	4	
Music industry elective	4				
Music in context course	4				
Elective	4				
	17	0	0	8	

Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Music industry elective	4 Co-op 2	0 Co-op 2	0 Vacation		
Business elective	4				
Music in context course	4				
Elective	4				
	16	0	0	0	

Year 4					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Music industry elective	4 Co-op 3	0 Co-op 3	0 Vacation	0	
Music in context course	4				

Music industry elective	4			
Elective	4			
	16	0	0	0

Year 5			
Fall	Hours Spring	Hours	
Music in context course	4 Music industry capstone	4	
Music industry elective	4 Music industry elective	4	
Elective	4 Elective	4	
Elective	4 Elective	4	
	16	16	

Total Hours: 130

## Music with Concentration in Music Technology, BS

The Bachelor of Science in Music with Concentration in Music Technology focuses on the creative application of digital and analog audio technologies to a broad range of artistic, social, and industrial purposes, including experimental composition, film, video, theatre, game design, mobile applications, sound design for urban environments, musical instrument design and beyond. An emphasis is maintained throughout on imaginative exploration, collaboration across disciplines, and real-world experience.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

- NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Analyzing and Using Data (AD) are met through the major course requirements.
- NUpath requirements Difference and Diversity (DD) and Formal and Quantitative Reasoning (FQ) may be met through electives in the major.
- NUpath requirements Natural and Designed World (ND), Societies and Institutions (SI), and Ethical Reasoning (ER) must be met through general electives.

### General Music Requirements

Code	Title	Hours
<b>Introduction to College</b>		
MUSC 1000	Music at Northeastern	1
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4

MUSC 1202	Music Theory 2	4
Complete two of the following:		8
MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition	
MUSC 3541	Music Analysis Seminar	

### Music in Context

A grade of C or higher is required. Choose one from each of these categories: "Western Art Music," "Global Music / Ethnomusicology," "Contemporary / Popular Music," and "Creative." Of the courses from "Western Art Music," "Global Music / Ethnomusicology," "Contemporary / Popular Music," at least two must be at the 2000-level or higher. Courses may not double count across these areas. Many, but not all, Music in Context courses at the 2000-level or higher fulfill the Writing Intensive in the discipline requirement. Please check Writing Intensive status of courses as needed.

#### Introductory Class

MUSC 1001	Music in Everyday Life	4
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#### Western Art Music

Complete one of the following: 4

MUSC 1100	Topics in Western Music	
MUSC 1116	Beethoven	
MUSC 1144	Music and Technology: Stone Age to Digital Age	
MUSC 2107	Introduction to Opera	
MUSC 2312	Historical Traditions: Classical	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2380	The World of Choral Music	
MUSC 3352	Sounding Human	

#### Global Music / Ethnomusicology

Complete one of the following: 4

MUSC 1131	Music of Latin America and the Caribbean	
MUSC 2101	Black Popular Music	
MUSC 2130	Music of Asia	
MUSC 2313	Topics in World Music	
MUSC 2330	Musical Communities of Boston	
MUSC 3353	Music and the Racial Imagination	
MUSI 3351	Music and Social Justice	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 3360	Global Music Industries in Context	
MUSI 5900	Ethnography in Creative Industries	

#### Contemporary / Popular Music

Complete one of the following: 4

MUSC 1112	Jazz	
MUSC 1113	Film Music	
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2311	Topics in American Music	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	

MUSC 2380	The World of Choral Music	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3353	Music and the Racial Imagination	
MUSC 3560	Topics in Music since 1900	
MUSI 3360	Global Music Industries in Context	
MUSI 3401	Hip Hop in the Music Industry	

#### Music Industry

Complete one of the following, as long as prerequisites have been met: 4

MUSI 1230	Introduction to Music Industry	
MUSI 2235	Copyright in the Creative Industries	
MUSI 2331	Music Recording 2	

#### Music Technology Requirements

MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2102	Composing with Digital Technologies	4
MUST 2431	Computer Music Fundamentals	4

#### Music Technology Electives

Complete three of the following: 12

MUSC 4510	Music and the Brain Research	
MUST 2320	Sound Design	
MUST 3540	Special Topics in Music Technology	
MUST 3601	Digital Audio Signal Processing	
MUST 3602	Electronics for Music	
MUST 3603	Embedded Audio Programming	
MUST 4610	Composition for Electronic Instruments	

#### Capstone

MUST 4611	Music Technology Capstone/Senior Recital	4
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### Supporting Courses

Code	Title	Hours
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#### College Elective

Complete one of the following: 4

ARTD 2100	Narrative Basics	
ARTF 2220	Movement and Time	
ARTF 2223	Experience and Interaction	
ARTD 3480	Video: Sound and Image	
GAME 1110	Games and Society	
GAME 2500	Foundations of Game Design	
MSCR 1220	Media, Culture, and Society	
MSCR 1100	Film 101	
MSCR 3435	Media Industries	
MSCR 3600	Film Theory	
THTR 1131	Technical Theatre 1	
THTR 1270	Introduction to Theatrical Design	
THTR 2370	Lighting Design	

### Music Technology Major Credit and Grade Requirement

Complete 72 semester hours in the major.

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards

will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

### Program Requirement

129 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 1001	4	MUSC 2350	4	CAMD Elective	4	Vacation	
MUST 1220	4	MUSC 1201	4	Elective	4		
MUSC 1119	4	Music in Context course: western	4				
ENGW 1111	4	Elective	4				
MUSC 1000	1						
		17		16		8	
0							
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUST 2431	4	Co-op	4	Co-op	4	2 Electives	8
MUSC 1202	4	Elective (online)	4	Elective (online)	4	or Dialogue	
Music theory/ composition elective	4						
Music in Context course: ethnomusical	4						
EEAM 2000	1						
		17		4		4	
8							
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Music Industry Elective	4	Co-op	4	Co-op	4	2 Electives	8
Music technology elective	4					or Dialogue	
Music industry elective	4						
MUST 2101	4						
		16		0		0	
8							
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Music technology elective	4	MUST 4611	4				
Music technology elective	4	Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		16		16		0	
8							

ENGW 3314	4	Elective	4
		16	
		16	

Total Hours: 130

#### Sample Four Years, No Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 1000	1	MUSC 1202	4	Vacation	4	Vacation	0
MUSC 1201	4	MUSC 2350	4				
MUST 1220	4	Music in context: Western	4				
MUSC 1001	4	Elective	4				
ENGW 1111	4						
		17		16		0	
0							
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUST 2431	4	Elective	4	Vacation	4	Vacation	0
MUSC 2350	4	Music theory/ composition elective	4				
Elective	4	Elective	4				
MUST 2101	4	Music in context: contemporary	4				
		16		16		0	
0							
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Music technology elective	4	CAMD elective	4	Vacation	4	Vacation	0
Music in context: ethnomusical	4	Elective	4				
Music industry elective	4	Elective	4				
Music technology elective	4	Elective	4				
		16		16		0	
0							
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Music technology restricted elective	4	MUST 4611	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		16		16		0	
0							

Total Hours: 129

## Computer Science and Music with Concentration in Music Technology, BS

The computer science and music combined major with concentration in music technology focuses on the creative application of sound and music technologies to a broad range of artistic, social, and industrial purposes. An emphasis is maintained throughout on imaginative exploration, collaboration across disciplines, and real-world experience. It is designed to give students a firm foundation in music and computing for digital audio technologies. This program is recommended for students with a strong background in music prior to entering Northeastern.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction (Integrative)	4
<b>Khoury Elective</b>		
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 8 credits of CS, CY, DS or IS classes that are not already required. Choose courses within the following ranges:		8
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Music Courses

Code	Title	Hours
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
Complete one of the following:		4
MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition (Music Perception and Cognition)	
MUSC 3541	Music Analysis Seminar	
<b>Music in Context</b>		
MUSC 1001	Music in Everyday Life	4
<b>Contemporary / Popular Music</b>		
Complete one of the following:		4
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2311	Topics in American Music	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 2380	The World of Choral Music	
MUSC 3353	Music and the Racial Imagination	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 3360	Global Music Industries in Context	
<b>Music Technology</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2102	Composing with Digital Technologies	4
MUST 2431	Computer Music Fundamentals	4
<b>Music Industry</b>		
Complete one of the following:		4
MUSI 1230	Introduction to Music Industry	
MUSI 2331	Music Recording 2	
<b>Music Technology Electives</b>		
Complete two of the following:		8
MUSC 4510	Music and the Brain Research	
MUST 3540	Special Topics in Music Technology	
MUST 3601	Digital Audio Signal Processing	
MUST 3602	Electronics for Music	
MUST 3603	Embedded Audio Programming	
MUST 4610	Composition for Electronic Instruments	
<b>Music Technology Capstone</b>		
MUST 4611	Music Technology Capstone/Senior Recital	4



### Foundations of Psychology

Code	Title	Hours
PSYC 1101	Foundations of Psychology	4

### Computing and Social Issues

Code	Title	Hours
Complete one of the following:		
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Pattern, Five Years, Three Co-ops in Spring/Summer 1

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5
				Vacation	0
CS 1800 and CS 1802	5	MUST 1220 (*)	4	CS 3200	4
CS 2500 and CS 2501	5	MUSC 1202 (*)	4		
MUSC 1201 (*)	4	MUSC 2350	4		
ENGW 1111	4				
		19		17	
				9	
				0	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1210	1	Co-op		Co-op	
MUSC 1001	4			ENGW 3302	4
				Elective	4
CS 3000	4				
MUST 2431	4				
MUST 2102	4				
		17		0	
				0	
				8	
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
MUSC 3541, 2111, or 3300	4	Co-op		0 Co-op	
Contemporary music requirement*	4			0 Vacation	0
Music technology elective	4				
Khoury elective	4				
		16		0	
				0	
				0	
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
IS 4300	4	Co-op		0 Co-op	
PSYC 1101	4			0 Vacation	0
Music technology elective*	4				

Khoury elective	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
CS 4500	4 MUST 4611 (*)	4
MUSC 3541, 2111, or 3300	4 Elective	4
Computing and social issues	4 Music industry elective	4
Elective	4 Elective	4
	16	16

Total Hours: 134

\*Indicates course must be taken in the term listed.

**Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	0
CS 1800 and CS 1802	5 MUST 1220 (*)	4 CS 3200	4	
CS 2500 and CS 2501	5 MUSC 1202 (*)	4		
MUSC 1201 (*)	4 MUSC 2350	4		
ENGW 1111	4			
	19	17	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210	1 Co-op	Co-op	ENGW 3302	4
MUSC 1001	4		Elective	4
CS 3000	4			
Khoury elective	4			
MUST 2431	4			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MUSC 2111, MUSC 3541 or MUSC 3300	4 Co-op	0 Co-op	0 PSYC 1101	4
MUSC 2111, MUSC 3541 or MUSC 3300	4		Elective	4
Contemporary music requirement*	4			
Music technology elective*	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
IS 4300	4 MUST 4611 (*)	4 Elective	4
CS 4500	4 Computing and social issues	4 Elective	4
Khoury elective	4 Music industry elective	4	
MUST 2102	4 Music technology elective	4	
	16	16	8

Total Hours: 134

\*Indicates course must be taken in the term listed.

### Electrical Engineering and Music with concentration in Music Technology, BSEE

This intercollege combined major is designed for students who would like to explore their interest in music technology while earning the benefit of a Bachelor of Science degree in electrical engineering. The music industry relies heavily on electronic technology in the production (e.g., studio and recording technology), storage (e.g., musical instruments, stage technology), and distribution (e.g., audio file formats, encoding) of music. The program is designed to give students a firm foundation in digital and analog audio electronics and learn the breadth and depth of the convergence between electrical engineering and music technology.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Societies and Institutions (SI) and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

**Engineering Requirements**

Code	Title	Hours
<b>Required Courses</b>		
EECE 2140	Computing Fundamentals for Engineers	4
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Electrical Engineering Fundamentals</b>		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	5

EECE 2520	Fundamentals of Linear Systems	4
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	5

**Computer Engineering Fundamentals**

Complete one of the following. If more than one computer engineering fundamentals course is taken, it may count as a technical elective: 4-5

EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2560	Fundamentals of Engineering Algorithms	

**Electrical Engineering Capstone Courses**

EECE 4791	Electrical and Computer Engineering Capstone 1	1
EECE 4792	Electrical and Computer Engineering Capstone 2	4

**Technical Electives**

Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH will be allowed to satisfy the requirement of technical electives. An additional 4SH will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.

Though students may register for EECE 2750 more than once, only 4SH will be allowed to satisfy the requirements of technical electives. An additional 4SH will be allowed as a general elective.

Complete two of the following. If EECE 5697 is taken, students are required to complete a music elective. 8

EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2750	Enabling Engineering	
EECE 3324	Computer Architecture and Organization	
EECE 3410	Electronic Design	
EECE 4512	Healthcare Technologies: Sensors, Systems, and Analysis	
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5115 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement: 2

EECE 3468	Noise and Stochastic Processes	
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2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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**Music Requirements**

Code	Title	Hours
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**Music Theory**

Complete one of the following pairs: 8

MUSC 1119 and MUSC 1201	Fundamentals of Western Music Theory and Music Theory 1	
MUSC 1201 and MUSC 1202	Music Theory 1 and Music Theory 2	
MUSC 1202 and MUSC 3541	Music Theory 2 and Music Analysis Seminar	

**Required Context Course**

MUSC 1001	Music in Everyday Life	4
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**Music in Context**

Complete one of the following: 4

MUSC 2101	Black Popular Music	
MUSC 2107	Introduction to Opera	
MUSC 2130	Music of Asia	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2311	Topics in American Music	
MUSC 2312	Historical Traditions: Classical	
MUSC 2313	Topics in World Music	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 2380	The World of Choral Music	
MUSC 3352	Sounding Human	
MUSC 3353	Music and the Racial Imagination	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 3351	Music and Social Justice	
MUSI 3360	Global Music Industries in Context	
MUSI 5900	Ethnography in Creative Industries	

**Acoustics or Music Elective**

Complete one of the following. If EECE 5697 is taken, students are required to complete a music elective. 4

MUSC 2350	Acoustics and Psychoacoustics of Music	
MUSC 2000 to MUSC 5999		

**Music Technology**

MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4

**Music Technology Electives**

Complete two of the following. Other appropriate MUST courses will be considered by petition to fulfill this category. 8

MUSC 4510	Music and the Brain Research	
MUST 3540	Special Topics in Music Technology	
MUST 3601	Digital Audio Signal Processing	
MUST 3602	Electronics for Music	
MUST 3603	Embedded Audio Programming	
MUST 4610	Composition for Electronic Instruments	

## Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

2 semester hours from the following course count toward this requirement:

EECE 3468 Noise and Stochastic Processes

### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1501 Cornerstone of Engineering 1<sup>1</sup>

## Professional Development

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement:

GE 1501 Cornerstone of Engineering 1<sup>1</sup>

1 semester hour from the following course counts toward the professional development requirement:

GE 1502 Cornerstone of Engineering 2<sup>1</sup>

## Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Required General Electives

Code	Title	Hours
Complete 4 SH of academic, nonremedial, nonrepetitive courses.		4

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

## Major GPA Requirement

Minimum 2.000 GPA required in EECE courses

## Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

## Program Requirement

137 total semester hours required

## Plan of Study

### Four Years, One Co-Op in Summer 2/Fall

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	MATH 2341	4	Vacation	4
CHEM 1153	0	MATH 1342 (FQ)	4	PHYS 1155 (ND)	4		3
ENGW 1111 (WF)	4	MUST 1220 (AD)	4	PHYS 1156 (AD)	4		1
GE 1000	1	PHYS 1151 (ND)	3	PHYS 1157	3		1
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
	17		17				9
							0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2140	4	EECE 2160	4	Vacation	4	Co-op	0
EECE 2150 (AD)	5	ENCP 2000	1				
MATH 2321 (FQ)	4	MUSC 1001 (EI, IC)	4				
MUST 2431 (FQ, AD)	4	EE Fundamental:	4				
		EE Fundamentals	5				
	17		18				0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENCP 3000	1	Vacation	4	EECE 3468	4
		ENGW 3302 or 3315 (WD)	4			EECE 4791 (EI, WI, CE)	1
		CE Fundamentals	4			General Elective	4
		EE Fundamental:	5				

	EECE Technical Elective	4		
		0	18	0
				9

**Year 4**

Fall	Hours	Spring	Hours	
EECE 4792 (EI, WI, CE)	4	EECE Technical Elective	4	
Music Technology Elective	4	Music in Context	4	
Music Technology Elective	4	Music Elective	4	
Music Theory Course	4	Music Theory Course	4	
	16		16	

Total Hours: 137

**Five Years, Three Co-Ops in Spring / Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	MUST 1220 (AD)	4				
GE 1000	1	PHYS 1151 (ND)	3				
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
	17		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2140	4	Co-op		Co-op		Vacation	
ENCP 2000	1						
MATH 2341	4						
MUST 2431 (FQ, AD)	4						
PHYS 1155 (ND)	3						
PHYS 1156 (AD)	1						
PHYS 1157	1						
	18		0		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2150 (AD)	5	Co-op		Co-op		ENGW 3302 or 3315 (WD)	4
EECE 2160	4					General Elective	4

MATH 2321 (FQ)	4			
MUSC 1001 (EI, IC)	4			
	17	0	0	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 3000	1	Co-op		Co-op		EECE 3468	4
CE Fundamentals	4					EECE 4791 (EI, CE, WI)	1
EE Fundamentals	4					ECE Technical Elective	4
EE Fundamentals	5						
Music Theory Course	4						
	18		0		0		9

**Year 5**

Fall	Hours	Spring	Hours
EECE 4792 (EI, CE, WI)	4	ECE Technical Elective	4
EE Fundamentals	5	Music in Context	4
Music Technology Elective	4	Music Elective	4
Music Technology Elective	4	Music Theory Course	4
	17		16

Total Hours: 137

**Notes:**

- The Capstone Design Courses are taken as follows: (Electrical and Computer Engineering Capstone 1 (EECE 4791) - Summer 1 and Electrical and Computer Engineering Capstone 2 (EECE 4792) - Spring) OR (Electrical and Computer Engineering Capstone 1 (EECE 4791) - Summer 2 and Electrical and Computer Engineering Capstone 2 (EECE 4792) - Fall).

**Game Design and Music with concentration in Music Technology, BS**

The Game Design and Music combined major with a concentration in Music Technology prepares students to manage all aspects of music and sound design integral to the creative process in Game Design. Students focus on the digital sound technologies, audiovisual integration techniques and collaborative skills, grounded in real-world experience, that are necessary to apply one's musical imagination effectively in a game design environment. Also emphasized are the aesthetic, expressive, psychological and social perspectives essential to meaningful engagement across a broad range of applications in the game industry.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses

where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), and Analyzing/Using Data (AD), Interpreting Culture (IC), Natural/Designed World (ND), Difference/Diversity (DD), Writing Intensive (WI), and Capstone Experience(CE) are met through the major course requirements. All other NUpath requirements must be met through electives.

## Game Design Courses

Code	Title	Hours
ARTF 1000	Art and Design at Northeastern	1

### Game Design Required

GAME 1110	Games and Society	4
GAME 2500	Foundations of Game Design	4
GAME 2950	Game Studio	4
GAME 3400	Level Design and Game Architecture	4
GAME 3700	Rapid Idea Prototyping for Games	4
GAME 3800	Game Concept Development	4

### Game Design Electives

Complete one of the following:

GAME 1850	Experimental Game Design	4
or GAME 3300	Game Interface Design	

### Art + Design Electives

Complete three courses from the following: 12

Any course in ARTD, ARTE, ARTF, ARTG, ARTH, and GAME subject areas as long as prerequisites have been met.

## Music Requirements

Code	Title	Hours
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### Music Theory and Composition

MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4

Complete two of the following: 8

MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition	
MUSC 3541	Music Analysis Seminar	

### Music in Context

MUSC 1001	Music in Everyday Life	4
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### Contemporary

Complete one from the following: 4

MUSC 2101	Black Popular Music	
MUSC 2310	Popular Music Since 1945	
MUSC 2320	40,000 Years of Music Technology	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	

### Music Technology Requirements

MUSC 2350	Acoustics and Psychoacoustics of Music	4
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MUST 1220	Introduction to Music Technology	4
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MUST 2431	Computer Music Fundamentals	4
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### Music Technology Electives

Complete two of the following: 8

MUSC 4510	Music and the Brain Research	
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MUST 2320	Sound Design	
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MUST 4610	Composition for Electronic Instruments	
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MUST 3540	Special Topics in Music Technology	
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MUST 4520		
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## Integrative Requirement

Code	Title	Hours
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Note: MUSC 1220 is already required in the Music Technology Requirements section

MUST 1220	Introduction to Music Technology	
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### Capstone

MUST 4611	Music Technology Capstone/Senior Recital	4
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GAME 4700	Game Design Capstone	4
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## Combined-Major Credit Requirement

Complete 90 semester hours in the major.

## Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or MUSC 1000	1	GAME 2500	4	A + D elective	4	Vacation	0

GAME 1110	4	MUST 1220	4	A + D elective	4		
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ENGW 1111	4	MUSC 1202	4				
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MUSC 1201	4	MUSC 2350	4				
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Elective	4						
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	17		16		8		0
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#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
GAME 2950	4	Co-op		Co-op		ENGW 3302	4

GAME 3400	4	Elective (online)	4			A + D elective	4
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MUSC 1001	4						
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MUST 1301	4						
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EEAM 2000	1				
	17	4	0		8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
GAME 3700	4 Co-op	Co-op	Elective	4	
MUSC 3541, 2111, or 3300	4 Elective (online)	4	Elective	4	
MUST 2431	4				
Contemporary music requirement	4				
	16	4	0		8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
GAME 3800	4 GAME 4700	4			
MUSC 3541, 2111, or 3300	4 Computing and social issues	4			
Game design elective	4 Music technology elective	4			
Music technology elective	4 Elective	4			
	16	16			

Total Hours: 130

## Music and Communication Studies with Concentration in Music Industry, BS

The Bachelor of Science in Music with Concentration in Music Industry, the first such undergraduate program offered in Boston, is designed for students with an interest in fields such as artist management; the music products industry; the recording industry; arts administration; contracting and legal issues; financial and economics aspects of the music industry; and broadcast, mobile, and online media technologies.

The Department of Communication Studies is committed to providing students with both the communication skills and the understanding of the communication process required to thrive in a complex and changing society. Majors are required to demonstrate a mastery of the fundamentals of effective communication, to learn the fundamentals of communication theory and practice, and to develop a distinct area of emphasis. Some of the more popular areas include argumentation and advocacy, organizational and health communication, international and intercultural communication, digital communication and social media, and media production. The curriculum is designed to enhance the understanding of human communication in a variety of contexts, to empower students to become informed and engaged citizens, and to provide the knowledge and skills required to live a rich personal and professional life.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Difference and Diversity (DD) may be met through electives in the major.

### Music Industry Requirements

Code	Title	Hours
<b>Introduction to College</b>		
MUSC 1000	Music at Northeastern	1
<b>Music Core</b>		
MUSC 1001	Music in Everyday Life	4
<b>Music Theory Placement</b>		
All students must take a theory placement exam. Students who do not place into MUSC 1201 must first take the following:		
MUSC 1119	Fundamentals of Western Music Theory	4
<b>Music Theory Requirement</b>		
MUSC 1201	Music Theory 1	4
<b>Introductory Music Industry</b>		
MUSI 1230	Introduction to Music Industry	4
<b>Music in Context</b>		
Choose one course from Western Art Music, Global Music / Ethnomusicology, or Contemporary / Popular Music categories.		
<i>Western Art Music</i>		
MUSC 2107	Introduction to Opera	
MUSC 2312	Historical Traditions: Classical	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2380	The World of Choral Music	
MUSC 3352	Sounding Human	
<i>Global Music / Ethnomusicology</i>		
MUSC 2101	Black Popular Music	
MUSC 2130	Music of Asia	
MUSC 2313	Topics in World Music	
MUSC 2330	Musical Communities of Boston	
MUSC 3353	Music and the Racial Imagination	
MUSI 3351	Music and Social Justice	
MUSI 3360	Global Music Industries in Context	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 5900	Ethnography in Creative Industries	
<i>Contemporary / Popular Music</i>		
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	

MUSC 2311	Topics in American Music
MUSC 2317	Punk Rock
MUSC 2320	40,000 Years of Music Technology
MUSC 2340	Divas, DJs, and Double Standards
MUSC 2351	Music, Sound, and the Screen
MUSC 2380	The World of Choral Music
MUSC 3352	Sounding Human
MUSC 3353	Music and the Racial Imagination
MUSC 3560	Topics in Music since 1900
MUSI 3360	Global Music Industries in Context
MUSI 3401	Hip Hop in the Music Industry
MUSI 3540	Special Topics in Music Industry

**Music Industry Electives**

Complete three of the following: 12

MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2210	Introduction to Songwriting
MUSC 2211	Advanced Songwriting
MUSC 3353	Music and the Racial Imagination
MUSI 1204	Analyzing Popular Genres
MUSI 2231	Music Licensing for Media
MUSI 2232	Music Recording 1
MUSI 2234	Festivals
MUSI 2235	Copyright in the Creative Industries
MUSI 2330	Performing Arts Administration
MUSI 2331	Music Recording 2
MUSI 2341	Music Supervision 1
MUSI 2540	Special Topics in Music Industry
MUSI 3332	Artist Management
MUSI 3333	The Record Industry
MUSI 3334	Music Products Industry
MUSI 3338	Music Industry Marketing and Promotion
MUSI 3340	Concert Promotion and Venue Management
MUSI 3351	Music and Social Justice
MUSI 3360	Global Music Industries in Context
MUSI 3401	Hip Hop in the Music Industry
MUSI 4530	Music Entrepreneurship
MUSI 4601	Seminar in Music Industry
MUSI 5900	Ethnography in Creative Industries
MUST 1220	Introduction to Music Technology

**Business Course**

ACCT 1209 Financial Accounting and Reporting 4

**Communication Studies Requirements**

Code	Title	Hours
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**Communication Studies Common Requirements**

COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

**Foundation Course**

Complete one of the following: 4

COMM 1210	Persuasion and Rhetoric
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COMM 1231	Principles of Organizational Communication
COMM 1225	Communication Theory
COMM 1255	Communication in a Digital Age

**Cluster Course**

Complete one of the following: 4

COMM 1131	Sex, Relationships, and Communication
COMM 2303	Global and Intercultural Communication
COMM 2304	Communication and Gender
COMM 2501	Communication Law
COMM 2551	Free Speech in Cyberspace

**Writing-Intensive Courses**

Complete two of the following: 8

COMM 3200	Mobile Communication
COMM 3201	Health Communication
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 3500	Environmental Issues, Communication, and the Media
COMM 3501	Free Speech: Law and Practice
COMM 3530	Communication and Sexualities
COMM 3532	Theories of Conflict and Negotiation
COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4631	Crisis Communication and Image Management

**Communication Studies Electives**

Complete three COMM courses. 12

**Integrative Requirement**

Code	Title	Hours
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Complete one of the integrative options below. If a communication studies course is taken, an additional music industry course is required, chosen from the list of music industry electives above.

**Music Option**

Complete one of the following:

MUSI 4601	Seminar in Music Industry
MUSI 4530	Music Entrepreneurship
MUSI 5900	Ethnography in Creative Industries

**Communication Studies Option**

Complete two of the following. One communication studies course is required:

COMM 4608	Strategic Communication Capstone
or COMM 4625	Online Communities
MUSC 2000 to MUSC 5999	
MUSI 2000 to MUSI 5999	
MUST 2000 to MUST 5999	



## Communication Studies Major Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

## Music Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

## Program Requirement

128 total semester hours required

## Plan of Study

Sample Four Years, Two Co-ops

### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MUSC 1000 or COMM 1000	1 ENG W 1111	4 Elective	4 Elective	4
MUSC 1001	4 MUSC 1201	4 Elective	4 Elective	4
MUSI 1230	4 Communication studies foundational course	4		
COMM 1101	4 Music in context elective	4		
COMM 1112 or 2301	4			
	17	16	8	8

### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Communication studies cluster course	4 Communication studies elective	4 Elective	4 Co-op	
Elective	4 Elective	4 Elective	4	
Music industry elective	4 Music industry elective	4		
Elective	4 Elective	4		
	EEAM 2000	1		
	16	17	8	0

### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ENG W 3314 or 3315	4 Communication studies elective	4 Co-op	
	Communicati studies elective	4 Communicati studies writing- intensive	4	
	ACCT 1209	4		
	Elective	4		
	0	16	8	0

### Year 4

Fall	Hours Spring	Hours
Co-op	Communication studies writing- intensive	4
	Music industry elective	4
	Integrative course	4
	Capstone	4
	0	16

Total Hours: 130

## Physics and Music with Concentration in Music Technology, BS

The combined major in physics and music provides a strong foundation in classical and modern physics, including studies of the various physical phenomena including electromagnetism, dynamics, building blocks of matter, energy, and radiation. It also provides students with a solid background in composition for acoustic and electronic instruments and for combined and/or interactive live and digital sources. The combined major allows students to learn how physical principles influence sound production and propagation.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
<i>Physics 2</i>		
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	5
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics	4

PHYS 4305	Thermodynamics and Statistical Mechanics	4
PHYS 5318	Principles of Experimental Physics	4

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

### Music Requirements

Code	Title	Hours
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
Complete two of the following:		8
MUSC 3541	Music Analysis Seminar	
MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition	
<b>Music in Context</b>		
MUSC 1001	Music in Everyday Life	4
<i>Contemporary</i>		
Complete one course from the following:		4
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2317	Punk Rock	
MUSC 2310	Popular Music Since 1945	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
<b>Music Technology</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4
<b>Music Technology Electives</b>		
Complete two of the following:		8
MUSC 4510	Music and the Brain Research	
MUST 3540	Special Topics in Music Technology	
MUST 4610	Composition for Electronic Instruments	
MUST 4520		
<b>Music Technology Capstone</b>		
MUST 4611	Music Technology Capstone/Senior Recital	4

### Physics/Music Integrative Requirements

Code	Title	Hours
<b>Integrative Course Requirements</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4

### Physics and Music Combined-Major Credit Requirement

Complete 98 semester hours in the major.

### Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

### Program Requirement

131 total semester hours required

### Plan of Study

#### Note on Physics courses in Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, **depending on the year of entry for that student.**

See course offering schedule at the end of the plans of study.

Please contact your academic adviser for additional information and plans of study.

### Five Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1000	1	PHYS 1165	4	Vacation		Vacation	
PHYS 1161	4	PHYS 1166	1				
PHYS 1162	1	PHYS 1167	0				
PHYS 1163	0	MATH 1342	4				
MATH 1341	4	MUST 1220	4				
MUSC 1001	4	Elective	4				
ENGW 1111	4						
	18		17		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	PHYS 3602	4	Vacation		Vacation on ODD years. See offering schedule for even years	
MATH 2321	4	MATH 2341	4				
MUSC 1201	4	MUSC 1202	4				
Elective	4	MUSC 2350	4				
	16		16		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2371	3	Co-op		Co-op		PHYS 3600	4
PHYS 2372	1					PHYS 4305	4

MUST 2431	4			
Elective	4			
EESC 2000	1			
MUSC 3541, 2111, or 3300	4			
	17	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MUSC 3541, 2111, or 3300	4 Co-op	Co-op	Vacation	
MUST 3540	4			
PHYS 4115	4			
Music elective	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
ENGW 3307	4 PHYS 5318	4
MUST 4610	4 MUST 4611	4
Elective	4	
Elective	4	
	16	8

Total Hours: 132

**FOUR YEARS, ONE CO-OP IN SPRING/SUMMER 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 1000	1 PHYS 1165	4 Vacation	Vacation	
PHYS 1161	4 PHYS 1166	1		
PHYS 1162	1 PHYS 1167	0		
PHYS 1163	0 MATH 1342	4		
MATH 1341	4 MUST 1220	4		
MUSC 1001	4 Elective	4		
ENGW 1111	4			
	18	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 2303	4 MATH 2341	4 Vacation	PHYS 3600	4
PHYS 2371	3 MUSC 1202	4	Elective in ODD years, PHYS 4305 in EVEN years	4
PHYS 2372 <sup>3</sup>	1 MUSC 2350	4		
MATH 2321	4 PHYS 3602	4		
MUSC 1201	4			
	16	16	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MUST 2431	4 Co-op	Co-op	ENGW 3307	4

MUSC 3541, 2111, or 3300	4	PHYS 4305	4
		(in EVEN years, Elective in ODD years.)	

Music elective	4		
PHYS 4115	4		
EESC 2000	1		
	17	0	0
			8

**Year 4**

Fall	Hours Spring	Hours
MUSC 3541, 2111, or 3300	4 PHYS 5318	4
MUST 3540	4 MUST 4611	4
MUST 4610	4 Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 132

**Offerings schedule (subject to changes)**

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2 (**take in yr. 2 or 3, whichever is even**)
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (**take in yr. 2 or 3, whichever is even**)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

**Psychology and Music, BS**

This combined major educates students in psychology and music and the interface between the two disciplines. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including such topics as cognition, psycholinguistics, perception, and the biological basis of behavior. Music courses provide a foundation in music theory, creative music in context, contemporary/ethnomusicology, music perception and cognition, and the psychoacoustics of music. Students completing this program of study should be able to understand how the two fields jointly contribute to explaining human behavior in the domain of music.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Difference and Diversity (DD), Ethical Reasoning (ER), and Advanced Writing in the Disciplines (WD) are not explicitly satisfied by the required courses. Difference and Diversity (DD) and Ethical Reasoning (ER) can be met through Music in Context. Students are responsible for satisfying any of these requirements not met within the major.

## Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3452	Sensation and Perception	4
PSYC 3458	Biological Psychology	4
PSYC 3464	Psychology of Language	4
PSYC 3466	Cognition	4
<b>Required Lab</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	
<b>Required Seminar</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	
<b>Psychology Electives</b>		
Complete two PSYC courses not used to fulfill requirements above.		8

## Music Theory Requirements

Code	Title	Hours
<b>Required Courses</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4

## Music in Context

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4

### Creative Category

Complete one of the following 4-semester-hour courses or choose four 1-semester-hour ensembles and/or lessons from the list:

MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2208	Jazz Improvisation	
MUSC 2209	Conducting	
MUSC 2210	Introduction to Songwriting	
MUST 1220	Introduction to Music Technology	
MUST 1301	Introduction to Composition	
MUST 2320	Sound Design	
<i>Ensembles and Lessons</i>		
MUSC 1901	Music Lessons 1	
MUSC 1902	Music Lessons 2	
MUSC 1904	Chorus	
MUSC 1905	Concert Band	
MUSC 1906	Orchestra	
MUSC 1907	Wind Ensemble	
MUSC 1911	Jazz Ensemble	
MUSC 1912	Rock Ensemble	
MUSC 1913	Blues/Rock Ensemble	
MUSC 1914	Create Your Own Music	
MUSC 1915	Chamber Ensemble	
MUSC 1917	Jazz Choir and Combo	
MUSC 1918	World Music Ensemble	
MUSC 1919	Fusion Ensemble	
MUSC 1920	Pep Band	

### Contemporary / Popular Music or Global Music /

#### Ethnomusicology Category

Complete one of the following:		4
MUSC 2101	Black Popular Music	
MUSC 2130	Music of Asia	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2311	Topics in American Music	
MUSC 2313	Topics in World Music	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2330	Musical Communities of Boston	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 2380	The World of Choral Music	
MUSC 3353	Music and the Racial Imagination	

MUSC 3560	Topics in Music since 1900
MUSI 3351	Music and Social Justice
MUSI 3360	Global Music Industries in Context
MUSI 3401	Hip Hop in the Music Industry
MUSI 5900	Ethnography in Creative Industries

Note: MUSC 2150 can be used to meet either the creative or the ethnomusicology/contemporary requirement but not both.

### Music Requirements

Code	Title	Hours
MUSC 2350	Acoustics and Psychoacoustics of Music	4
or INAM 3200	Creative Cognition	
MUSC 3300	Music Perception and Cognition	4
<b>Capstone</b>		
MUSC 4510	Music and the Brain Research	4

### Music Electives

Code	Title	Hours
Complete two courses from MUSC, MUSI, or MUST not used to fulfill the requirements above.		8

### Other Requirements Outside Major

Code	Title	Hours
PSYC 1000	Psychology at Northeastern	1
or MUSC 1000	Music at Northeastern	
EESC 2000	Professional Development for Co-op	1
or EEAM 2000	Professional Development for Co-op	
ENGW 1111	First-Year Writing	4
Complete one of the following:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1241	Calculus 1	

### Bridge/Integrative Courses

Code	Title	Hours
Note: MUSC 3300 is already required above.		
MUSC 3300	Music Perception and Cognition	

### Music Major Grade Requirement

Students must maintain at least a 2.667 grade-point average (B-average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

### Program Requirement

130 total semester hours required

### Plan of Study

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1101	4	PSYC 2320	4	PSYC 3466	4	Open elective	4
MUSC 1001	4	MUSC 1201	4	Music elective	4	Open elective	4

ENGW 1111	4	MATH 1213	4		
NUpath DD	4	NUpath ER	4		
MUSC 1000 or PSYC 1000	1				
		17	16	8	8

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3458	4	PSYC 3464	4	Open elective	4	Co-op	0
MUSC 1202	4	MUSC 2350 or INAM 3200	4	PSYC elective	4		
Open elective	4	Contemporary/ethno course	4				
MUSC 3300	4	Open elective	4				
		EESC 2000 or EEAM 2000	1				
		16	17	8	0		

### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PSYC 3452	4	PSYC lab	4	Co-op	0
		Creative MUSC course	4	PSYC elective	4		
		MUSC 4510	4				
		Open elective	4				
		0	16	8	0		

### Year 4

Fall	Hours	Spring	Hours
Co-op	0	PSYC seminar	4
		Music elective	4
		WD	4
		Open elective	4
		0	16

Total Hours: 130

## Ethnomusicology, Minor

The minor in ethnomusicology offers students an interdisciplinary approach to exploring the richness of music in its cultural context.

The foundation of the minor is a unique introductory course, Music in Everyday Life (MUSC 1001), which investigates many dimensions of musical experience and music's connections to society. Students can take in-depth electives that focus on the music of a region, the global circulation of popular music, or courses that investigate music's relationship to critical issues around gender, race, disability, technology, ethics, neoliberalism, postcolonialism, and social justice, to name a few intersections. The minor culminates in a seminar, Musical Communities of Boston (MUSC 2330), which invites students to conduct their own ethnographic projects in and around Boston. For this course, students

have worked closely with homeless street performers in Boston's subway system, documented a weekly Grateful Dead night in the basement of an independent record store, and joined an all-female swing big band. Some of these projects have resulted in long-term social, academic, and musical collaborations.

Ethnomusicological studies would enrich many programs or degrees, including but not limited to African-American studies; sociology; anthropology; Asian studies; Middle Eastern studies; Jewish studies; world language studies; cultural studies; women, gender, and sexuality studies; Latin American studies; religion; urban studies; Art + Design; cinema studies; communication studies; international affairs; theatre; political science; or health sciences. Music majors may also add this minor.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4
MUSC 2330	Musical Communities of Boston	4

### Ethnomusicology Electives

Code	Title	Hours
Complete two of the following. At least one must be at 2000-level or higher.		8
MUSC 1131	Music of Latin America and the Caribbean	
MUSC 2101	Black Popular Music	
MUSC 2130	Music of Asia	
MUSC 2313	Topics in World Music	
MUSC 3353	Music and the Racial Imagination	
MUSI 3351	Music and Social Justice	
MUSI 5900	Ethnography in Creative Industries	

### GPA Requirement

2.000 GPA required in the minor. *Students must complete all required music courses with grades of at least C.*

### Music, Minor

The minor in music offers students an opportunity to explore electives in music along with a music theory course appropriate to the student's level of experience. The foundation of the minor is a unique introductory course, Music in Everyday Life (MUSC 1001), which investigates many dimensions of the musical experience and music's contributions to culture.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

A grade of C or better is required in all music courses.

### Music Theory and Musicianship

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4
Complete one course from the following. Music theory placement test permits placement into Music Theory 1 or higher.		4
MUSC 1119	Fundamentals of Western Music Theory	
MUSC 1201	Music Theory 1	
MUSC 1202	Music Theory 2	
MUSI 1204	Analyzing Popular Genres	

### Music Literature Electives

Code	Title	Hours
Complete two courses from the following. Four semesters of ensembles and/or lessons may be substituted for one elective. At least one 2000-level course or above must be taken.		8
MUSC 1111	Rock Music	
MUSC 1112	Jazz	
MUSC 1113	Film Music	
MUSC 1116	Beethoven	
MUSC 1118	Music Therapy 1	
MUSC 1131	Music of Latin America and the Caribbean	
MUSC 1144	Music and Technology: Stone Age to Digital Age	
MUSC 2101	Black Popular Music	
MUSC 2107	Introduction to Opera	
MUSC 2130	Music of Asia	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2312	Historical Traditions: Classical	
MUSC 2313	Topics in World Music	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2330	Musical Communities of Boston	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 2380	The World of Choral Music	
MUSC 3352	Sounding Human	
MUSC 3353	Music and the Racial Imagination	
MUSC 3560	Topics in Music since 1900	
MUSI 3351	Music and Social Justice	
MUSI 3360	Global Music Industries in Context	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 5900	Ethnography in Creative Industries	

### Lessons and Ensembles

All lessons and ensembles are 1 credit:

MUSC 1901	Music Lessons 1
MUSC 1902	Music Lessons 2
MUSC 1904	Chorus
MUSC 1905	Concert Band
MUSC 1906	Orchestra

MUSC 1907	Wind Ensemble
MUSC 1911	Jazz Ensemble
MUSC 1912	Rock Ensemble
MUSC 1913	Blues/Rock Ensemble
MUSC 1914	Create Your Own Music
MUSC 1915	Chamber Ensemble
MUSC 1917	Jazz Choir and Combo
MUSC 1918	World Music Ensemble
MUSC 1919	Fusion Ensemble
MUSC 1920	Pep Band

**GPA Requirement**

2.000 GPA required in the minor. *Students must complete all required music courses with grades of C or better.*

**Music Composition, Minor**

The minor in composition offers student composers at all levels a concentrated opportunity to build composition skills. The minor includes a foundation in music theory and introduction to compositional approaches, composition lessons, and additional course work to broaden the student composer's understanding and appreciation of the intersection of music and culture.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
MUSC 1301	Introduction to Composition	4
MUSC 1903	Composition Lessons	1

**Elective**

Code	Title	Hours
Complete one of the following:		4
MUSC 3541	Music Analysis Seminar	
MUSC 1220	Introduction to Music Technology	
MUSC 2320	Sound Design	

**GPA Requirement**

2.000 GPA required in the minor. *Students must complete all required music courses with grades of at least C.*

**Music Industry, Minor**

The music industry program is the first such undergraduate program offered in Boston and is designed for students with an interest in fields such as artist management; the music products industry; the recording industry; arts administration; contracting and legal issues; financial and economics aspects of the music industry; and broadcast, mobile, and online media technologies.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

A C grade or better is required in all music courses.

**Music Core**

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4

**Music Industry**

Code	Title	Hours
MUSI 1230	Introduction to Music Industry	4

**Music Industry Electives**

Code	Title	Hours
Complete three of the following:		12
MUSC 1119	Fundamentals of Western Music Theory	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2210	Introduction to Songwriting	
MUSC 2211	Advanced Songwriting	
MUSC 3353	Music and the Racial Imagination	
MUSI 2231	Music Licensing for Media	
MUSI 2232	Music Recording 1	
MUSI 2234	Festivals	
MUSI 2235	Copyright in the Creative Industries	
MUSI 2341	Music Supervision 1	
MUSI 2540	Special Topics in Music Industry	
MUSI 3332	Artist Management	
MUSI 3333	The Record Industry	
MUSI 3334	Music Products Industry	
MUSI 3338	Music Industry Marketing and Promotion	
MUSI 3340	Concert Promotion and Venue Management	
MUSI 3351	Music and Social Justice	
MUSI 3360	Global Music Industries in Context	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 4530	Music Entrepreneurship	
MUSI 4601	Seminar in Music Industry	
MUSI 5900	Ethnography in Creative Industries	
MUSC 1220	Introduction to Music Technology	

**GPA Requirement**

2.000 GPA required in the minor. *Students must complete all required music courses with grades of at least C.*

**Music Performance, Minor**

The minor in music performance offers students an opportunity to improve on their instrument or voice through ensemble performance, private lessons, recitals, and instruction in music theory. Students also take an elective in music that can be used to explore a genre, musical culture, or composer related to the student's performance area or can

be used to broaden the student's musical horizons beyond their area of focus.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* Acceptance into the minor requires an audition.

### Music Core

A grade of C or higher is required in music theory courses:

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4
MUSC 1201	Music Theory 1	4

### Music Lessons

Code	Title	Hours
Complete four music lesson courses (courses are repeatable):		4
MUSC 1901	Music Lessons 1	
MUSC 1902	Music Lessons 2	

### Music Ensemble

Code	Title	Hours
Complete five music ensembles:		5
MUSC 1904	Chorus	
MUSC 1905	Concert Band	
MUSC 1906	Orchestra	
MUSC 1907	Wind Ensemble	
MUSC 1911	Jazz Ensemble	
MUSC 1912	Rock Ensemble	
MUSC 1913	Blues/Rock Ensemble	
MUSC 1914	Create Your Own Music	
MUSC 1915	Chamber Ensemble	
MUSC 1917	Jazz Choir and Combo	
MUSC 1918	World Music Ensemble	
MUSC 1919	Fusion Ensemble	
MUSC 1920	Pep Band	

### Music Electives

Code	Title	Hours
Complete one of the following:		4
MUSC 1111	Rock Music	
MUSC 1112	Jazz	
MUSC 1113	Film Music	
MUSC 1116	Beethoven	
MUSC 1118	Music Therapy 1	
MUSC 1131	Music of Latin America and the Caribbean	
MUSC 1144	Music and Technology: Stone Age to Digital Age	
MUSC 2101	Black Popular Music	
MUSC 2107	Introduction to Opera	
MUSC 2111	Algebra and Geometry of Music	
MUSC 2130	Music of Asia	

MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2208	Jazz Improvisation
MUSC 2209	Conducting
MUSC 2210	Introduction to Songwriting
MUSC 2211	Advanced Songwriting
MUSC 2310	Popular Music Since 1945
MUSC 2312	Historical Traditions: Classical
MUSC 2313	Topics in World Music
MUSC 2317	Punk Rock
MUSC 2320	40,000 Years of Music Technology
MUSC 2330	Musical Communities of Boston
MUSC 2340	Divas, DJs, and Double Standards
MUSC 2350	Acoustics and Psychoacoustics of Music
MUSC 2380	The World of Choral Music
MUSC 2351	Music, Sound, and the Screen
MUSC 2420	Music Composition Seminar 1
MUSC 3300	Music Perception and Cognition
MUSC 3337	Writing about Music
MUSC 4510	Music and the Brain Research
MUSC 3352	Sounding Human
MUSC 3353	Music and the Racial Imagination
MUSC 3541	Music Analysis Seminar
MUSC 3560	Topics in Music since 1900
MUSI 3351	Music and Social Justice
MUSI 3401	Hip Hop in the Music Industry
MUSI 5900	Ethnography in Creative Industries

### Music Recitals

Code	Title	Hours
MUSC 3410	Recital 1	1
MUSC 4622	Recital 2	1

### GPA Requirement

2.000 GPA required in the minor. *Students must complete all required music courses with grades of at least C.*

### Music Recording, Minor

The minor in music recording offers students a chance to explore the theory and practice of recording from basic principles through studio sessions and mixing/mastering. An elective rounds out the minor, giving students an opportunity to learn about the intersection of recording and copyright, technology, entertainment, and other disciplines.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
MUSI 2232	Music Recording 1	4
MUSI 2331	Music Recording 2	4



MUSI 3341	Music Recording 3—Mixing and Mastering	4
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### Recording Elective

Code	Title	Hours
Complete one of the following:		
MUSC 1001	Music in Everyday Life	4
MUSI 2341	Music Supervision 1	
MUST 1220	Introduction to Music Technology	
MUSI 2235	Copyright in the Creative Industries	
MUST 2320	Sound Design	

### GPA Requirement

2.000 GPA required in the minor. Students must complete all required music courses with grades of at least C.

### Music Technology, Minor

The minor in music technology gives students an opportunity to explore the creative application of digital and analog audio technologies to a broad range of artistic, social, and industrial purposes, including experimental composition, film, video, theatre, game design, mobile applications, sound design for urban environments, musical instrument design, and beyond. An emphasis is maintained throughout on imaginative exploration, collaboration across disciplines, and real-world experience.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

A C grade or better is required in all music courses.

### Required Courses

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4

### Music Technology Electives

Code	Title	Hours
Complete two of the following:		
MUSC 2111	Algebra and Geometry of Music	8
MUSC 2320	40,000 Years of Music Technology	
MUSC 2350	Acoustics and Psychoacoustics of Music	
MUST 2320	Sound Design	
MUST 3540	Special Topics in Music Technology	
MUST 3601	Digital Audio Signal Processing	
MUST 3602	Electronics for Music	
MUST 3603	Embedded Audio Programming	

### GPA Requirement

2.000 GPA required in the minor. *Students must complete all required music courses with grades of at least C.*

### Musical Theatre, Minor

Uniting acting, singing, and dance, the musical theatre minor provides foundational skills in musical theatre performance and the exploration of the culture and evolution of the musical form. This minor combines theatre courses in performance and Broadway history with additional course options from the Department of Music.

### Minor Requirements

Complete all courses listed below unless otherwise indicated.

Note: Students pursuing a music theatre minor may double count up to one course between that minor and the student's declared major and other minors.

### For Theatre Majors (Not Including Combined Majors):

#### REQUIRED COURSES

Code	Title	Hours
THTR 1500	Musical Theatre Performance 1	4
MUSC 1119 or MUSC 1201	Fundamentals of Western Music Theory Music Theory 1	4

#### MAKING MUSICAL THEATRE

Code	Title	Hours
Complete one of the following:		
MUSC 1901	Music Lessons 1	1
THTR 1100	Production Experience 1	

#### ELECTIVES

Code	Title	Hours
Complete two of the following:		
MUSC 1142	Pop, Jazz, and Rock Singing	8
THTR 1150	Dance Performance and History: Modern to Hip Hop	
THTR 1260	Movement for the Actor	
MUSC 2107	Introduction to Opera	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
THTR 2310	History of Musical Theatre	
THTR 3570	Musical Theatre Performance 2	

### For Music Majors (Not Including Combined Majors):

#### REQUIRED COURSES

Code	Title	Hours
THTR 1130	Introduction to Acting	4
THTR 1500	Musical Theatre Performance 1	4

#### MAKING MUSICAL THEATRE

Code	Title	Hours
Complete one of the following:		
MUSC 1901	Music Lessons 1	1
THTR 1100	Production Experience 1	

#### ELECTIVES

Code	Title	Hours
Complete two of the following:		
THTR 1101	Introduction to Theatre	8
MUSC 1142	Pop, Jazz, and Rock Singing	

THTR 1150	Dance Performance and History: Modern to Hip Hop
THTR 1260	Movement for the Actor
MUSC 2107	Introduction to Opera
MUSC 2150	Making a Musical: Analysis, Craft, and Creation
THTR 2310	History of Musical Theatre
THTR 3570	Musical Theatre Performance 2

### For All Other Majors (Including Combined Majors):

#### REQUIRED COURSES

Code	Title	Hours
THTR 1130	Introduction to Acting	4
THTR 1500	Musical Theatre Performance 1	4

#### MAKING MUSICAL THEATRE

Code	Title	Hours
Complete one of the following:		1
MUSC 1901	Music Lessons 1	
THTR 1100	Production Experience 1	

#### ELECTIVES

Code	Title	Hours
Complete two of the following:		8
THTR 1101	Introduction to Theatre	
MUSC 1119	Fundamentals of Western Music Theory	
MUSC 1142	Pop, Jazz, and Rock Singing	
THTR 1150	Dance Performance and History: Modern to Hip Hop	
THTR 1260	Movement for the Actor	
MUSC 2107	Introduction to Opera	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
THTR 2310	History of Musical Theatre	
THTR 3570	Musical Theatre Performance 2	

### GPA Requirement

2.000 GPA required in the minor

### Performing Arts Administration, Minor

Connecting a range of College of Arts, Media and Design courses, this minor prepares students to work in nonprofit arts organizations such as theatre companies, concert venues, and performance centers. Students have an opportunity to develop valuable skills in artistic programming, marketing, organizational communication, public relations, community outreach, and the entertainment business.

### Program Requirements

Complete all courses listed below unless otherwise indicated.

Students pursuing a performing arts administration minor may double count up to one course between that minor and the student's declared major and other minors. Should a student place out of a course in a minor it must be replaced with another course.

#### Notes:

- No student may receive a theatre minor as a result of external transfer credit only.

- Music majors cannot use Performing Arts Administration (MUSI 2330) as a major elective due to double-counting policy outlined above.

### Foundational Courses

Code	Title	Hours
Complete one of the following:		4
THTR 1101	Introduction to Theatre	
MUSC 1001	Music in Everyday Life	
MUSI 1230	Introduction to Music Industry	

### Required Course

Code	Title	Hours
MUSI 2330	Performing Arts Administration	4

### Electives

Code	Title	Hours
Complete two of the following (prerequisites may apply):		8
COMM 1113	Business and Professional Speaking	
COMM 1231	Principles of Organizational Communication	
COMM 2350	Producing for the Entertainment Industry	
COMM 2650	The Business of Entertainment	
COMM 3451	Advertising Practices	
JRNL 3425	Public Relations Principles	
MUSI 2234	Festivals	
MUSI 2235	Copyright in the Creative Industries	
MUSI 3338	Music Industry Marketing and Promotion	
MUSI 3340	Concert Promotion and Venue Management	
THTR 2335	Boston Theatre Experience	
AACE 6000	Arts and Culture Organizational Leadership	

### GPA Requirement

2.000 GPA required in the minor

### Songwriting, Minor

The minor in songwriting offers students a chance to build songwriting skills through classes that focus on craft, collaboration, music theory, and songwriting business practice.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
Complete one of the following:		4
MUSC 1119	Fundamentals of Western Music Theory	
MUSC 1201	Music Theory 1	
MUSI 1204	Analyzing Popular Genres	
<b>Songwriting</b>		

MUSC 2210	Introduction to Songwriting	4
<b>Songwriting Electives</b>		
<i>Complete two of the following:</i>		8
MUSC 1001	Music in Everyday Life	
MUSC 2211	Advanced Songwriting	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSI 2232	Music Recording 1	
MUSI 2235	Copyright in the Creative Industries	
MUSI 2331	Music Recording 2	

### GPA Requirement

2.000 GPA required in the minor. *Students complete all required music courses with grades of at least C.*

## Theatre

Website (<https://camd.northeastern.edu/theatre/>)

### Antonio Ocampo-Guzman

Associate Professor and Chair

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The Northeastern Department of Theatre is a hub for creative practice research: We explore theatre and performance both as a living art and as a system of inquiry in order to engage with our global society and the moment in which we live. We offer students a transformative education by aligning performance and production with academic inquiry and professional experiential learning. Our curriculum embraces diverse techniques, philosophies, and measures of success.

Our multidimensional students develop a unique understanding of creative leadership. They are actors, directors, designers, technicians, playwrights, stage managers, producers, and administrators and more. With generosity, integrity, respect, and rigor, we explore theatre as a living art that engages across disciplines.

We produce a variety of productions in the Studio Theatre and Ryder Theatre Lab, where students collaborate with faculty, staff, and professional guest artists to achieve the highest standard of professionalism. With more than 40 co-op partners around the globe, students can connect classroom and stage experiences with the professional world.

### Academic Progression Standards

Students must receive a minimum grade of 2.000 in major courses.

Code	Title	Hours
Students must receive a minimum grade of 2.000 in major courses. The following courses are recommended to be taken by the end of the fourth semester (third semester for transfer students):		
THTR 1100	Production Experience 1	1
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

## Programs

### Bachelor of Arts (BA)

- Theatre (p. 234)
- Communication Studies and Theatre (p. 137)
- Cultural Anthropology and Theatre (p. 244)
- English and Theatre (p. 246)
- Media and Screen Studies and Theatre (p. 162)
- Theatre and Interaction Design (p. 116)

### Bachelor of Science (BS)

- Theatre (p. 237)
- American Sign Language and Theatre (p. 239)
- Computer Science and Theatre (p. 242)
- Media and Screen Studies and Theatre (p. 175)
- Theatre and Interaction Design (p. 118)

### Minors

- Theatre (p. 258)
- Global Fashion Studies (p. 255)
- Improvisation and Storytelling (p. 184)
- Musical Theatre (p. 232)
- Playwriting (p. 257)
- Performing Arts Administration (p. 233)
- Theatrical Design (p. 259)
- Theatre, Performance, and Social Change (p. 258)

## Theatre, BA

The Northeastern Department of Theatre is dedicated to creativity, collaboration, and excellence in the pursuit of innovative ways to see, to investigate, and to make theatre for a new generation. We offer students a transformative theatre education by aligning performance and production with academic inquiry and professional experiential learning. Our multidimensional students develop a unique understanding of professionalism and entrepreneurship as the foundations of meaningful careers. We embrace diverse methods, philosophies, and measures of success. Through values of generosity, integrity, respect, and rigor, we explore theatre as a living art that engages with our global society and the moment in which we live.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Formal and Quantitative Reasoning (FQ), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Analyzing and Using Data (AD) must be met through general electives.

## Theatre Major Requirements

A minimum grade of C is required for all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1000	Theatre at Northeastern	1
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
THTR 4100	Senior Career Seminar	1

### Theatre Texts and Context

At least one the Theatre Texts and Contexts course must be at the 2000-level or above.

Complete one of the following:	4
THTR 1220	Race, Power, and Performance
THTR 2300	Classics of Global Theatre
THTR 2315	Rebels of Modern Drama
THTR 2320	Classics of 20th-Century American Drama
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 3200	Queer Theatre and Performance

Complete one of the following:	4
THTR 1215	Activism and Performance
THTR 2340	Theatre and Society
THTR 3100	Creative Storytelling for Social Engagement

### Making Theatre

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 3702	Rehearsal and Production: The Art of Collaboration	1
THTR 4702	Capstone Rehearsal and Performance	4

### Advanced Technique

Complete one of the following:	4
Students concentrating in theatre performance should complete THTR 3300, THTR 3450 or THTR 3550.	
Students concentrating in production should complete THTR 3550	
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3450	Acting 3 (Theatre Performance Concentration)
THTR 3550	Directing for the Stage

## Electives

Complete the following electives or choose one of the concentrations below (p. 235).

Code	Title	Hours
Complete five of the following:		20
THTR 1215	Activism and Performance	
THTR 1260	Movement for the Actor	
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2335	Boston Theatre Experience	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2385	Fashion Construction and Pattern Making	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
INAM 5100	Performance Studies	

## Theatre Major Credit Requirement

Complete 61 semester hours in the major. The performance and production concentrations require 68 semester hours.

## Program Requirement

132 total semester hours required

## Theatre Performance Concentration

A minimum grade of C is required for all theatre courses in the performance concentration.

Code	Title	Hours
<b>Performance</b>		
THTR 1260	Movement for the Actor	4
THTR 2342	Acting 2	4
THTR 2600	Voice and Speech for the Actor	4
<b>Electives</b>		
Complete three of the following:		12

THTR 1215	Activism and Performance
THTR 2300	Classics of Global Theatre
THTR 2310	History of Musical Theatre
THTR 2315	Rebels of Modern Drama
THTR 2330	Playwriting
THTR 2335	Boston Theatre Experience
THTR 2340	Theatre and Society
THTR 2345	Acting for the Camera
THTR 2346	Viewpoints
THTR 2370	Lighting Design
THTR 2380	Costume Design
THTR 2385	Fashion Construction and Pattern Making
THTR 2400	Scenic Design
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage (Designing Combat for the Stage)
THTR 3450	Acting 3
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
INAM 5100	Performance Studies

### Theatre Production Concentration

A minimum grade of C is required for all theatre courses in the production concentration.

Code	Title	Hours
<b>Design and Production</b>		
Complete four of the following:		16
THTR 1230	The Evolution of Fashion and Costume	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2385	Fashion Construction and Pattern Making	
THTR 2400	Scenic Design	
<b>Electives</b>		
Complete two of the following:		8
THTR 1215	Activism and Performance	
THTR 1235	Fashion and Costume Design in Film and Television	
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2330	Playwriting	
THTR 2335	Boston Theatre Experience	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	

THTR 2380	Costume Design
THTR 2385	Fashion Construction and Pattern Making
THTR 2400	Scenic Design
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
INAM 5100	Performance Studies

### Plan of Study

Theatre, BA

#### SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1000	1	THTR 1131	4	Elective	4	Vacation	0
THTR 1100	1	Theatre texts and context #1	4	Elective	4		
THTR 1101	4	Theatre elective #1	4				
THTR 1120	4	Elective	4				
ENGW 1111	4						
Elective	4						
		18	16	8	0		

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1270	4	Co-op #1	4	Co-op #1	4	Foreign Language	0
THTR 2000	1	Online elective	4			Elective	4
THTR 2325	4						
Theatre Elective #2	4						
Elective	4						
EEAM 2000	1						
		18	4	0	8		

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 3702	1	Co-op #2	4	Co-op #2	4	Elective	0
Theatre texts and context #2	4	Online elective	4			Elective	4
Theatre elective #3	4						
Foreign language	4						
Elective	4						
		17	4	0	8		

**Year 4**

Fall	Hours	Spring	Hours
THTR 4100	1	THTR 4702	4
Theatre elective #4	4	Theatre advanced technique	4
Foreign Language	4	Elective	4
Theatre elective #5	4	Elective	4
Elective	4		
	17		16

Total Hours: 134

**Theatre, BS**

The Northeastern Department of Theatre is dedicated to creativity, collaboration, and excellence in the pursuit of innovative ways to see, to investigate, and to make theatre for a new generation. We offer students a transformative theatre education by aligning performance and production with academic inquiry and professional experiential learning. Our multidimensional students develop a unique understanding of professionalism and entrepreneurship as the foundations of meaningful careers. We embrace diverse methods, philosophies, and measures of success. Through values of generosity, integrity, respect, and rigor, we explore theatre as a living art that engages with our global society and the moment in which we live.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Formal and Quantitative Reasoning (FQ), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Analyzing and Using Data (AD) must be met through general electives.

**Theatre Major Requirements**

A minimum grade of C is required for all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1000	Theatre at Northeastern	1
THTR 1101	Introduction to Theatre	4

THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
THTR 4100	Senior Career Seminar	1

**Theatre Texts and Context**

At least one the Theatre Texts and Contexts course must be at the 2000-level or above.

Complete one of the following: 4

THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 3200	Queer Theatre and Performance	

Complete one of the following: 4

THTR 1215	Activism and Performance	
THTR 2340	Theatre and Society	
THTR 3100	Creative Storytelling for Social Engagement	

**Making Theatre**

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 3702	Rehearsal and Production: The Art of Collaboration	1
THTR 4702	Capstone Rehearsal and Performance	4

**Advanced Technique**

Complete one of the following: 4

Students concentrating in theatre performance should complete THTR 3300, THTR 3450 or THTR 3550.

Students concentrating in production should complete THTR 3550 or THTR 3600.

THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3450	Acting 3 (Theatre Performance Concentration)	
THTR 3550	Directing for the Stage	

**Electives**

Complete the following electives or choose one of the concentrations below (p. 238).

Code	Title	Hours
Complete five of the following: 20		
THTR 1215	Activism and Performance	
THTR 1260	Movement for the Actor	
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2335	Boston Theatre Experience	
THTR 2340	Theatre and Society	

THTR 2342	Acting 2
THTR 2345	Acting for the Camera
THTR 2346	Viewpoints
THTR 2370	Lighting Design
THTR 2380	Costume Design
THTR 2385	Fashion Construction and Pattern Making
THTR 2400	Scenic Design
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 2600	Voice and Speech for the Actor
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
INAM 5100	Performance Studies

### Theatre Major Credit Requirement

Complete 61 semester hours in the major. The performance and production concentrations require 68 semester hours.

### Program Requirement

132 total semester hours required

### Theatre Performance Concentration

A minimum grade of C is required for all theatre courses in the performance concentration.

Code	Title	Hours
<b>Performance</b>		
THTR 1260	Movement for the Actor	4
THTR 2342	Acting 2	4
THTR 2600	Voice and Speech for the Actor	4
<b>Electives</b>		
Complete three of the following:		12
THTR 1215	Activism and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2330	Playwriting	
THTR 2335	Boston Theatre Experience	
THTR 2340	Theatre and Society	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2385	Fashion Construction and Pattern Making	
THTR 2400	Scenic Design	
THTR 3100	Creative Storytelling for Social Engagement	

THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
INAM 5100	Performance Studies

### Theatre Production Concentration

A minimum grade of C is required for all theatre courses in the production concentration.

Code	Title	Hours
<b>Design and Production</b>		
Complete four of the following:		16
THTR 1230	The Evolution of Fashion and Costume	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2385	Fashion Construction and Pattern Making	
THTR 2400	Scenic Design	
<b>Electives</b>		
Complete two of the following:		8
THTR 1215	Activism and Performance	
THTR 1235	Fashion and Costume Design in Film and Television	
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2330	Playwriting	
THTR 2335	Boston Theatre Experience	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2385	Fashion Construction and Pattern Making	
THTR 2400	Scenic Design	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
INAM 5100	Performance Studies	

## Plan of Study

### Theatre, BS

#### SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER

##### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
THTR 1000	1 THTR 1131	4 Elective	4 Vacation	0
THTR 1100	1 Theatre texts and context #1	4 Elective	4	
THTR 1101	4 Theatre elective #1	4		
THTR 1120	4 Elective	4		
ENGW 1111	4			
Elective	4			
	18	16	8	0

##### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
THTR 2000	1 Co-op #1	Co-op #1	0 Elective	4
THTR 1270	4 Online elective	4	Elective	4
THTR 2325	4			
Theatre Elective #2	4			
Elective	4			
EEAM 2000	1			
	18	4	0	8

##### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
THTR 3702	1 Co-op #2	Co-op #2	Elective	4
Theatre texts and context #2	4 Online Elective	4	Elective	4
Theatre elective #3	4			
Elective	4			
Elective	4			
	17	4	0	8

##### Year 4

Fall	Hours Spring	Hours
THTR 4100	1 Theatre advanced technique	4
Theatre elective #4	4 THTR 4702	4
Theatre elective #5	4 Elective	4
Elective	4 Elective	4
Elective	4	
	17	16

Total Hours: 134

### American Sign Language and Theatre, BS

The American Sign Language and Interpreting Education (ASLIE) Program curriculum is an intensive program of study dedicated to

preparing individuals to interact in a positive and supportive manner with members of the American Deaf Community. This program is designed to assist students in acquiring competence in American Sign Language, developing an understanding of the American Deaf Community and its culture, and applying their linguistic and cultural skills and knowledge to a particular academic area of study.

This major is designed for students who want to combine an understanding of the American Deaf Community and its culture to the study and making of theatre, including performance, design, and production. It offers both classroom and experiential learning on the creative, social, and linguistic relationship between theatre and the American Deaf Community. Students may study acting, dramatic literature, and production design to develop the skills to be professional ASL/English interpreters and/or performers for theatrical productions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### American Sign Language Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Linguistics</b>		
DEAF 2700	ASL Linguistics	4
LING 1150	Introduction to Language and Linguistics	4
<b>Interpreting</b>		
INTP 3500	The Interpreting Profession	2
INTP 3550	Interpreting Scripted Texts	4

### Theatre Requirements

Code	Title	Hours
<b>Theatre</b>		
A grade of C or higher is required for all theatre courses.		
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4



THTR 2325	From Script to Stage	4
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**Theatre Texts and Context**

Complete one of the following:		4
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THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	

**Making Theatre**

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1

**Intermediate or Advanced Technique**

Complete two of the following:		8
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THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
THTR 4345	Advanced Acting for the Camera	

**Integrative Requirement**

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
THTR 4702	Capstone Rehearsal and Performance	4

**Combined Major GPA Requirement**

Minimum 2.750 GPA required in all ASL courses

Minimum 2.500 overall GPA required

**Combined Major Credit/Grade Requirement**

Complete 88 semester hours in the major. A minimum grade of C is required for all theatre courses.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study  
Four Years, One Co-op****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 1101	4	AMSL 1102	4	Elective	4	Vacation	0
DEAF 1500	4	THTR 1120	4	Elective	4		
THTR 1100	1	THTR Text & Context 1	4				
THTR 1101	4	Elective	4				
ENGW 1111	4						
	17		16		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 2101	4	AMSL 2102	4	Vacation	0	Vacation	0
LING 1150	4	DEAF 2700	4				
DEAF 2500	4	THTR 1131	4				
THTR 1270	4	THTR Intermediate or Advanced 1	4				
THTR 2000	1						
	17		16		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTP 3550 or 3510	4	Co-op 1	4	Co-op 1	4	Elective	0
THTR 2325	4					Elective	4
INTP 3500	2						
Elective	4						
Elective	4						
EEAM 2000	1						
	19		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
ENGW 3315	4	THTR 4702	4
THTR Intermediate or Advanced 2	4	INTP 4940	4
Elective	4	AMSL 3101	4
Elective	4	Elective	4
	16		16

Total Hours: 133

**Communication Studies and Theatre, BA**

The Departments of Theatre and Communication Studies offer an interdisciplinary combined major that unites the artistic dimensions of theatre with the practical skills and theories in communication studies. The program provides both the creative study of theater performance, literature, playwriting, and directing with the ability to research and deliver a compelling speech and think critically and write effectively. The

two disciplines unite in shared values of original personal expression, professional collaboration, and experiences in the cultural, social, and ethical impact of theatre as human communication.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Creative Expression/Innovation (EI), Societies and Institutions (SI), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Difference and Diversity (DD) may be met through electives in the major.

## Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1000	Communication Studies at Northeastern	1
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1231	Principles of Organizational Communication	
COMM 1225	Communication Theory	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Courses</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	

COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 3500	Environmental Issues, Communication, and the Media
COMM 3501	Free Speech: Law and Practice
COMM 3530	Communication and Sexualities
COMM 3532	Theories of Conflict and Negotiation
COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4631	Crisis Communication and Image Management

## Communication Studies Electives

Complete three COMM courses. 12

## Theatre Requirements

A minimum grade of C is required in all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Choose one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Intermediate or Advanced Technique</b>		
Choose two of the following:		8
THTR 2310	History of Musical Theatre	
THTR 2330	Playwriting	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1

THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4

**Integrative Requirements**

Code	Title	Hours
Choose from one of the following:		
THTR 4702	Capstone Rehearsal and Performance	4
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Program Requirement**

130 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops in Spring/Summer**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000 or THTR 1000	1	COMM 1112 or 2301	4	Communication studies foundation course	4	Vacation	0
COMM 1101	4	THTR 1131	4	Communicatc studies elective	4		
THTR 1100	1	Foreign language course or elective	4				
THTR 1101	4	ENGW 1111	4				
THTR 1120	4						
Foreign language elective or THTR elective	4						
		18	16		8		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication studies cluster course	4	Co-op #1	4	Co-op #1	4	Elective	4
Communicatc studies elective	4					Elective	4
THTR 2000	1						
THTR 2325	4						
Theatre text and context	4						
EEAM 2000	1						
		18	0		0		8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1270	4	Comm writing intensive	4	Optional Co-op #2	0	Optional Co-op #2	0
THTR intermediate or advanced	4	Comm elective	4				
Foreign language or elective	4	Elective	4				
ENGW 3314 or 3315	4	Elective	4				
		16	16		0		0

Year 4			
Fall	Hours	Spring	Hours
Communication studies writing-intensive	4	Integrative course	4
THTR Intermediate or advanced elective 2	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 132

**Computer Science and Theatre, BS**

The computer science and theatre combined major is ideal for creative students who love technology as a means to expand what is possible in the performing arts. This major combines a strong foundation in computing with the opportunity to acquire a deep knowledge of theatre through curriculum that spans design, performance, and the production of innovative forms of theatre, including interactive media, computer graphics, human-computer interaction, and more.

It offers both classroom and experiential learning on the creative, social, and technological relationship between theatre and computing.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
CS 4550	Web Development	4
IS 4300	Human Computer Interaction	4

### Khoury Elective Courses

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	8
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

## Theatre Requirements

Code	Title	Hours
<b>Theatre</b>		
A grade of C or higher is required for all theatre courses.		
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete two of the following:		8
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 3200	Queer Theatre and Performance	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Intermediate or Advanced Technique</b>		
Complete one of the following:		4
THTR 2300	Classics of Global Theatre	

THTR 2310	History of Musical Theatre
THTR 2315	Rebels of Modern Drama
THTR 2330	Playwriting
THTR 2335	Boston Theatre Experience
THTR 2340	Theatre and Society
THTR 2342	Acting 2
THTR 2345	Acting for the Camera
THTR 2346	Viewpoints
THTR 2380	Costume Design
THTR 2400	Scenic Design
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2

## Integrative Requirement

Code	Title	Hours
THTR 2370	Lighting Design	4

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4

or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines
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### Required General Electives

Code	Title	Hours
Complete 28 credits of general electives.		28

### Computer Science and Theatre Combined Major Credit Requirement

A minimum of 89 semester hours is required in the major.

### Combined Major GPA Requirement

Minimum 2.000 GPA in all CS, CY, DS, IS courses

### Program Requirement

133 semester hours required

### Plan of Study

#### Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5
				Vacation	0
CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4
CS 2500 and CS 2501	5	THTR 1131	4		
THTR 1101	4	ENGW 1111	4		
THTR 1120	4				
	19		17		9
					0
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1210	1	Co-op		Co-op	
CS 3000	4			Elective	4
Khoury elective (1/2)	4			Elective	4
THTR 1270	4				
THTR 1100	1				
Elective	4				
	18		0		0
					8
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 4550	4	Co-op		Co-op	
Khoury elective (2/2)	4			ENGW 3302	4
THTR 2325	4			Elective	4
Texts and contexts (1/2)	4				
THTR 2000	1				
	17		0		0
					8
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 4500 or 4530	4	THTR 4702	4	Elective	4

IS 4300	4	Computing and social issues	4	Elective	4
Intermediate/advanced technique	4	Elective	4		
Texts and contexts (2/2)	4	Integrative requirement	4		
	16		16		8
					0

Total Hours: 136

## Cultural Anthropology and Theatre, BA

This major is designed for students who want to combine a knowledge of the art of theatre, including performance, design, and production, with sociocultural theories and conceptual frameworks for understanding human behavior. It offers both classroom and experiential learning in the practice of making theatre and performance theories with cross-cultural approaches. Offers students the opportunity to develop an understanding of theatre's impact on past and present cultures, as well as a deeper awareness of the world in which they live.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Anthropology Requirements

Code	Title	Hours
Foundation Courses		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4
Advanced Area Courses		
Complete two of the following:		
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

### Anthropology Electives

Complete three courses in the following range. Two study-abroad courses may count toward this requirement with prior permission from the department: 12

ANTH 2300 to ANTH 4999

### Social Science Electives

Complete three social science courses from the following subject areas: 12

AFRS, AFAM, CRIM, ECON, HUSV, HIST, INTL, LING, LPSC, POLS, PSYC, SOCL

## Theatre Requirements

A minimum grade of C is required in all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Intermediate or Advanced Technique</b>		
Complete two of the following:		8
THTR 2310	History of Musical Theatre	
THTR 2330	Playwriting	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3400	Designing Combat for the Stage	
THTR 4345	Advanced Acting for the Camera	

## Integrative Requirements

Code	Title	Hours
THTR 4702	Capstone Rehearsal and Performance <sup>1</sup>	4
ANTH 2300	Reading Culture through Ethnography	4

<sup>1</sup> THTR 4702 is permitted to also count as an integrative course.

## Cultural Anthropology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Four Years, One Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1000	1	THTR 1120	4	Elective	4	Vacation	4
THTR 1100	1	THTR 1131	4	Elective	4		
THTR 1101	4	ANTH 2305	4				
ANTH 1101	4	ANTH elective	4				
Social science elective	4						
ENGW 1111	4						
		18	16		8		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 2000	1	THTR text and context elective	4	Vacation	4	Vacation	4
THTR 2325	4	THTR 1270	4				
ANTH 2300	4	Foreign language	4				
THTR elective	4	ANTH 3421	4				
ANTH elective	4						
		17	16		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH elective	4	Co-op	4	Co-op	4	Elective	4
THTR intermediate or advanced <sup>1</sup>	4					Foreign language	4
Foreign language	4						
Social science elective	4						

EEAM 2000	1			
	17	0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
ANTH advanced 1	4	Foreign language	4	
THTR intermediate or advanced 2	4	Social science elective	4	
Foreign language	4	ANTH advanced 2	4	
ANTH 3410	4	THTR 4702	4	
	16		16	

Total Hours: 132

## English and Theatre, BA

The Department of Theatre and Department of English offer an interdisciplinary combined major that integrates performance, design, production, and dramatic literature with literary studies, digital humanities, and creative writing. This combined major offers both classroom and experiential learning in making theatre, playwriting, and dramaturgy with the study of the diverse historical, cultural, and aesthetic contexts of literature. Students develop the capacity for interpreting a variety of texts through performance and writing to engage audiences.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160 or ENGL 1410	Introduction to Rhetoric Introduction to Research on Writing	4
<b>Diversity</b>		

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below: 4

ENGL 2150	Literature and Digital Diversity
ENGL 2296	Early African-American Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2760	Writing in Global Contexts
ENGL 2470	Asian-American Literature
ENGL 3663	The African American Novel
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature

### Pre-Nineteenth-Century Literature

Complete one of the following: 4

ENGL 1600	Introduction to Shakespeare
ENGL 1700	Global Literatures 1
ENGL 2296	Early African-American Literature
ENGL 3101	Early Literatures
ENGL 3120	17th- and 18th-Century Literatures
ENGL 3618	Milton
ENGL/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

### Nineteenth-, Twentieth-, and Twenty-First-Century Literature

Complete one of the following: 4

ENGL 2301	The Graphic Novel
ENGL 2330	The American Renaissance
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3140	19th-Century Literatures
ENGL 3619	Emerson and Thoreau
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3720	19th-Century Major Figure
ENGL 3730	20th- and 21st-Century Major Figure

### Theories and Methods

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3700	Narrative Medicine
ENGL 4410	Research in Rhetoric and Writing
LING 1150	Introduction to Language and Linguistics

LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

**Comparative Literature**

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1500	British Literature to 1800
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

**English Electives**

Complete two additional ENGL electives. 8

**Theatre Requirements**

A minimum grade of C is required in all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1000	Theatre at Northeastern	1
or ENGL 1000	English at Northeastern	

THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

**Theatre Texts and Context**

Complete one of the following: 4

THTR 1220	Race, Power, and Performance
THTR 2300	Classics of Global Theatre
THTR 2315	Rebels of Modern Drama
THTR 2320	Classics of 20th-Century American Drama
THTR 2340	Theatre and Society

**Making Theatre**

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4

**Intermediate or Advanced Technique**

Complete two of the following: 8

THTR 2310	History of Musical Theatre
THTR 2330	Playwriting
THTR 2342	Acting 2
THTR 2345	Acting for the Camera
THTR 2346	Viewpoints
THTR 2370	Lighting Design
THTR 2380	Costume Design
THTR 2400	Scenic Design
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
THTR 3100	Creative Storytelling for Social Engagement
THTR 4345	Advanced Acting for the Camera

**Integrative Requirements**

Courses used in the integrative requirements cannot double-count in other areas of the major.

Code	Title	Hours
<b>Integrative Courses</b>		
ENGL 1600	Introduction to Shakespeare	4
THTR 2315	Rebels of Modern Drama	4
or THTR 2320	Classics of 20th-Century American Drama	

**English and Theatre Major Credit Requirement**

90 semester hours required in the major

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).



## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Four Years, One Co-op

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
THTR 1000 or ENGL 1000	1 THTR 1131	4 Elective	4 Vacation	
THTR 1100	1 ENGL 1160 or 1410	4 Elective	4	
THTR 1101	4 THTR 1270	4		
THTR 1120	4 ENGL elective	4		
ENGL 1400	4			
ENGL comparative requirement	4			
	18	16	8	0

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGL 1600	4 Co-op	Co-op	Vacation	
THTR 2000	1			
THTR 2325	4			
THTR 2315 or 2320	4			
ENGL pre-19th-century requirement	4			
EEAM 2000	1			
	18	0	0	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGL 19th-, 20th-, or 21st-Century requirement	4 Foreign Language	4 Foreign Language	4 Vacation	
ENGL Theories & Methods requirement	4 ENGL diversity requirement	4 Elective	4	
THTR Intermediate or Advanced Technique elective	4 THTR Intermediate or Advanced Technique	4		
THTR Text and Context elective	4 Elective	4		
	16	16	8	0

#### Year 4

Fall	Hours Spring	Hours
ENGL writing requirement	4 THTR 4702	4
ENGL elective	4 Foreign Language	4

Elective	4 ENGL Capstone	4
Elective	4 Elective	4
	16	16

Total Hours: 132

## Media and Screen Studies and Theatre, BA

This major is designed for students who want to combine a knowledge of the art of theatre with the theories and conceptual frameworks of media and film studies. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design with related studies in screenwriting, media technology, and media production. Students have an opportunity to develop a personalized technique for the practices of making theatre, film, and television as engaged citizens and creative artists.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirement Natural and Designed World (ND) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirement</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320 or MSCR 1420	Media and Social Change or Media History	4
<b>Foundation Courses</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 2325	Global Media	

MSCR 2505	Digital Feminisms
MSCR 3392	Gender and Film
MSCR 3437	Media and Identity
<b>Writing Intensive</b>	
Complete two of the following: 8	
MSCR 2505	Digital Feminisms
MSCR 3600	Film Theory
MSCR 3420	Digital Media Culture
MSCR 3422	Media Audiences
MSCR 3700	Queer Media
MSCR 4208	TV History

## Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following: 12		
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

## Theatre Requirements

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

### Theatre Texts and Context

Complete one of the following: 4		
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	

### Making Theatre

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1

### Intermediate or Advanced Technique

Complete two of the following: 8		
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	

THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	

## Integrative Requirement

Code	Title	Hours
Choose one of the following courses: 4		
MSCR 4623	Theories of Media and Culture	
THTR 4702	Capstone Rehearsal and Performance	

## Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements

## Theatre Grade Requirement

A minimum grade of C is required for all theatre courses.

## Program Requirement

130 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4
MSCR 1220	4	MSCR Foundation	4	Elective	4
THTR 1101	4	THTR 1131	4		
THTR 1120	4	THTR 1270	4		
ENGW 1111	4				
		17	16		8

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR Diversity/Globalization	4	Co-op		Co-op	
MSCR Elective	4			Foreign language core course	4
THTR 2325	4			Elective	4
THTR texts and context elective	4				

EEAM 2000	1				
THTR 1100	1				
	18	0	0		8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
MSCR Writing Intensive	4 Co-op	Co-op	Elective		4
MSCR Elective	4		Elective		4
Intermediate or advanced technique elective	4				
Foreign language core course	4				
THTR 2000	1				
	17	0	0		8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
MSCR Writing Intensive	4 MSCR Elective	4			
Intermediate or advanced technique elective	4 Integrative course	4			
Foreign language core course	4 Elective	4			
Elective	4 Elective	4			
	16	16			

Total Hours: 132

## Media and Screen Studies and Theatre, BS

This major is designed for students who want to combine a knowledge of the art of theatre with the theories and conceptual frameworks of media and film studies. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design with related studies in screenwriting, media technology, and media production. Students have an opportunity to develop a personalized technique for the practices of making theatre, film, and television as engaged citizens and creative artists.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirement Natural and Designed World (ND) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

## Theatre Requirements

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
<b>Intermediate or Advanced Technique</b>		
Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	

## Integrative Requirement

Code	Title	Hours
Choose one of the following courses:		4
MSCR 4623	Theories of Media and Culture	
THTR 4702	Capstone Rehearsal and Performance	

## Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

## Theatre Grade Requirement

A minimum grade of C is required for all theatre courses.

## Program Requirement

130 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Elective	4
THTR 1101	4	THTR 1131	4		
THTR 1120	4	THTR 1270	4		
ENGW 1111	4				
		17		16	
				8	
					8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR diversity/globalization	4	Co-op		Co-op	
MSCR elective	4			Elective	4
THTR 2325	4				
THTR texts and context elective	4				
EEAM 2000	1				
THTR 1100	1				
		18		0	
				0	
					8
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR writing-intensive	4	Co-op		Co-op	
MSCR elective	4			Elective	4
Intermediate or advanced technique elective	4				
THTR 2000	1				
Elective	4				
		17		0	
				0	
					8
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR writing-intensive	4	MSCR elective	4		

Intermediate or advanced technique elective	4 Integrative course	4
Elective	4 Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 132

## Theatre and Interaction Design, BA

This program is designed for students who want to combine a knowledge of the art of theatre with the theories and practice-based design disciplines. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design practices. Design is the practice-based discipline raising important questions about—and providing significant answers to—how we live. Designers are needed when we don't know what is needed. Designers propose alternative futures and create new choices using design principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Theatre Requirements

A minimum grade of C is required for all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Major Elective</b>		
Complete one of the following:		4
THTR 1220	Race, Power, and Performance	

THTR 2300	Classics of Global Theatre
THTR 2315	Rebels of Modern Drama
THTR 2320	Classics of 20th-Century American Drama
THTR 2340	Theatre and Society
<b>Intermediate/Advanced Electives</b>	
Complete two of the following:	
8	
THTR 2300	Classics of Global Theatre
THTR 2310	History of Musical Theatre
THTR 2315	Rebels of Modern Drama
THTR 2320	Classics of 20th-Century American Drama
THTR 2330	Playwriting
THTR 2340	Theatre and Society
THTR 2342	Acting 2
THTR 2345	Acting for the Camera
THTR 2346	Viewpoints
THTR 2300	Classics of Global Theatre
THTR 2370	Lighting Design
THTR 2380	Costume Design
THTR 2400	Scenic Design
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 2600	Voice and Speech for the Actor
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
THTR 4345	Advanced Acting for the Camera

### Interaction Design Requirements

Code	Title	Hours
<b>Art + Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art + Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2260	Programming Basics	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4
<b>Design Project</b>		

ARTG 4550	Design Degree Project 1	4
<b>Major Electives</b>		
<i>Art + Design History</i>		
Complete two of the following:		8
ARTH 1111	Global Art and Design History. Renaissance to Modern	
ARTH 2210	Modern Art and Design History	
ARTH 2215	History of Graphic Design	
<i>Art + Design Elective</i>		
Complete one of the following:		4
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 3460	Identity and Brand Design	
ARTG 4554	Typography 3	

### Integrative Requirement

Code	Title	Hours
ARTG 4550	Design Degree Project 1	4
THTR 4702	Capstone Rehearsal and Performance	4

Note: ARTG 4550 double counts with the specified requirements above.

### Theatre and Interaction Design Combined Major Credit Requirement

Complete 94 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1000 or ARTF 1000	1	THTR 1101	4	Elective	4	Elective	4
THTR 1120	4	THTR 1131	4	Elective	4	Elective	4
ENGW 1111	4	ARTF 2223 (with optional ARTF 2224)	4				
ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4				
ARTG 1250	4						
		17	16		8		8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000	1	Co-op 1		Co-op 1		Elective	4
Art + design history elective 1	4					Elective	4
THTR 2000	1						
THTR 1270	4						
ARTG 2260	4						
THTR 2325	4						
		18	0		0		8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 2400 (with optional ARTG 2401)	4	Co-op 2		Co-op 2		Elective	4
ARTG 3350	4					Elective	4
Art + design elective 1	4						
THTR elective	4						
		16	0		0		8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Art + design history elective 2	4	THTR 4702	4	Vacation		Vacation	0
THTR elective	4	THTR advanced technique	4				
ARTG 3700	4	ARTG 3451	4				
ARTG 4550	4	Elective	4				
THTR 4100	1						
		17	16		0		0

Total Hours: 132

### Theatre and Interaction Design, BS

This program is designed for students who want to combine a knowledge of the art of theatre with the theories and practice-based design disciplines. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design practices. Design is the practice-based discipline raising important questions about—and providing significant answers to—how we live. Designers are needed when we don't know what is needed. Designers propose alternative futures and create new choices using design principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Theatre Requirements

A minimum grade of C is required for all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Major Electives</b>		
Complete one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Intermediate/Advanced Electives</b>		
Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2300	Classics of Global Theatre	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	

THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
THTR 4345	Advanced Acting for the Camera

## Interaction Design Requirements

Code	Title	Hours
<b>Art + Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art + Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optionals ARTG 2251)	4
ARTG 2260	Programming Basics	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4
<b>Design Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Major Electives</b>		
<i>Art + Design History</i>		
Complete two of the following:		8
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 2210	Modern Art and Design History	
ARTH 2215	History of Graphic Design	
<i>Art + Design Elective</i>		
Complete one of the following:		4
ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	
ARTD 2380	Video Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time	
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 3460	Identity and Brand Design	
ARTG 4554	Typography 3	
<b>Integrative Requirement</b>		
<b>Code</b>	<b>Title</b>	<b>Hours</b>
Note: ARTG 4550 double counts with the specified requirements above.		
ARTG 4550	Design Degree Project 1	4
THTR 4702	Capstone Rehearsal and Performance	4

## Theatre and Interaction Design Combined Major Credit Requirement

Complete 94 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
THTR 1000 or ARTF 1000	1	THTR 1101	4	Elective	4	Elective	4	4
THTR 1120	4	THTR 1131	4	Elective	4	Elective	4	4
ENGW 1111	4	ARTF 2223 (with optional ARTF 2224)	4					
ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4					
ARTG 1250	4							
	17		16		8		8	

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
EEAM 2000	1	Co-op 1		Co-op 1		Elective	4	4
Art + design history elective 1	4					Elective	4	4
THTR 2000	1							
THTR 1270	4							
ARTG 2260	4							
THTR 2325	4							
	18		0		0		8	

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
ARTG 2400 (with optional ARTG 2401)	4	Co-op 2		Co-op 2		Elective	4	4
ARTG 3350	4					Elective	4	4
Art + design elective 1	4							
THTR elective	4							
	16		0		0		8	

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
Art + design history elective 2	4	THTR 4702	4	Vacation		Vacation	0	0
THTR elective	4	THTR advanced technique	4					
ARTG 3700	4	ARTG 3451	4					

ARTG 4550 or 4700	4	Elective	4				
THTR 4100	1						
	17		16		0		0

Total Hours: 132

### Global Fashion Studies, Minor

The international scope of this multidisciplinary minor is on the context, culture, practices, and trends in the fashion industry. It is designed for students interested in fashion marketing, retailing, media, and technology. Students have an opportunity to learn to identify, analyze, and communicate how the fashion industry functions artistically, socially, historically, and economically in a global market.

### Minor Requirements

Complete all courses listed below unless otherwise indicated.

A student pursuing the minor in global fashion studies may double count up to one course between this minor and the student's declared major(s) and minor(s).

### Required Courses

Code	Title	Hours
Complete one of the following: 4		
THTR 1236	Introduction to Global Fashion Studies: History, Theory, and Contemporary Practice	
THTR 1237	Introduction to Global Fashion Studies Abroad: History, Theory, and Contemporary Practice	

### Electives

Code	Title	Hours
Complete two of the following: 8		
ARTE 4901	Special Topics in Art and Design Studio (Fashion Photography Only)	
THTR 1230	The Evolution of Fashion and Costume	
THTR 1233	Nineteenth- and Twentieth-Century Fashion in Europe	
THTR 1235	Fashion and Costume Design in Film and Television	
THTR 1240	Fashion Industry and Trend Forecasting in Europe	
THTR 2242	Fashion Retailing	
THTR 2385	Fashion Construction and Pattern Making	
THTR 3350	Fashion Marketing and Merchandising in Europe	
Complete one of the following OR a third course from the list above: 4		
ARTD 2350	Photo Basics for Nonmajors	
ARTG 1250	Design Process Context and Systems	
ARTG 2260	Programming Basics	
COMM 3445	Public Relations Principles	
COMM 3451	Advertising Practices	
JRNL 3425	Public Relations Principles	



JRNL 5310	Photojournalism
THTR 2380	Costume Design

### GPA Requirement

2.000 GPA required in the minor

### Improvisation and Storytelling, Minor

The minor in improvisation and storytelling is intended for students interested in integrating the creativity of actor training and the practical techniques of public speaking. Students are encouraged to choose courses to empower their voice and speech, cultivate their onstage persona, and develop high-impact presentation skills to enhance career prospects. This minor, which features classes offered by the Department of Theatre and the Department of Communication Studies, seeks to create more confident, creative, and compelling communicators.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Common Requirements

Code	Title	Hours
COMM 1511	Communication and Storytelling	4
THTR 1125	Improvisation	4

### Communication Studies Elective

Code	Title	Hours
Complete one of the following:		4
COMM 1112	Public Speaking	
COMM 1113	Business and Professional Speaking	
COMM 1210	Persuasion and Rhetoric	

### Theatre Elective

Code	Title	Hours
Complete one of the following:		4
THTR 1130	Introduction to Acting	
THTR 1160	The Professional Voice	
THTR 2345	Acting for the Camera	

### GPA Requirement

2.000 GPA required in the minor

### Musical Theatre, Minor

Uniting acting, singing, and dance, the musical theatre minor provides foundational skills in musical theatre performance and the exploration of the culture and evolution of the musical form. This minor combines theatre courses in performance and Broadway history with additional course options from the Department of Music.

### Minor Requirements

Complete all courses listed below unless otherwise indicated.

Note: Students pursuing a music theatre minor may double count up to one course between that minor and the student's declared major and other minors.

### For Theatre Majors (Not Including Combined Majors):

#### REQUIRED COURSES

Code	Title	Hours
THTR 1500	Musical Theatre Performance 1	4
MUSC 1119	Fundamentals of Western Music Theory	4
or MUSC 1201	Music Theory 1	

#### MAKING MUSICAL THEATRE

Code	Title	Hours
Complete one of the following:		1
MUSC 1901	Music Lessons 1	
THTR 1100	Production Experience 1	

#### ELECTIVES

Code	Title	Hours
Complete two of the following:		8
MUSC 1142	Pop, Jazz, and Rock Singing	
THTR 1150	Dance Performance and History: Modern to Hip Hop	
THTR 1260	Movement for the Actor	
MUSC 2107	Introduction to Opera	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
THTR 2310	History of Musical Theatre	
THTR 3570	Musical Theatre Performance 2	

### For Music Majors (Not Including Combined Majors):

#### REQUIRED COURSES

Code	Title	Hours
THTR 1130	Introduction to Acting	4
THTR 1500	Musical Theatre Performance 1	4

#### MAKING MUSICAL THEATRE

Code	Title	Hours
Complete one of the following:		1
MUSC 1901	Music Lessons 1	
THTR 1100	Production Experience 1	

#### ELECTIVES

Code	Title	Hours
Complete two of the following:		8
THTR 1101	Introduction to Theatre	
MUSC 1142	Pop, Jazz, and Rock Singing	
THTR 1150	Dance Performance and History: Modern to Hip Hop	
THTR 1260	Movement for the Actor	
MUSC 2107	Introduction to Opera	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
THTR 2310	History of Musical Theatre	
THTR 3570	Musical Theatre Performance 2	

**For All Other Majors (Including Combined Majors):****REQUIRED COURSES**

Code	Title	Hours
THTR 1130	Introduction to Acting	4
THTR 1500	Musical Theatre Performance 1	4

**MAKING MUSICAL THEATRE**

Code	Title	Hours
Complete one of the following:		1
MUSC 1901	Music Lessons 1	
THTR 1100	Production Experience 1	

**ELECTIVES**

Code	Title	Hours
Complete two of the following:		8
THTR 1101	Introduction to Theatre	
MUSC 1119	Fundamentals of Western Music Theory	
MUSC 1142	Pop, Jazz, and Rock Singing	
THTR 1150	Dance Performance and History: Modern to Hip Hop	
THTR 1260	Movement for the Actor	
MUSC 2107	Introduction to Opera	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
THTR 2310	History of Musical Theatre	
THTR 3570	Musical Theatre Performance 2	

**GPA Requirement**

2.000 GPA required in the minor

**Performing Arts Administration, Minor**

Connecting a range of College of Arts, Media and Design courses, this minor prepares students to work in nonprofit arts organizations such as theatre companies, concert venues, and performance centers. Students have an opportunity to develop valuable skills in artistic programming, marketing, organizational communication, public relations, community outreach, and the entertainment business.

**Program Requirements**

Complete all courses listed below unless otherwise indicated.

Students pursuing a performing arts administration minor may double count up to one course between that minor and the student's declared major and other minors. Should a student place out of a course in a minor it must be replaced with another course.

**Notes:**

- No student may receive a theatre minor as a result of external transfer credit only.
- Music majors cannot use Performing Arts Administration (MUSI 2330) as a major elective due to double-counting policy outlined above.

**Foundational Courses**

Code	Title	Hours
Complete one of the following:		4
THTR 1101	Introduction to Theatre	

MUSC 1001	Music in Everyday Life	
MUSI 1230	Introduction to Music Industry	

**Required Course**

Code	Title	Hours
MUSI 2330	Performing Arts Administration	4

**Electives**

Code	Title	Hours
Complete two of the following (prerequisites may apply):		8
COMM 1113	Business and Professional Speaking	
COMM 1231	Principles of Organizational Communication	
COMM 2350	Producing for the Entertainment Industry	
COMM 2650	The Business of Entertainment	
COMM 3451	Advertising Practices	
JRNL 3425	Public Relations Principles	
MUSI 2234	Festivals	
MUSI 2235	Copyright in the Creative Industries	
MUSI 3338	Music Industry Marketing and Promotion	
MUSI 3340	Concert Promotion and Venue Management	
THTR 2335	Boston Theatre Experience	
AACE 6000	Arts and Culture Organizational Leadership	

**GPA Requirement**

2.000 GPA required in the minor

**Playwriting, Minor**

This minor is designed for students interested in writing for stage and screen. Uniting the study of significant works of drama with the creative writing process, students explore diverse styles of plays, playwrights, theories, forms, and movements. This minor includes course options from the Departments of English, Communications Studies, and Media and Screen Studies.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated.

**Required Courses**

Code	Title	Hours
THTR 1101	Introduction to Theatre	4
THTR 2330	Playwriting	4

**Electives**

Code	Title	Hours
Complete two of the following:		8
ENGL 1600	Introduction to Shakespeare	
COMM 1511	Communication and Storytelling	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	

THTR 2325	From Script to Stage
THTR 2335	Boston Theatre Experience
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
MSCR 3389	Screenwriting
THTR 3300	Devised Theatre Project: Collaborative Performance

### GPA Requirement

2.000 GPA required in the minor

### Theatre, Minor

Theatre minors select a dynamic artistic path that uniquely matches their personal interests in areas such as acting, stage design, technical production, and dramatic literature, whether for career exploration or creative expression. Minors are active participants in department productions who develop the foundational techniques and collaborative skills to make imaginative, innovative theatre.

### Minor Requirements

Complete all courses listed below unless otherwise indicated.

*Note:* No student may receive a theatre minor as a result of external transfer credit only.

### Required Course

Code	Title	Hours
THTR 1101	Introduction to Theatre	4

### Foundational Courses

Code	Title	Hours
Complete one of the following:		4
THTR 1130	Introduction to Acting	
THTR 1131	Technical Theatre 1	
THTR 1270	Introduction to Theatrical Design	
THTR 2325	From Script to Stage	

### Electives

Code	Title	Hours
Choose two courses from the following options (prerequisites may apply):		8
THTR 1125	Improvisation	
THTR 1130	Introduction to Acting	
THTR 1131	Technical Theatre 1	
THTR 1160	The Professional Voice	
THTR 1215	Activism and Performance	
THTR 1270	Introduction to Theatrical Design	
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2325	From Script to Stage	
THTR 2330	Playwriting	

THTR 2335	Boston Theatre Experience
THTR 2340	Theatre and Society
THTR 2342	Acting 2
THTR 2345	Acting for the Camera
THTR 2346	Viewpoints
THTR 2370	Lighting Design
THTR 2380	Costume Design
THTR 2400	Scenic Design
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 2600	Voice and Speech for the Actor
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3450	Acting 3
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3400	Designing Combat for the Stage

### Making Theatre

Code	Title	Hours
Participate in a theatre department production:		
THTR 1100	Production Experience 1	1

### GPA Requirement

2.000 GPA required in the minor

### Theatre, Performance, and Social Change, Minor

The theatre, performance, and social change minor helps to prepare students for the challenges of world citizenship by developing competencies in theoretical, historical, and contextual knowledge alongside the technical skills to express their understanding of diverse social issues by making narratives, theatre, and performances. The minor's selected courses focus on enlarging students' ability to identify social problems; explore social movements; and make sensitive, ethical, and artistic choices in performance creation. In addition, students are encouraged to think strategically about the material realities of creating performance for social change.

### Minor Requirements

Complete all courses listed below unless otherwise indicated.

*Note:* No student may receive a theatre minor as a result of external transfer credit only.

### Foundational Courses

Code	Title	Hours
THTR 1215	Activism and Performance	4
THTR 2340	Theatre and Society	4

### Theatrical Interventions in Social Issues

Code	Title	Hours
Complete one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2315	Rebels of Modern Drama	

THTR 2320	Classics of 20th-Century American Drama
THTR 2330	Playwriting
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
INAM 5100	Performance Studies

## Community Engagement

Code	Title	Hours
Complete one of the following:		4
COMM 1412	Social Movement Communication	
HUSV 1101	Social Change and Human Services	
HUSV 3520	Child Intervention and Treatment	
JRNL 5309	News Documentary Production	
JRNL 5310	Photojournalism	
POLS 3100	Gender, Social Justice, and Transnational Activism	
or SOCL 3100	Gender, Social Justice, and Transnational Activism	
or WMNS 3100	Gender, Social Justice, and Transnational Activism	

## GPA Requirement

2.00 GPA required in the minor

## Theatrical Design, Minor

This minor is intended for students with an interest in design as the collaborative art of transforming ideas into images that support live performance; design as an expression of human experience; design as a method of inquiry and problem solving. It encourages interdisciplinary learning by connecting the study of theatre with studio art, visual communication, design thinking, spatial design, and visual storytelling.

The theatrical design minor combines courses from the Department of Theatre with additional choices from the Department of Art + Design, the Department of Music, and the School of Architecture.

## Minor Requirements

Complete all courses listed below unless otherwise indicated.

### Foundational Requirements

Code	Title	Hours
THTR 1100	Production Experience 1	1
THTR 1270	Introduction to Theatrical Design	4

### Design Area

Code	Title	Hours
Complete two of the following:		8
THTR 1131	Technical Theatre 1	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
MUST 2320	Sound Design	

## Interdisciplinary Elective

Code	Title	Hours
Complete one of the following:		4
ARTG 1250	Design Process Context and Systems	
ARCH 1450	Understanding Design	
ARTG 3462	Experience Design 1	
THTR 1131	Technical Theatre 1	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
MUST 2320	Sound Design	

## GPA Requirement

2.000 GPA required in the minor

## Interdisciplinary

## Minors

- Creativity in Theory and Practice (p. 259)

## Creativity in Theory and Practice, Minor

The Minor in Creativity in Theory and Practice offers students the opportunity to get inside the mindset of creativity from a variety of angles and develop perspectives that foster persistently creative habits of mind and practice—as one of the most important ways of thinking valued for innovative work across all fields and disciplines.

The minor is built around three carefully crafted core courses that introduce design thinking and expression, the ethics of creative practice, and the science of creativity. Students will have the opportunity to put those theories and concepts into practice with a broad selection of "making" electives across a variety of disciplines.

This minor is intended to enhance all disciplines across the university, from art, design, and communication to business, engineering, computer science, and more.

## Minor Requirements

Note: Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Required Courses

Code	Title	Hours
INAM 1450	Understanding Design	4
INAM 2000	Ethics in Creativity	4
INAM 3200	Creative Cognition	4

## Creativity in Making Elective

Code	Title	Hours
Complete one of the following (students may also petition to take an alternative making course):		4
ARCH 1110	Fundamental Architectural Representation	
ARCH 1120	Fundamental Architectural Design	
ARCH 2345	Contemporary Architecture	
ARCH 3352	Architecture Topics Abroad: Drawing	

ARTD 2360	Introduction to Photography
ARTF 1120	Observational Drawing
ARTF 1122	Color and Composition
ARTG 1250	Design Process Context and Systems
ARTS 2340	Painting Basics
COMM 1450	Sound Production for Digital Media
COMM 2550	Television Field Production
COMM 2655	Television Studio Production
COMM 3655	Digital Editing for TV
GAME 1110	Games and Society
JRNL 2301	Visual Storytelling in Journalism
JRNL 3370	Podcast and Radio Journalism
JRNL 5310	Photojournalism
JRNL 5311	Design for Storytelling
LARC 2430	Plants, People, and Landscape Change
LARC 2440	Planting Design
MSCR 1230	Introduction to Film Production
MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2208	Jazz Improvisation
MUSC 2209	Conducting
MUSC 2210	Introduction to Songwriting
MUST 1301	Introduction to Composition
MUST 2320	Sound Design
THTR 1125	Improvisation
THTR 1130	Introduction to Acting
THTR 1160	The Professional Voice
THTR 1270	Introduction to Theatrical Design
THTR 2330	Playwriting
THTR 2346	Viewpoints

The following courses have prerequisites but may be taken with permission of the instructor:

JRNL 5314	Video News Reporting and Producing
THTR 2342	Acting 2
THTR 2345	Acting for the Camera
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3

### Accelerated Bachelor/Graduate Degree Programs

The College of Arts, Media and Design offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

### D'Amore-McKim School of Business

Website (<http://www.damore-mckim.neu.edu>)

**Emery A. Trahan, PhD**, Interim Dean

**Jeffery A. Born, PhD**, Associate Dean of Undergraduate Programs

*Undergraduate Office*  
617.373.3270  
617.373.4804 (fax)

Northeastern University's D'Amore-McKim School of Business enables students to develop the skills needed to lead in today's technologically driven business world. We deliver a curriculum that combines knowledge in technology and data analytics with uniquely human skills, such as critical thinking, creativity, and an entrepreneurial mindset.

Bringing all of that together is Northeastern's experience-powered approach to education. Students build their own personal brands as they explore a vast array of real-world experiences on their paths to graduation, including global immersion, undergraduate research, service-learning projects, interdisciplinary courses, and our signature co-op program.

Our expert faculty members have a deep understanding of business theory, which they apply to both their research and teaching; many also consult and partner with the corporate world. They're plugged into industry trends and will challenge and inspire you. Dedicated academic advisors and co-op coordinators are on hand every step of the way to help students make decisions throughout their academic and professional careers.

The school offers Bachelor of Science degrees in:

- Business Administration
- International Business
- Combined Majors—see Combined Majors section

For each degree program students must choose one of the concentrations listed below:

- Accounting
- Brand Management
- Business Analytics
- Corporate Innovation and Venture
- Entrepreneurial Startups
- Family Business
- Finance
- Fintech
- Healthcare Management and Consulting
- International Business (available only as a second concentration)
- Management
- Management Information Systems
- Marketing
- Marketing Analytics
- Social Innovation and Entrepreneurship
- Supply Chain Management

The business curriculum is enhanced by courses in the sciences, humanities, and social sciences. In addition to their academic courses, all students are required to complete a cooperative education plan.

Cooperative education, or co-op, is experiential learning and deliberately integrates and blends the application of theory into practice. During co-op students apply knowledge learned in a class setting in a professional

work environment, which stimulates inquiry and discussion when students return to class. By engaging in co-op experiences, students develop increased self-awareness, a sense of purpose, and define career aspirations to impact postgraduate employment opportunities and lifelong learning. Eligible students are permitted to complete one full-time (32-plus hours per week) co-op experience OR one part-time (16-31.99 hours per week) co-op experience together with 6-plus credits of academic coursework during an approved co-op cycle. Eligibility for co-op is based upon a variety of factors and is integrated into a student's academic plan.

The undergraduate program of the D'Amore-McKim School of Business meets the standards of AACSB International—The Association to Advance Collegiate Schools of Business—for faculty and student quality, curriculum design, and overall university support.

After graduation, students may obtain jobs in all aspects of business, both domestically and internationally, as well as in nonprofits and government.

### Academic Progression Standards

In addition to meeting the university progression standards, students must achieve a 2.000 grade-point average (GPA) in business courses.

Freshmen must complete at least 32 semester hours (SH) in order to progress to sophomore status. Freshmen who earn fewer than 32 SH must make up the difference prior to graduation. Students beyond the freshman year must complete at least 16 SH each in-school (not on co-op) full semester and 8 SH each in-school summer half semester in order to progress to the next class standing.

Students who do not meet academic progression standards will be placed on academic probation and may be subject to dismissal from the university.

### Pass/Fail Option

D'Amore-McKim School of Business students may opt to take courses on a pass/fail basis in accordance with university policy but should be aware that this policy applies to nonbusiness courses that will count as open electives only. Business courses may not be taken pass/fail under any circumstance.

### Taking Courses While on Co-op

Students may take a maximum of one class either online or in-person while on co-op during the fall, spring, or summer term. Course participation should not interfere with the student's work performance on co-op. It is the D'Amore-McKim School of Business policy that, with prior approval of their co-op coordinator and academic advisor, a student may register for a maximum of two courses or 8 credits while on co-op.

### External Transfer to the D'Amore-McKim School of Business

External transfer students are accepted from other academic institutions during the fall and spring terms. Applications and accompanying materials are submitted directly to the Office of Undergraduate Admissions.

The D'Amore-McKim School of Business at Northeastern University is accredited by AACSB International—The Association to Advance Collegiate Schools of Business—and as such complies with the following regulations governing the transferring of credit:

#### COURSES FROM AN AACSB-ACCREDITED INSTITUTION

Students may transfer a maximum of 80 SH of credit. A combination of 60 SH of nonbusiness courses and/or 28 SH of business courses

will be accepted; 64 SH may be applied as credits toward the minimum 128 SH required for degree conferral.

#### COURSES FROM A NON-AACSB-ACCREDITED INSTITUTION

Students may transfer a maximum of 60 SH of credit. A combination of 52 SH of nonbusiness courses and/or 20 SH of business courses will be accepted.

Some courses are not eligible for transfer. Check with the Office of Undergraduate Admissions for more details.

### Graduation Requirements

The school reserves the right to amend programs, courses, and degree requirements to fulfill its educational responsibility to respond to relevant changes in the field.

Bachelor of Science degree candidates must complete all prescribed work of the curriculum in which they seek to qualify, currently 128 SH. The degree not only represents the formal completion of selected courses but also indicates professional study in the major or concentration. A GPA of 2.000 and a C average in all business courses are required for graduation.

### Academic Group Chairs

#### ACCOUNTING

Timothy J. Rupert, PhD

Professor and Group Chair

#### ENTREPRENEURSHIP AND INNOVATION

Fernando F. Suarez, PhD

Jean C. Tempel Professor and Group Chair

#### FINANCE

Olubunmi Faleye, PhD

Professor and Group Chair

#### INTERNATIONAL BUSINESS AND STRATEGY

Christopher J. Robertson, PhD

Professor and Interim Group Chair

#### MANAGEMENT AND ORGANIZATIONAL DEVELOPMENT

Jamie J. Ladge, PhD

Associate Professor and Group Chair

#### MARKETING

Felicia Lassk, PhD

Associate Professor and Group Chair

#### SUPPLY CHAIN AND INFORMATION MANAGEMENT

Gilbert Nyaga, PhD

Associate Professor and Group Chair

## Bachelor of Science in Business Administration, BSBA

The Bachelor of Science in Business Administration (BSBA) program integrates the theory and practice of management through active learning, problem-driven research, corporate partnerships, and experiential assignments. Students will foster a global and entrepreneurial spirit while honing their technical skills, analytical abilities, and creative and strategic thinking. They have opportunities to define an interdisciplinary academic path through combined majors,

concentrations, and minors inside and outside of the business school. Students are expected to take part in the cooperative education program, where they participate in paid work placements related to their field of study. The BSBA degree can be accomplished in four or five years.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

NUPath requirements Differences and Diversity (DD), Creative Expression and Innovation (EI), and Natural and Designed World (ND) are not explicitly satisfied by required courses in the business curriculum at this time. Students are responsible for satisfying these requirements, and if these are not fulfilled in required major courses, they should use general electives to do so.

## Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Management Information Systems</b>		
MISM 2301	Management Information Systems	4
<b>Operations Management and Supply Chain Management</b>		
SCHM 2301	Supply Chain and Operations Management	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>Strategy in Action</b>		
STRT 4501	Strategy in Action	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4
<b>Statistics</b>		
MGSC 2301	Business Statistics	4

## Concentration

Complete the required concentration appropriate to your program. One concentration is required. A second concentration is optional.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)

- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1242	Calculus 2	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342	Calculus 2 for Science and Engineering	
<b>Macroeconomics and Microeconomics</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4

## Business Cooperative Education

Complete one cooperative education experience.

## Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Spring/Summer 1

*Note:* Plan of study will vary based upon student's academic program. The four-year plan of study will require summer courses throughout the student's academic career. Individual study plans will be created with an academic advisor.

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BUSN 1101	4 ECON 1115	4 Elective	4 Elective	4
BUSN 1102	1 Business core	4 ENGW 1111, ECON 1116, or MATH 1231	4 Business core	4

ENGW 1111, ECON 1116, or MATH 1231 (FQ)	4	ENGW 1111, ECON 1116, or MATH 1231 (FQ)	4		
Take two:	8	Take one:	4		
MGSC 2301 (AD)		MGSC 2301 (AD)			
ACCT 1201		ACCT 1201			
INTB 1203 (IC and ER)		INTB 1203 (IC and ER)			
	17		16	8	8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Concentration course	4	Co-op		Co-op		Business core	4
Business core	4					ORGB 3201	4
Elective	4						
NUpath	4						
BUSN 1103	1						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Concentration course	4	Co-op		Co-op		Elective	4
Elective	4					Elective	4
NUpath	4						
Business core	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
ENGW 3304	4	STRT 4501	4
Concentration course	4	Concentration course	4
NUpath	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

ENGW 1111, ECON 1116, or MATH 1231 (FQ)	4	ENGW 1111, ECON 1116, or MATH 1231 (FQ)	4		
Take two:	8	Take one:	4		
MGSC 2301 (AD)		MGSC 2301 (AD)			
ACCT 1201		ACCT 1201			
INTB 1203 (IC and ER)		INTB 1203 (IC and ER)			
	17		16	8	8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Concentration course	4	Concentration course	4	Elective	4	Co-op	0
Business core	4	Business core	4	NUpath	4		
Business core	4	Elective	4				
NUpath	4	BUSN 1103	1				
	16	Elective	4		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Concentration course	4	NUpath	4	Co-op	0
		ENGW 3304	4	Elective	4		
		ORGB 3201	4				
		Elective	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	STRT 4501	4
		Concentration course	4
		Elective	4
		Elective	4
	0		16

Total Hours: 130

**Four Years, Two Co-ops in Summer 2/Fall**

Note: Plan of study will vary based upon student's academic program. The four-year plan of study will require summer courses throughout the student's academic career. Individual study plans will be created with an academic advisor.

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BUSN 1101	4	ECON 1115	4	Elective	4	Elective	4
BUSN 1102	1	Business core	4	ENGW 1111, ECON 1116, or MATH 1231	4	Business core	4

**International Business, BSIB**

The Bachelor of Science in International Business (BSIB) program is designed to prepare students to be successful managers in an evolving global economy. They develop the skills and knowledge needed to work across cultures and differing business practices, both virtually and face-to-face. Program curriculum examines how a global environment impacts a student's chosen concentration.

Knowledge about other cultures and practices is best learned on location and experientially. BSIB students are expected to complete at least two semesters of study and/or cooperative education placements in a country other than where they grew up. Students can begin meeting this eligibility through a semester overseas in the N.U.in program. Students are encouraged to become proficient in a second language.



Upon graduation, students are able to make an impact from day one at companies that are engaged in business internationally. Graduates can also work in their home country for a company that operates internationally as well as overseas on a foreign assignment.

The BSIB program can be completed in four or five years, depending on the program of study. During the optional fifth year, the program offers the opportunity to earn a Master of Science in International Management, a Master of Science in Finance, or a Master of Science in Accounting through the PlusOne option.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Differences and Diversity (DD), Natural and Designed World (ND), and Formal and Quantitative Reasoning (FQ) are not explicitly satisfied by required courses in the business curriculum at this time. Students are responsible for satisfying these requirements, and if these are not fulfilled in required major courses, they should use general electives to do so.

### Business Core

Code	Title	Hours
ACCT 1201	Financial Accounting and Reporting	4
ENTR 2301	Innovation!	4
FINA 2201	Financial Management	4
MGSC 2301	Business Statistics	4
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4

### International Business Requirements

Code	Title	Hours
INTB 1202	Becoming a Global Manager	4
INTB 2202	Analyzing the Global Business Environment	4
INTB 3202	Managing the International Assignment	4
INTB 4202	Executing Global Strategy	4

### Concentration

Complete one of the following concentrations. A second concentration is optional. Certain concentrations require additional prerequisites. Please consult your academic advisor to ensure you have met these requirements.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)

- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

### General Education

Code	Title	Hours
ECON 1116	Principles of Microeconomics	4
ENGW 1111	First-Year Writing	4
ENGW 3304	Advanced Writing in the Business Administration Professions	4
BUSN 1102	Personal Skill Development for Business	1
BUSN 1103	Professional Development for Business Co-op	1

### Business Cooperative Education

Complete one cooperative education experience.

### Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four-Year Program: Year Three Abroad with Two Co-ops

Note: Individual study plans will be created with an academic advisor and may vary based on the student's goals. Plan below is a sample only.

- Additional courses may be required in place of open electives. Electives may be moved or used to fulfill language classes.
- Finance concentration requires Managerial Accounting (ACCT 2301) and Principles of Macroeconomics (ECON 1115) to fulfill prerequisites. Accounting concentration requires Managerial Accounting (ACCT 2301) as a prerequisite. Supply chain management requires Supply Chain and Operations Management (SCHM 2301) as a prerequisite. Management information systems requires Management Information Systems (MISM 2301) as a prerequisite.

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTB 1202	4	ENGW 1111	4	Elective	4	Elective	4
MGSC 2301	4	MKTG 2201	4	FINA 2201	4	Elective	4
ECON 1116 or ENTR 2301	4	INTB 2202	4				
ACCT 1201	4	ECON 1116 or ENTR 2301	4				

BUSN 1102	1				
	17	16	8		8
<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
INTB 3202	4	Co-op	0	Co-op	Elective
Elective	4				Elective
Concentration course	4				
Elective	4				
BUSN 1103	1				
	17	0	0		8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Year abroad –school and co-op	0	Co-op abroad	0	Co-op abroad	Elective
Concentration course	4				Elective
Elective	4				
Elective	4				
Elective	4				
	16	0	0		8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Elective	4	INTB 4202	4		
ORGB 3201	4	Concentration course	4		
ENGW 3304	4	Elective	4		
Concentration course	4	Elective	4		
	16		16		

Total Hours: 130

## Exchange Students

The Bachelor of Science in International Business (BSIB) program is designed to prepare students to be successful managers in an evolving global economy. They develop the skills and knowledge needed to work across cultures and differing business practices, both virtually and face-to-face. Program curriculum examines how a global environment impacts a student's chosen concentration.

Degree-earning exchange students must successfully complete their first two academic years at their home institution and must take part in a cooperative education placement before transferring to Northeastern University. The total program of study must meet the BSIB degree requirements as listed in this catalog for D'Amore-McKim School of Business students.

Upon graduation, students are able to make an impact from day one at companies that are engaged in business internationally. Graduates can also work in their home country for a company that operates internationally as well as overseas on a foreign assignment.

The BSIB program offers the opportunity to earn a Master of Science in International Management, a Master of Science in Finance, or a Master of Science in Accounting through the PlusOne option.

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses

where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Differences and Diversity (DD), Natural and Designed World (ND), and Formal and Quantitative Reasoning (FQ) are not explicitly satisfied by required courses in the business curriculum at this time. Students are responsible for satisfying these requirements, and if these are not fulfilled in required major courses, they should use general electives to do so.

## Business Core

Code	Title	Hours
ACCT 1201	Financial Accounting and Reporting	4
ENTR 2301	Innovation!	4
FINA 2201	Financial Management	4
MGSC 2301	Business Statistics	4
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4

## International Business Requirements

Code	Title	Hours
INTB 1202	Becoming a Global Manager	4
or INTB 1203	International Business and Global Social Responsibility	
INTB 3310	Cultural Aspects of International Business	4
INTB 3320	International Business Management and Environment	4
INTB 4202	Executing Global Strategy	4

## Concentration

Complete one of the following concentrations. A second concentration is optional. Certain concentrations require additional prerequisites. Please consult your academic advisor to ensure you have met these requirements.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)

- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

## General Education

Code	Title	Hours
ECON 1116	Principles of Microeconomics	4
ENGW 1111	First-Year Writing	4
ENGW 3304	Advanced Writing in the Business Administration Professions	4
BUSN 1103	Professional Development for Business Co-op	1

## Business Cooperative Education

Complete one cooperative education experience.

## Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

## Program Requirement

128 total semester hours required

### Combined Majors

- Business Administration and Communication Studies, BS (p. 167)
- Business Administration and Design, BS (p. 91)
- Business Administration and Psychology, BS (p. 270)
- Computer Science and Business Administration, BS (p. 271)
- Cybersecurity and Business Administration, BS (p. 274)
- Data Science and Business Administration, BS (p. 277)
- Economics and Business Administration, BS (p. 279)
- Health Science and Business Administration, BS (p. 281)
- International Affairs and International Business, BS (p. 283)
- Mathematics and Business Administration, BS (p. 285)
- Political Science and Business Administration, BS (p. 287)

### Business Administration and Communication Studies, BS

The combined major between business administration and communication studies provides students with a robust overview of business and communication studies. This combined major seeks to prepare students for career opportunities in growing industry markets such as public relations, marketing communications, and digital media.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

## Business Core Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BUSN 1102	Personal Skill Development for Business	1
or COMM 1000	Communication Studies at Northeastern	
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
<b>Business Statistics</b>		
MGSC 2301	Business Statistics	4
<b>Business Core Option 1</b>		
INTB 1203	International Business and Global Social Responsibility	4
or ORGB 3201	Organizational Behavior	
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Business Core Option 2</b>		
ACCT 2301	Managerial Accounting	4
or ENTR 2301	Innovation!	
or MISM 2301	Management Information Systems	
or SCHM 2301	Supply Chain and Operations Management	

## Business Concentration Required

A concentration is required and may be chosen from the following list:

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

## Supporting Business Courses

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	

**Macroeconomics and Microeconomics**

Complete one of the following: 4

ECON 1115 Principles of Macroeconomics

ECON 1116 Principles of Microeconomics

**Communication Studies Requirements****Code Title Hours****Communication Studies Common Requirements**

COMM 1101 Introduction to Communication Studies 4

COMM 1112 Public Speaking 4

or COMM 1113 Business and Professional Speaking

or COMM 2301 Communication Research Methods

**Foundation Course**

Complete one of the following: 4

COMM 1210 Persuasion and Rhetoric

COMM 1225 Communication Theory

COMM 1231 Principles of Organizational Communication

COMM 1255 Communication in a Digital Age

**Cluster Course**

Complete one of the following: 4

COMM 1131 Sex, Relationships, and Communication

COMM 2303 Global and Intercultural Communication

COMM 2304 Communication and Gender

COMM 2501 Communication Law

COMM 2551 Free Speech in Cyberspace

**Writing-Intensive**

Complete two of the following: 8

COMM 3200 Mobile Communication

COMM 3201 Health Communication

COMM 3230 Interpersonal Communication

COMM 3304 Communication and Inclusion

COMM 3320 Political Communication

COMM 3414 Great Speakers and Speeches

COMM 3415 Communication Criticism

COMM 3445 Public Relations Principles

COMM 3500 Environmental Issues, Communication, and the Media

COMM 3501 Free Speech: Law and Practice

COMM 3530 Communication and Sexualities

COMM 3532 Theories of Conflict and Negotiation

COMM 4535 Nonverbal Social Interaction

COMM 4605 Youth and Communication Technology

COMM 4631 Crisis Communication and Image Management

**Communication Studies Electives**

Complete three additional electives. Choose from any communication studies courses not used to satisfy requirements above or related electives outside of communication studies. 12

ARTF 2220 Movement and Time

ARTD 2360 Introduction to Photography

ARTD 2380 Video Basics

ARTD 3460 Photography: Concept + Process

ARTD 3480 Video: Sound and Image

JRNL 1101 Journalism 1: Fundamentals of Reporting

JRNL 3425 Public Relations Principles

JRNL 3625 Public Relations Practice

JRNL 3610 Digital Storytelling and Social Media

JRNL 5311 Design for Storytelling

JRNL 5314 Video News Reporting and Producing

JRNL 5316 The Newsroom

MSCR 1230 Introduction to Film Production

MSCR 2302 Advertising and Promotional Culture

**Integrative Requirement****Code Title Hours****Integrative Course**

MKTG 4504 Advertising and Brand Promotion 4

**Capstone**

Complete one of the following: 4

STRT 4501 Strategy in Action

COMM 4608 Strategic Communication Capstone

COMM 4533 Consultation Skills

**Business GPA Requirement**

Minimum 2.000 GPA in business courses required

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Program Requirement**

128 total semester hours required

**Plan of Study****Sample Four Years, Two Co-ops****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BUSN 1102 or COMM 1000	1	COMM 1112, 1113, or 2301	4	Communication studies elective	4	Elective	4
ACCT 1201	4	MGSC 2301	4	NUpath course	4	Elective	4
ENGW 1111	4	Communication studies foundation course	4				
COMM 1101	4	MKTG 2201	4				
MATH 1231	4						
			17		16		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
FINA 2201	4	COOP 3945	0	COOP 3945	0	Elective	4
BUSN 1103 or EEAM 2000	1					Elective	4

Business core option	4				
Communication studies cluster course	4				
ECON 1115 or 1116	4				
	17	0	0		8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Business core option 1	4	COOP 3945	0	COOP 3945	0
				Communication studies elective	4
MKTG 4504	4			NUpath course	4
Communication studies writing-intensive 1	4				
Concentration course	4				
	16	0	0		8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Concentration course	4	Concentration course	4		
Communication studies writing-intensive 2	4	COMM 4608, STRT 4501, or COMM 4533	4		
Communication studies elective	4	COMM 3409, ENGW 3304, or ENGW 3315	4		
Concentration course	4	Elective	4		
	16	16			

Total Hours: 130

## Business Administration and Design, BS

The combined major in business administration and design integrates fundamental design courses with the theory and practice of management through active learning, problem-driven research, corporate partnerships, and experiential assignments. The BS degree can be accomplished using the five-year co-op plan.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Business Core Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BUSN 1102	Personal Skill Development for Business	1
or ARTF 1000	Art and Design at Northeastern	

### Mathematics

Complete one of the following:		4
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1260	Math Fundamentals for Games	

### Macroeconomics and Microeconomics

ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

### Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
<b>Business Statistics</b>		
MGSC 2301	Business Statistics	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>Strategy in Action</b>		
STRT 4501	Strategy in Action	4

### Business Core Option

Complete one of the following:		4
ACCT 2301	Managerial Accounting	
ENTR 2301	Innovation!	
MISM 2301	Management Information Systems	
SCHM 2301	Supply Chain and Operations Management	

### Professional Development

BUSN 1103	Professional Development for Business Co-op	1
or EEAM 2000	Professional Development for Co-op	

### Business Concentration

Complete one of the following business concentrations:

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)

- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

## Second Business Concentration (Optional)

A second business concentration is optional and may be chosen from the following list:

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startup (p. 291)s
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

## Design Requirements

Code	Title	Hours
<b>Art + Design Fundamentals Required</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
<b>Art + Design Fundamentals Elective</b>		
Complete one of the following:		4-5
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
<b>Design Required</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1	4
ARTG 3350	Typography 2	4
<b>Design Elective</b>		
Complete any one ARTG design elective course, as long as prerequisites have been met.		4
<b>Art History Elective</b>		
Complete any one ARTH course.		4
<b>Art + Design Elective</b>		

Complete any one ARTG, ARTE, ARTD, ARTH, ARTS, or GAME course as long as prerequisites have been met.	4
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### Degree Capstone Project

ARTG 4550	Design Degree Project 1	4
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## Design Option

Code	Title	Hours
Complete one of the following options:		
8		

### Interaction Design Option

ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3700	Interaction Design 2: Mobile	

### Graphic and Information Design Option

ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	

### Experience Design Option

ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

## Integrative Course

Code	Title	Hours
Note: Integrative course is required above.		
ARTG 4550	Design Degree Project 1	

## Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
BUSN 1102 or ARTF 1000	1	ECON 1115 or 1116	4	ARTG 2250 (with optional ARTG 2251)	4
ACCT 1201	4	MGSC 2301	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTG 1250	4	Art + Design fundamentals elective	4
Art history elective	4	Math elective	4		
ENGW 1111	4				
		17	16		8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
INTB 1203	4	Business concentration introductory course	4	FINA 2201	4
ARTG 3350	4	Business core option	4	Elective	4
				4	0

Design option 1	4	Design option 2	4		
MKTG 2201	4	Art + Design elective	4		
		BUSN 1103 or EEAM 2000	1		
	16		17	8	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	0	ORGB 3201	4	Business concentration elective course 2	4
		Business concentration elective course 1	4	Elective	4
		Design elective	4		
		ENGW 3314 or 3315	4		
	0		16	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Co-op	0	STRT 4501	4		
		ARTG 4550	4		
		Business concentration course	4		
		Elective	4		
	0		16		

Total Hours: 130

## Business Administration and Psychology, BS

This combined major educates students in business and psychology and the interface between the two disciplines. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including statistics and research, social psychology, developmental psychology, cognition, and personality. Business courses provide a foundation in accounting, innovation, marketing, management, and organizational behavior, with the opportunity to concentrate in a specific area of business. Students completing this program should be able to understand the relationships between these fields that pertain to explaining and addressing human behavior and business practices.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Business Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
ENTR 2301	Innovation!	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
MISM 2301	Management Information Systems	4
or SCHM 2301	Supply Chain and Operations Management	
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4
STRT 4501	Strategy in Action	4
<b>Supporting Courses for Business</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
MATH 1231	Calculus for Business and Economics	4

### Business Concentration

Complete one of the following concentrations.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

### Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
or MGSC 2301	Business Statistics	
PSYC 3402	Social Psychology	4
PSYC 3466	Cognition	4
PSYC 3400	Personality	4
PSYC 3404	Developmental Psychology	4
<b>Required Seminar</b>		
	Complete one of the following:	4

PSYC 4654	Seminar in Behavioral Modification
PSYC 4656	Seminar in Biological Psychology
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4662	Seminar in Personality
PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

**Required Lab**

Complete one of the following: 4

PSYC 4600	Laboratory in Research Design
PSYC 4606	Laboratory in Biological Psychology
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4612	Laboratory in Cognition
PSYC 4614	Laboratory in Social Psychology
PSYC 4616	Laboratory in Personality
PSYC 4622	Laboratory in Sensation and Perception
PSYC 4624	Laboratory in Affective Science
PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4628	Laboratory in Developmental Psychology

**Psychology Electives**

Complete two PSYC courses not used to fulfill the requirements above: 8

PSYC 1001 to PSYC 5999

**Supporting Courses**

Code	Title	Hours
<b>Introduction to College</b>		
BUSN 1102	Personal Skill Development for Business	1
or PSYC 1000	Psychology at Northeastern	

**Co-op Preparation**

Complete one of the following: 1

BUSN 1103	Professional Development for Business Co-op
or EESC 2000	Professional Development for Co-op

**Integrative Course**

Code	Title	Hours
ORGB 3201	Organizational Behavior	4

**Business GPA Requirement**

A minimum 2.000 GPA in business courses is required.

**Psychology GPA Requirement**

A minimum 2.000 GPA in psychology courses is required.

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Program Requirement**

128 total semester hours required

**Computer Science and Business Administration, BS**

The computer science and business combined major delivers a technical degree with a strong grounding in business. Students will complete most of the requirements of a business major, including macroeconomics and microeconomics, while also focusing on technical skills like program design, software development, computer organization, systems and networks, theories of computation, principles of languages, and advanced algorithms and data.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
Complete two of the following: 8		
CS 3650	Computer Systems	
CS 3700	Networks and Distributed Systems	
DS 3000	Foundations of Data Science	
DS 4200	Information Presentation and Visualization	
DS 4300	Large-Scale Information Storage and Retrieval	

**Khoury Elective**



With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## Business Courses

Code	Title	Hours
<b>Required Business Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
ORGB 3201	Organizational Behavior	4
MKTG 2201	Introduction to Marketing	4
MGSC 2301	Business Statistics	4
STRT 4501	Strategy in Action	4

## Business Concentration

Complete a four-course business concentration from the following list.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

## Integrative Course

Code	Title	Hours
<b>Information Resource Management</b>		
MISM 2301	Management Information Systems	4

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
or MATH 1231	Calculus for Business and Economics	
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4

AFAM 2600	Issues in Race, Science, and Technology
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
HIST 2220	History of Technology
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300	Knowledge in a Digital World
or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## Business GPA Requirement

Minimum 2.000 GPA required in business courses

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 MATH 1341 or 1231	4 Vacation	
CS 1800 and CS 1802	5 CS 3200	4 ACCT 1201	4	
CS 2500 and CS 2501	5 ECON 1116	4		
ENGW 1111	4 Elective	4		
ECON 1115	4			
	19	17	8	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ACCT 2301	4 Business concentration 1	4 MKTG 2201	4 Co-op	
CS 3500 and CS 3501	5 CS 3000	4 Elective	4	
MGSC 2301	4 Computing and social issues	4		
Elective	4 CS 1210	1		
	Elective	4		
	17	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 3650	4 FINA 2201	4 Co-op	
	MISM 2301	4 ORGB 3201	4	
	Business concentration 2	4		
	Khoury Elective	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours	Hours
Co-op	CS 3700	4 STRT 4501	4	
	CS 4500	4 ENGW 3302	4	
	Business concentration 3	4		
	Business concentration 4	4		
	0	16	8	

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 3200	4		
CS 1200	1 ECON 1116	4		
ECON 1115	4 Elective	4		
ENGW 1111	4			
	19	17	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 ACCT 2301	4 Vacation	0 Co-op	0
MATH 1341	4 CS 3000	4		
ACCT 1201	4 FINA 2201	4		
MGSC 2301	4 CS 1210	1		
	Elective	4		
	17	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 3650	4 ORGB 3201	4 Co-op	0
	Business concentration 1	4 MKTG 2201	4	
	MISM 2301	4		
	ENGW 3302	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Business concentration 2	4 Elective	4 Co-op	0
	CS 3700	4 Elective	4	
	Business concentration 3	4		
	Khoury Elective	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours	Hours	Hours
Co-op	0 STRT 4501	4		
	Business concentration 4	4		
	CS 4500	4		
	Computing and social issues	4		
	0	16		

Total Hours: 134

## Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 3200	4		
CS 1200	1 ECON 1116	4		
ECON 1115	4 Elective	4		
ENGW 1111	4			
	19	17	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 Co-op	0 Co-op	0 Vacation	0
MATH 1341	4			
ACCT 1201	4			
MGSC 2301	4			
CS 1210	1			
	18	0	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ACCT 2301	4 Co-op	0 Co-op	0 ORGB 3201	4
CS 3000	4		MKTG 2201	4
Elective	4			
FINA 2201	4			
	16	0	0	8
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3650	4 Co-op	0 Co-op	0 Elective	4
Business concentration 1	4		Elective	4
MISM 2301	4			
ENGW 3302	4			
	16	0	0	8
Year 5				
Fall	Hours Spring	Hours		
Khoury Elective	4 STRT 4501	4		
Business concentration 2	4 CS 4500	4		
Business concentration 3	4 Computing and social issues	4		
CS 3700	4 Business concentration 4	4		
	16	16		

Total Hours: 134

## Cybersecurity and Business Administration, BS

The cybersecurity and business combined major delivers a technical and security-focused degree with a strong grounding in business. Students will complete most of the requirements of a business major, including macroeconomics and microeconomics, while also focusing on the conceptual and practical computer science skills that will enable them to contribute to ensuring the reliability and security of cyberspace.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
<b>Cybersecurity Required Courses</b>		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
CY 4740	Network Security	4
<b>Cybersecurity Electives</b>		
If courses require prerequisites, those should be taken using general electives.		
Complete one course from the following:		3-4
COMM 2551	Free Speech in Cyberspace	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 3030	Global Criminology	

CRIM 4040	Crime Prevention
CS 2800	Logic and Computation
CS 4240	Large-Scale Parallel Data Processing
CS 4400	Programming Languages
CS 4500	Software Development
CS 4710	Mobile and Wireless Systems
CS 6710	Wireless Network
CY 5200	Security Risk Management and Assessment
CY 5210	Information System Forensics
CY 5770	Software Vulnerabilities and Security
DS 4300	Large-Scale Information Storage and Retrieval
DS 4400	Machine Learning and Data Mining 1
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322
EECE 3324	Computer Architecture and Organization
EECE 4534 and EECE 4535	Microprocessor-Based Design and Lab for EECE 4534
IS 4300	Human Computer Interaction
LPSC 1101	Introduction to Law
LPSC 2301	Introduction to Law, Policy, and Society
LPSC 3303	Topics in Law and Public Policy
MATH 3527	Number Theory 1
MATH 4575	Introduction to Cryptography
PHIL 1145	Technology and Human Values
POLS 2390	Science, Technology, and Public Policy
POLS 3307	Public Policy and Administration
POLS 3324	Law and Society
POLS 3406	International Law
POLS 3408	International Security
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism

## Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Statistics</b>		
MGSC 2301	Business Statistics	4
<b>Strategy</b>		
STRT 4501	Strategy in Action	4

## Business Concentration

Complete a four-course business concentration from the following list.  
(p. )

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Integrative Requirement

Code	Title	Hours
MISM 2301	Management Information Systems	4

## Supporting Courses

Code	Title	Hours
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### Mathematics Courses

Complete one of the following:		4
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1231	Calculus for Business and Economics	

### Economics

Complete one of the following:		4
ECON 1115	Principles of Macroeconomics	
ECON 1116	Principles of Microeconomics	

## Writing Requirements

Code	Title	Hours
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### College Writing

ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

### Advanced Writing in the Disciplines

Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

## Business GPA Requirement

Minimum 2.000 GPA required in all business courses.

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills Through Experience* is satisfied through co-op.

### Program Requirement

133 semester hours required

### Plan of Study

Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 CY 2550	4 Elective 1	4	
CS 2500 and CS 2501	5 MATH 1341 or 1231	4		
ENGW 1111	4 ACCT 1201	4		
ECON 1115 or 1116	4			
	19	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 CS 3700	4 MKTG 2201	4 Co-op	
CS 3650	4 CY 3740	4 Elective 3	4	
ACCT 2301	4 Business concentration 1	4		
MGSC 2301	4 Elective 2	4		
	CS 1210	1		
	16	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CY 4170 or 5240	4 FINA 2201	4 Co-op	
	Business concentration 2	4 ORGB 3201	4	

Business concentration 3	4			
CY 4740	4			
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ENGW 3302	4 STRT 4501	4	
	MISM 2301	4 Elective 4	4	
	Business concentration 4	4		
	Cybersecurity elective	4		
	0	16	8	

Total Hours: 134

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 CY 2550	4		
CS 2500 and CS 2501	5 MATH 1341 or 1231	4		
ENGW 1111	4 ACCT 1201	4		
ECON 1115 or 1116	4			
	19	17	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 1210	1 Vacation	Co-op	
CS 3650	4 CS 3700	4		
ACCT 2301	4 CS 3000	4		
MGSC 2301	4 Business concentration 1	4		
	Elective 1	4		
	17	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CY 3740	4 FINA 2201	4 Co-op	
	MKTG 2201	4 ORGB 3201	4	
	Business concentration 2	4		
	Elective 2	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CY 4170 or 5240	4 ENGW 3302	4 Co-op	
	CY 4740	4 Elective 4	4	

Business concentration 3	4			
Elective 3	4			
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	MISM 2301	4
	STRT 4501	4
	Business concentration 4	4
	Cybersecurity elective	4
	0	16

Total Hours: 134

## Data Science and Business Administration, BS

The data science and business combined major integrates a technical degree with the theory and practice of management through active learning, problem-driven research, corporate partnerships, and experiential assignments. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. This program reflects the impact of data in modern business practice.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

#### Programming Sequence Pathways

Choose one of the two options. 12

##### Computer Science Option

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	

##### Data Science Option

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

##### Computer Science Required Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4

##### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4

##### Khoury Elective

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Business Courses

Code	Title	Hours
<b>Required Business Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
MGSC 2301	Business Statistics	4
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4
Complete one of the following: 4		
ENTR 2301	Innovation!	
MISM 2301	Management Information Systems	
SCHM 2301	Supply Chain and Operations Management	
STRT 4501	Strategy in Action	

### Business Concentration

Complete a four-course business concentration from the following list.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)

- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Marketing (p. 295)
- Marketing Analytics (p. 296)

*Note: If the Marketing Analytics concentration is selected an additional general elective is required.*

- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

**Integrative Course**

Code	Title	Hours
BUSN 5001	Data-Driven and Technology-Enabled Value Creation in Digital Economy	4

**Supporting Courses**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
or MATH 1231	Calculus for Business and Economics	
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
	Complete 16 credits of general electives.	16

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Business GPA Requirement**

Minimum 2.000 GPA required in business courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Ethical Reasoning
- Interpreting Culture

- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills Through Experience* is satisfied through co-op.

**Program Requirement**

130 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5
CS 1800 and CS 1802	5	CS 3200	4	ACCT 2301	4
CS 2500 and CS 2501	5	MATH 1341	4		
ACCT 1201	4	ECON 1115	4		
ENGW 1111	4				
		19		17	
				9	
				0	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
MGSC 2301	4	CS 1210	1	MKTG 2201	4
DS 3000	4	DS 4200	4	Elective	4
INTB 1203	4	DS 4300	4		
Elective	4	Business concentration 1	4		
		Elective	4		
		16		17	
				8	
				0	
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		DS 4400	4	FINA 2201	4
		SCHM 2301	4	ORGB 3201	4
		Business concentration 2	4		
		Khoury elective	4		
		0		16	
				8	
				0	

## Year 4

Fall	Hours Spring	Hours Summer 1	Hours
Co-op	DS 4420	4 ENGW 3302	4
	BUSN 5001	4 Elective	4
	Business concentration 3	4	
	Business concentration 4	4	
	0	16	8

Total Hours: 134

## Five Years, Three Co-ops in Summer 2/Fall

## Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 3200	4		
CS 1200	1 ACCT 1201	4		
ECON 1115	4 Elective	4		
ENGW 1111	4			
	19	17	0	0

## Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 FINA 2201	4 Vacation	0 Co-op	0
MATH 1341	4 INTB 1203	4		
MGSC 2301	4 DS 3000	4		
ACCT 2301	4 CS 1210	1		
	Elective	4		
	17	17	0	0

## Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 DS 4200	4 ORGB 3201	4 Co-op	0
	DS 4300	4 MKTG 2201	4	
	Business concentration 1	4		
	MISM 2301	4		
	0	16	8	0

## Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Business concentration 2	4 ENGW 3302	4 Co-op	0
	Business concentration 3	4 Elective	4	
	Khoury elective	4		
	Elective	4		
	0	16	8	0

## Year 5

Fall	Hours Spring	Hours
Co-op	0 DS 4420	4
	SCHM 2301	4
	BUSN 5001	4
	Business concentration 4	4
	0	16

Total Hours: 134

## Economics and Business Administration, BS

Economics and business administration is our most popular combined major, integrating the underlying economic theories and models and their business applications. After satisfying the core courses in economics, there are over 40 electives from which to choose to complete this combined major.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000	Economics at Northeastern	1
or BUSN 1102	Personal Skill Development for Business	
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or MGSC 2301	Business Statistics	
ECON 2560	Applied Econometrics	4

## Economics Electives

Complete four courses that are found in the following ranges, with no more than one at the introductory (1000) level:

ECON 1200 to ECON 1999
ECON 3000 to ECON 4689
ECON 4900 to ECON 4999
ECON 5200 to ECON 5999



### Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4

### Business Concentration

Complete one of the following business concentrations:

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

### Business Cooperative Education Requirement

Complete one six-month co-op experience.

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Computer Science</b>		
Complete one of the following: 4		
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MISM 2510	Fundamentals of Information Analytics	
<b>Co-op Preparation</b>		

BUSN 1103	Professional Development for Business Co-op	1
or EESH 2000	Professional Development for Co-op	
<b>Capstone Requirement</b>		
ECON 4692	Senior Economics Seminar	4
STRT 4501	Strategy in Action	4

### Economics GPA Requirement

Grades in the following four economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or MGSC 2301	Business Statistics	
ECON 2560	Applied Econometrics	4

### Business GPA Requirement

Minimum 2.000 GPA required in business courses

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ACCT 1201	4	ECON 1116	4	ECON 2315	4	MKTG 2201	4
ECON 1000 or BUSN 1102	1	MGSC 2301 or ECON 2350	4	NUpath DD	4	FINA 2201	4
ENGW 1111	4	FINA 2201	4				
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4	INTB 1203	4				
ECON 1115	4						
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2316	4	Co-op	4	Co-op	4	Elective	4
ACCT 2301	4					ORGB 3201	4
CS 1100, MISM 2510, or DS 2000 and DS 2001	4						
BUSN 1103 or EESH 2000	1						
Economics elective 1	4						
		17		0		0	
						8	

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ECON 2560	4 Co-op	Co-op	Advanced Writing	4
Concentration course 1	4		Elective	4
Concentration course 2	4			
Economics elective 2	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours
Concentration course 3	4 ECON 4692	4
Economics elective 3	4 Concentration course 4	4
STRT 4501	4 Economics elective 4	4
Elective	4 Elective	4
	16	16

Total Hours: 130

## Health Science and Business Administration, BS

The combined major in health science and business administration provides students at Northeastern with an opportunity to study a curriculum that is synergetic with the growing field of healthcare. This academic combination will provide students with the knowledge and expertise needed to enter a multitude of careers upon graduation. The degree will allow students the unique opportunity to better understand the business side of the healthcare industry in Massachusetts, which is home to some of the best hospitals and medical research companies in the country. The field is compatible with all the undergraduate concentrations in the School of Business and prepares students to enter the workforce after graduation.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300	Communication Skills for the Health Professions	4

or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
HLTH 5450 or PHTH 4202	Healthcare Research Principles of Epidemiology in Medicine and Public Health	4

### Life Sciences Core

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
PSYC 1101	Foundations of Psychology	4
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

### Business Administration Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
<b>Business Electives</b>		
Complete two of the following:		8
MISM 2301	Management Information Systems	
MKTG 2201	Introduction to Marketing	
SCHM 2301	Supply Chain and Operations Management	
ORGB 3201	Organizational Behavior	
<b>Supporting Courses for Business</b>		
Complete one of the following:		4
ECON 1115 or ECON 1116	Principles of Macroeconomics Principles of Microeconomics	

### Business Concentration

Complete one of the following concentrations. Requirements for the concentrations are listed below. (p. )

- Accounting (p. )
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. )
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)

- International Business (p. 294) (available only as a second concentration)
- Management (p. )
- Management Information Systems (p. )
- Marketing (p. )
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. )

**Supporting Courses**

Code	Title	Hours
<b>Introduction to College</b>		
HSCI 1000 or BUSN 1102	College: An Introduction Personal Skill Development for Business	1
<b>Calculus</b>		
MATH 1231 or MATH 1241	Calculus for Business and Economics Calculus 1	4
<b>Statistics</b>		
PHTH 2210 or MGSC 2301	Foundations of Biostatistics Business Statistics	4
<b>Co-op Preparation</b>		
Complete one of the following:		1
BUSN 1103	Professional Development for Business Co-op	
HSCI 2000	Professional Development for Bouvé Co-op	
<b>Writing</b>		
ENGW 1111	First-Year Writing	4
ENGW 3306 or ENGW 3304	Advanced Writing in the Health Professions Advanced Writing in the Business Administration Professions	4
<b>Capstone</b>		
Complete one of the following:		4
STRT 4501	Strategy in Action	
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700)	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	

**Integrative Requirement**

Code	Title	Hours
MGMT 3340	Healthcare Management, Innovation, and Design	4

**Required General Electives**

Code	Title	Hours
Complete at least 16 credits of general electives		16

**Business GPA Requirement**

A minimum 2.000 GPA is required in all business courses.

**Health Sciences Major Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Plan of Study**

Year 1				
Fall	Hours	Spring	Hours	
HSCI 1000 or BUSN 1102	1	BIOL 1113 and BIOL 1114	5	
PHTH 1260	4	ENGW 1111	4	
PSYC 1101	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5	
BIOL 1111 and BIOL 1112	5	Elective	4	
MATH 1241 or 1231	4			
		18	18	
Year 2				
Fall	Hours	Spring	Hours	Summer 2
PHTH 2210 or MGSC 2301	4	HSCI 2000 or BUSN 1103	1	Co-op
PHTH 2350	4	PHTH 2300	4	
ECON 1115 or 1116	4	PHTH 2515	4	
ACCT 1201	4	FINA 2201	4	
		INTB 1203	4	
		16	17	0
Year 3				
Fall	Hours	Spring	Hours	
Co-op		HLTH 5450 or PHTH 4202	4	
		Elective or concentration course	4	
		ACCT 2301	4	
		Business core selective #1	4	
		0	16	
Year 4				
Fall	Hours	Spring	Hours	Summer 1
ENGW 3306 or 3304	4	Co-op		Co-op
PHTH 4540	4			
MGMT 3340	4			
Business core selective #2	4			
		16	0	0

**Year 5**

Fall	Hours	Spring	Hours
PHTH 4120	4	HSCI 4720, 4730, or STRT 4501	4
HSCI 4700	0	Electives or concentration courses	12
Electives or concentration courses	12		
	16		16

Total Hours: 133

## International Affairs and International Business, BS

Students who pursue this combined major will have the opportunity to learn how international business practices influence and are influenced by state-society interactions such as labor rights, trade practices, climate and sustainability priorities, political implications, as well international institutions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### International Affairs Requirements

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following: 1		
INTL 1000	International Affairs at Northeastern	
or BUSN 1102	Personal Skill Development for Business	

### Required International Affairs Courses

A grade of C or higher is required for ECON courses.

Code	Title	Hours
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
INTL 4700	Senior Capstone Seminar in International Affairs	4

### International Experiential Learning

Complete one of the following:

One semester of study-abroad experience

One co-op abroad experience

Two Dialogue of Civilizations (summer programs)

Two summer traditional study-abroad experiences

One N.U.in experience and one Dialogue of Civilizations or one summer traditional study-abroad experience  
Two approved short-term programs abroad

### International Affairs Electives

Code	Title	Hours
Complete two of the following:		8

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

### Regional Analysis Requirement

Code	Title	Hours
Complete three of the following, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:		12

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	

HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

*Europe*

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict

POLS 4915	Model Arab League
<i>Russia</i>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**Business Requirements**

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>Business Core Option</b>		
Complete one of the following:		4
ACCT 2301	Managerial Accounting	
ENTR 2301	Innovation!	
MISM 2301	Management Information Systems	
SCHM 2301	Supply Chain and Operations Management	

**Global Business and Strategy Concentration**

Code	Title	Hours
<b>Required Courses</b>		
INTB 1202	Becoming a Global Manager	4
INTB 2202	Analyzing the Global Business Environment	4
INTB 4202	Executing Global Strategy	4
<b>Elective Course</b>		
Complete one of the following:		4
INTB 3310	Cultural Aspects of International Business	
MKTG 4512	International Marketing	
FINA 4320	International Financial Management	
SCHM 3301	Global Supply Chain Strategy	

**Integrative Course Requirements**

Code	Title	Hours
INTB 4202	Executing Global Strategy	4
INTL 4700	Senior Capstone Seminar in International Affairs	4

**Supporting Courses**

Code	Title	Hours
<b>Co-op Preparation</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EESH 2000	Professional Development for Co-op	
<b>Statistics Requirement</b>		
MGSC 2301	Business Statistics	4
or INTL 2718	Research Methods in International Affairs	

## Second Business Concentration (Optional)

A second business concentration is optional and may be chosen from the following list.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Business GPA Requirement

Minimum 2.000 GPA required in business courses

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

The plan below is a sample. Students should consult with their academic adviser to confirm individual academic plans.

This program requires one of the following abroad options:

Semester-long student abroad experience; cooperative education abroad experience; two Dialogue of Civilizations (summer programs); two summer traditional study-abroad experiences; N.U.*in* experience combined with either Dialogue of Civilizations or traditional summer study-abroad experience.

### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	MGSC 2301 or INTL 2718	4	NUpath	4	MKTG 2201	4
INTB 1202	4	INTL undergraduate elective	4	FINA 2201	4	INTL undergraduate elective	4
ECON 1115 or 1116	4	ACCT 1201	4				
INTL 1101	4	NUpath	4				
BUSN 1102 or INTL 1000	1						
	17		16		8		8

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL undergraduate elective	4	Co-op		Co-op		Elective	4
INTL undergraduate elective	4					Elective	4
Complete one of the approved business core: ACCT 2301, ENTR 2301, MISM 2301, SCHM 2301	4					Student may choose to participate in a Dialogue of Civilizations experience	
INTB 2202	4						
BUSN 1103 or EESH 2000	1						
	17		0		0		8

### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 3400	4	Co-op		Co-op		Elective	4
ORGB 3201	4					Elective	4
ENGW 3304 or 3315	4						
Complete one of the following:							
INTB 3310, FINA 4320, MKTG 4512, or SCHM 3301	4						
	16		0		0		8

### Year 4

Fall	Hours	Spring	Hours
Elective	4	Elective	4
NUpath	4	NUpath	4
INTL undergraduate elective	4	Elective	4
INTL 4700	4	INTB 4202	4
	16		16

Total Hours: 130

## Mathematics and Business Administration, BS

A combined major combines two majors in a way that allows a student to fulfill all requirements within the standard 128 credits. For details, see program requirements.

Current students can also find details about combined majors and minors by going to their audit, clicking on "explore options," and finding the appropriate program. Students will be able to see a list of required courses and will be able to track their progress toward fulfilling them.

In the BS combined mathematics and business administration degree program, business and mathematics courses lay the groundwork for strong basic training in finance.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

## Mathematics Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 1365	Introduction to Mathematical Reasoning	4
MATH 3081	Probability and Statistics	4
<b>Calculus and Linear Algebra (Required) and Differential Equations (Recommended)</b>		
Complete either Option 1 or Option 2 below:		8
<i>Option 1 (Recommended)</i>		
MATH 2321	Calculus 3 for Science and Engineering	
MATH 2341	Differential Equations and Linear Algebra for Engineering	
<i>Option 2</i>		
MATH 2321	Calculus 3 for Science and Engineering	
MATH 2331	Linear Algebra	
<b>Co-op Reflections</b>		
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
<b>Mathematics Electives</b>		
Complete three courses in the range MATH 3001 to MATH 5999. The following courses are recommended:		12
MATH 4681	Probability and Risks	
MATH 4682	Theory of Interest and Basics of Life Insurance 1	
MATH 4581	Statistics and Stochastic Processes	

## Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		

ORGB 3201	Organizational Behavior	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4
<b>Strategy in Action</b>		
STRT 4501	Strategy in Action	4

## Integrative Course

*Note:* Financial Risk Management (FINA 4512) also counts toward the finance concentration.

Code	Title	Hours
FINA 4512	Financial Risk Management	4

## Finance Concentration

Code	Title	Hours
<b>Finance Requirements</b>		
FINA 3301	Corporate Finance	4
FINA 3303	Investments	4
FINA 4512	Financial Risk Management	4
<b>Finance Elective</b>		
Complete one of the following:		4
ENTR 3520	Impact Investing and Social Finance	
or FINA 2720	Sustainability in the Business Environment	
FINA 4604	Fixed-Income Securities (Recommended)	
FINA 4310	Working Capital Management	
FINA 4312	Issues in Corporate Governance	
FINA 4320	International Financial Management	
FINA 4410	Valuation and Value Creation	
FINA 4412	Personal Financial Planning	
FINA 4420	Mergers and Acquisitions	
FINA 4514	Investment Banking	
FINA 4516	Real Estate Finance	
FINA 4526	Core Topics in Alternative Investments	
FINA 4602	Turnaround Management	
FINA 4604	Fixed-Income Securities	
FINA 4608	Advanced Financial Strategy	
FINA 4610	Entrepreneurial Finance and Private Equity	
FINA 4983	Special Topics in Finance	

## Second Business Concentration (Optional)

A second business concentration is optional and may be chosen from the following list.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294)
- Management (p. 294)
- Management Information Systems (p. 295)

- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

## Supplemental Courses

Code	Title	Hours
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
<b>Co-op Preparation</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EESC 2000	Professional Development for Co-op	

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Mathematics GPA Requirement

Minimum 2.000 GPA required in all mathematics courses

## Business GPA Requirement

Minimum 2.000 GPA required in business courses

## Program Requirement

128 total semester hours required

## Political Science and Business Administration, BS

The combined major in political science and business administration offers students the opportunity to integrate the study of politics and government with an analysis of business practices and organizations. Students complete core courses in political science along with core courses in business administration that cover accounting, finance, marketing, and organizational behavior. This combined major highlights the important intersection between business practices and the evolution of politics and government.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPATH Requirements

All undergraduate students are required to complete the NUPATH Requirements (p. 46).

## Political Science Requirements

Code	Title	Hours
<b>Introduction to College</b>		
POLS 1000	Political Science at Northeastern	1
or BUSN 1102	Personal Skill Development for Business	
<b>Political Science Requirements</b>		
POLS 1150	American Government	4

POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2330	American Political Thought	
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2332	Contemporary Political Thought	

## Statistics

POLS 2400	Quantitative Techniques	4
or MGSC 2301	Business Statistics	

## Political Science Electives

Complete four courses in the following range, or complete a political science concentration as outlined below:

POLS 2000 to POLS 5999

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record:

- American Political Institutions (p. 288)
- Campaigns and Elections (p. 288)
- Comparative Politics (p. 288)
- Identity, Culture, and Politics (p. 288)
- International Relations and Diplomacy (p. 289)
- Law and Legal Studies (p. 289)
- Public Policy (p. 289)
- Security Studies (p. 289)

## Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4

## Business Concentration

Complete one of the following business concentrations:

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)



- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

**Supporting Courses**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
<b>Computer Science</b>		
CS 1100	Computer Science and Its Applications	4
<b>Co-op Preparation</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EESH 2000	Professional Development for Co-op	

**Integrative Requirement**

Code	Title	Hours
<b>Senior Capstone</b>		
POLS 4701	Political Science Senior Capstone (or POLS 4703 Senior Thesis)	4
or STRT 4501	Strategy in Action	

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Political Science GPA Requirement**

Minimum 2.000 GPA required in all political science courses

**Business GPA Requirement**

Minimum 2.000 GPA required in business courses

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Political Science Concentrations (Optional)**

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	

POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study**

<b>Year 1</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1000 or BUSN 1102	1	POLS 1150	4	DD NUpath	4
				Open elective	4
POLS 1155	4	POLS 1160	4	Open elective	4
ENGW 1111	4	MGSC 2301 or POLS 2400	4		
ACCT 1201	4	ECON 1115 or 1116	4		
MATH 1231	4				
		17	16	8	8

<b>Year 2</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS thought	4	Co-op		Co-op	
				FINA 2201	4
POLS elective	4			ACCT 2301	4
MKTG 2201	4				
CS 1100	4				
CS 1101	1				
BUSN 1103 or EESH 2000	1				
		18	0	0	8

<b>Year 3</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS elective	4	Co-op		Co-op	
				POLS elective	4
POLS elective	4			ND NUpath	4
ORGB 3201	4				
Concentration class 1	4				
		16	0	0	8

<b>Year 4</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
Concentration class 2	4	POLS 4701 or STRT 4501	4		
ENGW 3304, 3315, or 3307	4	Concentration class 4	4		
Concentration class 3	4	IC NUpath	4		
EI NUpath	4	ER NUpath	4		
		16	16		

Total Hours: 131

## Concentrations

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Global Business and Strategy (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

## Accounting

A concentration in accounting aims to prepare the graduate for entry into public accounting or private industry in a highly valued career. Accounting is a dynamic profession that requires people to possess sound technical knowledge, critical thinking skills, superior interpersonal skills, and the ability to communicate effectively. Accountants hold senior management positions in private companies in business or industry, public accounting firms, and government agencies.

To prepare for an accounting career, students take courses in financial reporting, managerial accounting, and intermediate accounting, with additional elective courses available for more specialized studies in strategic cost analysis, auditing and other assurance services, income tax planning, and advisory services and emerging accounting systems. Students wishing to sit for the CPA exam may combine the BSBA with a concentration in accounting with the Master of Science in Accounting (five-year BSBA/MSA program).

### Concentration Requirements

#### CONCENTRATION IN ACCOUNTING

Code	Title	Hours
<b>Required Courses</b>		
ACCT 3401	Financial Reporting and Analysis 1	4
ACCT 4501	Financial Reporting and Analysis 2	4
<b>Electives</b>		
Complete two of the following:		8
ACCT 3403	Advisory Services and Emerging Accounting Systems	
ACCT 3416	Strategic Cost Analysis for Decision Making	
ACCT 4412	Auditing and Other Assurance Services	
ACCT 4414	Income Tax Determination and Planning	

## Brand Management

### Overview

Think about some of your favorite brands—chances are, there is a high-powered brand manager working behind the scenes to ensure the brand resonates with you, one of its target consumers. Brand managers oversee the integrity of a brand across all marketing activities in tech, consumer packaged goods (CPG), and service industries. The position of brand manager requires strategic thinking, focus on the customer experience, communication with multiple stakeholders and cross-functional teams, creativity, and analytical skills. Brand managers are creative, organized multitaskers who often serve as the liaison between the marketing group, design team, and engineers to oversee the consistency of the brand image. While every day is different, typical activities of a brand manager include conducting and analyzing research to identify brand opportunities, understanding market trends and competitive landscape, creating and maintaining brand marketing budget, managing cross-platform brand communication strategy, developing the brand story, executing marketing and advertising campaigns, and overseeing the overall health of a brand. When managing a brand's products or services in a tech firm, brand and product managers may also be involved in ideation, prototyping, user experience (UX) testing, and business casing. This concentration offers the opportunity to learn these skills across coursework in marketing, consumer behavior, advertising, new product development, marketing analytics, project management, demand planning and forecasting, and product innovation. As such, the core brand management course paired with a flexible, yet focused list of electives supports students in the aspects of brand management that are most relevant for their future career prospects.

### Concentration Requirements

#### CONCENTRATION IN BRAND MANAGEMENT

Code	Title	Hours
<b>Required Course</b>		
MKTG 3720	Brand Management	4
<b>Electives</b>		
Complete three electives, with at least 8 credits from MKTG courses:		12
MKTG 2720	Enabling Technologies for Consumer Engagement	
MKTG 3401 or MKTG 3402	Marketing Research Gaining Insights from Consumer Data	
MKTG 4502	Managing Customer Engagement in a Service World	
MKTG 4504	Advertising and Brand Promotion	
MKTG 4506	Consumer Behavior	
MKTG 4510 or ENTR 3330 or ENTR 3335	New Product Development Lean Design and Rapid Prototyping Product Innovation and Portfolio Management	
MKTG 4720	Understanding the Platform Economy	
ENTR 2301	Innovation!	
MGMT 3530	Project Management	
SCHM 3320	Forecasting and Sales Operations Planning	

A maximum of one course may be applied to requirements of a second concentration.

## Business Analytics

### Overview

Organizations can make smarter decisions when they effectively harness the power of data. The business analytics concentration is designed to provide students with the analytical skills, techniques, and perspectives required to understand, analyze, and interpret datasets of various sizes and content. This knowledge and skill set can be used to help companies improve decision making in increasingly complex and interconnected business environments and create measurable improvements in business performance.

This concentration offers courses that cover the fundamentals of data analysis and management; information visualization; and descriptive, predictive, and prescriptive analytic techniques. These techniques are often based on artificial intelligence, machine learning, and data mining. Courses are grounded in relevant theory and principles but also explore how to apply these concepts to investigate realistic datasets by using a variety of innovative computational tools and programming languages. These may include Python, R, SQL, and Tableau. Students have the opportunity to develop technical and problem-solving skills that are in high demand by employers and to apply those skills through both classroom activities and co-ops focused on business analytics.

Analytics can be employed in many different parts of an organization. Therefore, students are encouraged to consider completing a dual concentration in business analytics and another area. Graduates of this program have a wide range of career paths to suit their interests. Professional options include business or information analyst, consultant, and project manager. Graduates may also become specialists within a specific department or functional area, such as financial services, accounting, marketing, or manufacturing.

### Concentration Requirements

#### CONCENTRATION IN BUSINESS ANALYTICS

Code	Title	Hours
Only one course may double count between another concentration or minor.		
<b>Required Courses</b>		
MISM 2510	Fundamentals of Information Analytics	4
MISM 3403 or MISM 3405	Data Management in the Enterprise Data Wrangling for Business Analytics	4
MISM 3501	Information Visualization for Business	4
<b>Elective</b>		
Complete one of the following:		4
MISM 3515	Data Mining for Business	
MISM 3525	Modeling for Business Analytics	
MISM 4983	Special Topics in Management Information Systems	

## Corporate Innovation and Venture

Corporate innovation is a series of processes by which established companies promote, design, and pursue innovation opportunities that can result in new products, services, and/or business models. It entails R&D activities, product development, internal venture accelerators, acquisitions, and alliances. Innovation is the most powerful competitive weapon for a corporation that wants to ensure growth and relevance over time.

The corporate innovation and venture concentration is designed to prepare students to develop new businesses, products, services, or processes inside of an existing organization to create value and generate new revenue growth through entrepreneurial thought and action. A concentration in corporate innovation and venture will develop students to be agents of change and renewal within established companies, aspiring to leading roles in areas such as product development, new business research, and innovation-related projects. This concentration targets students with co-op aspirations that involve positions within corporations such as entry-level product line management, project management, consulting, and new product and service development.

### Concentration Requirements

#### CONCENTRATION IN CORPORATE INNOVATION AND VENTURE

Code	Title	Hours
<b>Required Courses</b>		
ENTR 2301	Innovation!	4
ENTR 4504	Advanced Studies in Corporate Innovation	4
<b>Electives</b>		
Complete two electives, one of which may come from the additional elective list:		8
ENTR 2304	Industry Disruption and Corporate Transformation	
ENTR 3335	Product Innovation and Portfolio Management	
ENTR 4225	Growth, Acquisitions, and Alliances	
<i>Additional Electives</i>		
ENTR 2206	Global Social Enterprise	
ENTR 2215	Understanding Family Enterprise	
ENTR 2303	Marketing Strategies for Startups	
ENTR 4983	Special Topics in Entrepreneurship	
ENTR 4505	Entrepreneurial Growth Strategy for Technology Ventures	
FINA 4610	Entrepreneurial Finance and Private Equity	
MGMT 3302	Negotiating in Business	
MGMT 3340	Healthcare Management, Innovation, and Design	
MGMT 3530	Project Management	
STRT 4301	Strategic Analysis and Decision Making	
One course from an approved Dialogue may count toward a concentration elective.		

## Entrepreneurial Startups

A startup is a young company founded by one or more entrepreneurs in order to develop a product or service and bring it to market. Startups can be technology intensive with novel products or use existing technologies to create new variations or combinations. The entrepreneurial startups concentration is designed to prepare students from any background or area of study with the perspective, knowledge, and skills necessary to conceptualize, launch, manage, and grow a new business. It will also equip them with an understanding of the advantages and challenges of a startup they may work for. Students have an opportunity to learn to shape entrepreneurial opportunities, assess feasibility, raise funds, and develop other skills needed to open, manage, and grow a new business venture. Students are exposed to innovation, marketing, and business modeling as they work in interdisciplinary teams to develop business plans. This

concentration seeks students with career aspirations that involve starting a new venture or working in a startup.

## Concentration Requirements

### CONCENTRATION IN ENTREPRENEURIAL STARTUPS

Code	Title	Hours
<b>Required Courses</b>		
ENTR 2301	Innovation!	4
ENTR 4501	Advanced Studies in Entrepreneurial Startups	4

#### Electives

Complete two electives, one of which may come from the Additional Electives list: 8

ENTR 2303	Marketing Strategies for Startups	
ENTR 3305	Business Model Innovation for Entrepreneurs	
ENTR 3330	Lean Design and Rapid Prototyping	
<i>Additional Electives</i>		
ENTR 2206	Global Social Enterprise	
ENTR 2215	Understanding Family Enterprise	
ENTR 2304	Industry Disruption and Corporate Transformation	
ENTR 4983	Special Topics in Entrepreneurship	
FINA 4610	Entrepreneurial Finance and Private Equity	
MGMT 3302	Negotiating in Business	

One course from an approved Dialogue may count toward an elective.

## Family Business

A family business is a commercial organization owned or controlled by members of a single family or extended family, including relatives related by blood, marriage, or adoption. Family controlled companies are a dominant form of enterprise worldwide. Due to the inextricable link between family and the business, family firms must grapple with unique challenges in that the business decisions are often intertwined with family dynamics, as in the case of succession planning and corporate governance. The purpose of this concentration is to provide insight and understanding of the distinct challenges, opportunities, and practices of family/owner-controlled companies.

The concentration covers family and business issues of family firms, including family values and culture, managing conflict, sibling rivalry, entitlement, hiring family and nonfamily employees, management of the family business, facilitating growth and change, and succession planning. This concentration is intended for those contemplating a career in a family business and for those who plan to consult or provide professional services to family businesses. It will present both a theoretical framework for understanding the family form of business and a practical perspective on working for, or consulting to, a family/owner-controlled business.

## Concentration Requirements

### CONCENTRATION IN FAMILY BUSINESS

Code	Title	Hours
<b>Required Courses</b>		
ENTR 2301	Innovation!	4
ENTR 4503	Advanced Studies in Family Business	4

#### Electives

Complete two electives, one of which may come from the Additional Elective list: 8

ENTR 2215	Understanding Family Enterprise	
ENTR 3302	Managing and Growing the Family Business	
ENTR 3401	Consulting Operations Growth in SMEs	
<i>Additional Electives</i>		
ENTR 2206	Global Social Enterprise	
ENTR 2303	Marketing Strategies for Startups	
ENTR 2304	Industry Disruption and Corporate Transformation	
ENTR 4983	Special Topics in Entrepreneurship	
FINA 4610	Entrepreneurial Finance and Private Equity	
MGMT 3302	Negotiating in Business	

Students may use one course from an approved Dialogue experience toward the elective area of the concentration.

## Finance

The role of people trained in finance is expanding rapidly within the business world. Changes on the financial scene—rising securities prices, fluctuating inflation, currency values and interest rates, and globalization of markets—have created an awareness that financial knowledge is essential to the effective management of business firms and many other types of organizations.

Finance is the management of real and monetary assets for businesses, financial institutions, nonprofit organizations, governments, and individuals. Finance courses draw on accounting principles, economic theory, and quantitative methods. These courses develop methods to direct the way capital is acquired and managed. Students are exposed to economic and financial systems and how they operate. They also are given an opportunity to analyze economic trends and indicators and to apply this analysis to financial decision making.

Students may specialize in one or more of the following areas: corporate finance, investment management and analysis, risk management, and real estate. The program is designed to prepare students for careers in corporate financial management, security analysis, investment management, security or insurance brokerage, credit management, and risk management with corporations, banks, insurance companies, and other financial institutions.

## Concentration Requirements

### CONCENTRATION IN FINANCE

Code	Title	Hours
<b>Required Course</b>		
FINA 3301 or FINA 3303	Corporate Finance Investments	4
<b>Electives</b>		
Complete three of the following:		12
ENTR 3520 or FINA 2720	Impact Investing and Social Finance Sustainability in the Business Environment	
FINA 2730	Fintech and Financial Innovation	
FINA 3301	Corporate Finance (if not selected as a required course)	

FINA 3303	Investments (if not selected as a required course)
FINA 4219	Portfolio Management
FINA 4220	Behavioral Finance
FINA 4310	Working Capital Management
FINA 4312	Issues in Corporate Governance
FINA 4320	International Financial Management
FINA 4330	Emerging Financial Markets
FINA 4340	Blockchain Applications in Finance
FINA 4350	Applied Financial Econometrics
FINA 4370	Financial Modeling
FINA 4380	Financial Data Analytics
FINA 4390	Machine Learning in Finance
FINA 4410	Valuation and Value Creation
FINA 4412	Personal Financial Planning
FINA 4420	Mergers and Acquisitions
FINA 4512	Financial Risk Management
FINA 4514	Investment Banking
FINA 4516	Real Estate Finance
FINA 4524	Credit Analysis
FINA 4526	Core Topics in Alternative Investments
FINA 4602	Turnaround Management
FINA 4604	Fixed-Income Securities
FINA 4608	Advanced Financial Strategy
FINA 4610	Entrepreneurial Finance and Private Equity
FINA 4983	Special Topics in Finance

## Fintech

This concentration is designed for students who are interested in learning about new applications of technology in financial services, under the general heading of fintech (financial technology). In addition to mastering the foundations of finance, students in this concentration have an opportunity to learn how to leverage technology to create and improve financial services. The concentration provides both a broad and in-depth view of various fintech topics (e.g., big data, machine learning, peer-to-peer lending, blockchain, digital currencies, algorithmic trading) and allows students to develop programming skills in R and Python. These tools and knowledge are especially valued by banks, consulting firms, financial technology, and investment firms.

### Concentration Requirements

#### CONCENTRATION IN FINTECH

Only one course may be double counted with another concentration.

Code	Title	Hours
<b>Required Courses</b>		
FINA 3303 or FINA 3301	Investments Corporate Finance	4
FINA 4380	Financial Data Analytics	4
<b>Electives</b>		
Complete two of the following:		8
FINA 2730	Fintech and Financial Innovation	
FINA 4340	Blockchain Applications in Finance	

FINA 4350	Applied Financial Econometrics
FINA 4390	Machine Learning in Finance

## Global Business and Strategy

### Concentration Requirements

#### CONCENTRATION IN GLOBAL BUSINESS AND STRATEGY

Code	Title	Hours
<b>Required Courses</b>		
INTB 1202	Becoming a Global Manager	4
INTB 2202	Analyzing the Global Business Environment	4
INTB 4202	Executing Global Strategy	4
<b>Elective</b>		
Complete one of the following:		4
FINA 4320	International Financial Management	
INTB 3310	Cultural Aspects of International Business	
INTB 4983	Special Topics in International Business	
MKTG 4512	International Marketing	
SCHM 3301	Global Supply Chain Strategy	

## Healthcare Management and Consulting

Healthcare is an exciting and important industry, growing faster than any other, and its importance to society cannot be underestimated given its focus on helping people live longer and lead happier, higher-quality lives. Working in healthcare requires knowledge and skills in several cutting-edge areas such as service delivery innovation, process and quality improvement, talent management, analytics, and supply chain management. The concentration in healthcare management and consulting offers students an opportunity to understand how this major sector of the U.S. economy works; to apply training in other areas like finance and marketing to managing healthcare problems and opportunities; to obtain a viable educational and career outlet for realizing their interests in advancing the social good; and to prepare for working, managing, and consulting in the healthcare industry. The concentration in healthcare management and consulting is an interdisciplinary concentration that provides exposure to several different areas of business and the social sciences important for working in healthcare.

### Concentration Requirements

#### CONCENTRATION IN HEALTHCARE MANAGEMENT AND CONSULTING

Note: Students may double count up to one course in another business concentration.

Code	Title	Hours
<b>Required Courses</b>		
MGMT 3340	Healthcare Management, Innovation, and Design	4
SCHM 3315	Managing Healthcare Operations and Supply Chain	4
<b>Implementation/Consulting Elective</b>		
Complete one of the following:		4
BUSN 3110	The Consulting Environment	
ENTR 3220	International Entrepreneurship and Innovation Consulting	

MGMT 3302	Negotiating in Business
MISM 3501	Information Visualization for Business
MISM 3515	Data Mining for Business
MGMT 3315	Managing Organizational Change and Disruption
MGMT 3530	Project Management
MGMT 3420	Managing Human Capital
MGMT 4410	Workforce Analytics
MGMT 4550	Management Consulting in Organizations

**Interdisciplinary Healthcare Focus**

Complete one of the following: 4

COMM 3201	Health Communication
COMM 4533	Consultation Skills
HUSV 2970	Research Methods for Human Services
IE 3500	Introduction to Healthcare Systems Engineering
PHTH 2515	Healthcare Policy and Administration
PHTH 4515	Critical Issues in Health and Public-Health Policy
SOCL 3440	Sociology of Human Service Organizations
SOCL 3441	Sociology of Health and Illness

**International Business**

The concentration in international business is designed for students interested in developing their knowledge and skills related to doing business in the global economy. The development of a deeper understanding of international business will be crucial in the future. Subject matter covered in this concentration focuses on topics such as the cultural, economic, technological, and political aspects of varying national business environments and their impact on international business operations. Students are exposed to a variety of key international business concepts ranging from strategic planning in the global arena to managing behavior and interpersonal relations. Additional topics include international trade theory, national trade policies, foreign market analysis, managing technological issues, and international strategic management.

From a job placement perspective, few firms today operate or compete exclusively in domestic markets. Possessing a knowledge of how people, firms, and institutions interact across borders provides international business concentrators with a competitive edge. This concentration pairs well with other D'Amore-McKim concentrations such as finance, marketing, and supply chain, among others.

**Concentration Requirements****CONCENTRATION IN INTERNATIONAL BUSINESS**

*Note:* Students may double count up to one course in another business concentration.

Code	Title	Hours
<b>Required Courses</b>		
INTB 1203	International Business and Global Social Responsibility	4
or INTB 1209	International Business and Global Social Responsibility	

Complete one or both of the following: 4-8

INTB 2501	Competing to Win in Emerging Markets
INTB 3310	Cultural Aspects of International Business

**Electives**

Complete two of the following courses (one if both courses above selected). 4-8

*Note:* One course can also count toward a different business concentration.

*Managing Internationally*

INTB 3202	Managing the International Assignment
INTB 3320	International Business Management and Environment
INTB 4202	Executing Global Strategy
INTB 4983	Special Topics in International Business

*International Functional Knowledge*

ENTR 2206	Global Social Enterprise
ENTR 3306	Global Entrepreneurship
FINA 4320	International Financial Management
MKTG 4512	International Marketing
SCHM 3301	Global Supply Chain Strategy

*Contextual Experience*

ENTR 4512	Social Entrepreneurship and Sustainable Development in India
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Electives not listed may be approved via the undergraduate dean's office.

**Management**

Managing—whether it's people, projects, or programs—is challenging and requires a considerable range of knowledge and skills. Effective managers must know the business, be interpersonally competent, behave ethically, and diagnose and deal with human and organizational dynamics. The aim of the management concentration is to increase both managerial *knowledge* and management *skills*. This involves both studying *and* practicing topics such as motivation, leadership, negotiation, conflict resolution, project management, managing teams, organizational change, and their impact on business results.

Management concentrators participate in vibrant co-op experiences spanning a diverse range of business functions, such as business analytics, human resources, client and sales support, and project management. Many students who concentrate in management decide to get a second concentration, giving them the ability to work in teams and manage other people in whatever arena they find themselves.

**Concentration Requirements****CONCENTRATION IN MANAGEMENT**

Code	Title	Hours
<b>Required Course</b>		
MGMT 4550	Management Consulting in Organizations	4

**Electives**

*Note:* Only one non-MGMT course may be used as an elective.

Complete three of the following: 12		
ENTR 2215	Understanding Family Enterprise	
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
ENTR 4225	Growth, Acquisitions, and Alliances	

MGMT 3302	Negotiating in Business
MGMT 3305	Power and Influence
MGMT 3315	Managing Organizational Change and Disruption
MGMT 3340	Healthcare Management, Innovation, and Design
MGMT 3350	Managing a Diverse Workforce
MGMT 3360	Law and the Legal Process
MGMT 3380	Leading with Character
MGMT 3420	Managing Human Capital
MGMT 3435	Social Networks and Organizations
MGMT 3530	Project Management
MGMT 4310	The Management Practices of Great Organizations
MGMT 4410	Workforce Analytics
MGMT 4983	Special Topics in Management

## Management Information Systems

In the global information age, success for organizations requires the ability to manage, analyze, and use information effectively. To that end, the goal of the Management Information Systems concentration is to teach future managers how to manage and utilize data and information technology (IT) to help both individuals and organizations perform more efficiently and effectively. This can lead the student in two career directions:

- To become a professional in the cross-functional information management, business analytics, and data quality and governance functions of a company or in an IT or data-enabled strategic business transformation initiative.
- To accelerate and enhance a data-informed or data leadership career in organizations or another functional area such as finance, marketing, research and development, innovation, accounting, workforce management, strategic management, or acquisitions.

Understanding how to get the right information in the right form and format to the right people at the right time is essential in today's business world, especially when companies and the individuals that do this well are achieving significant competitive advantages. Students have the opportunity to explore new, cutting-edge approaches that allow them to use the powerful resource of information to its greatest advantage. These approaches often use analytical concepts such as information visualization, artificial intelligence, and data mining. The importance of information privacy and security is also emphasized. Students have the opportunity to develop technical and problem-solving skills that are in high demand by employers, and to apply those skills through both classroom activities and co-ops focused on information management or business analytics.

Managers in the information management function need to interact frequently with other managers throughout an organization. Therefore, students are also encouraged to complete a dual concentration in information management and another area of business. Graduates of this program have a wide range of career paths that suit their particular interests. Professional options include Business/Systems/Information Analyst, Database Manager or Designer, Data Architect or Data Strategist, Information Product Designer/Manager, Data Quality Manager, Data Governance Manager, IT or Data Project Manager, Consultant, and IT or Data Specialist or Strategist within other departments, such as financial

services, accounting, marketing, R&D, manufacturing, customer service, and risk management and compliance. Executive positions include Chief Data Officer or Chief Information Officer.

## Concentration Requirements

### CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS

Code	Title	Hours
Only one course may double count between another concentration or minor.		
<b>Required Courses</b>		
MISM 3403	Data Management in the Enterprise	4
<b>Electives</b>		
Complete three of the following:		12
MISM 2510	Fundamentals of Information Analytics	
MISM 3501	Information Visualization for Business	
MISM 3515	Data Mining for Business	
MISM 4501	Business Systems Integration	
MISM 4983	Special Topics in Management Information Systems	
BUSN 5001	Data-Driven and Technology-Enabled Value Creation in Digital Economy	

## Marketing

Aspiring marketers at the D'Amore-McKim School of Business have an opportunity to learn how brands, customers, and organizations impact business performance and society by embracing an approach that is analytical, creative, and practice oriented. Students receive instruction from award-winning research and teaching faculty who share their knowledge to help empower the next generation of marketing leaders.

The concentration in marketing encourages students to examine marketing as a driver of business growth, while considering the ethical and sustainable practices that are necessary for business and societal benefit.

The building blocks of the marketing concentration require courses in marketing research and consumer behavior or marketing management. This leads to a tailored set of electives to suit different student goals and interests. Students choose from marketing and society, marketing analytics, sales management, managing customer engagement in a service world, advertising and brand promotion, digital marketing, new product development, international marketing, and marketing in Asia to complete their concentration.

The concentration aims to prepare students with the knowledge and skills to pursue careers in a broad range of professional settings including, but not limited to, digital marketing management, social media marketing, marketing analysis, data analysis, marketing consulting, UX design, content strategy, consumer insights analysis, sales management, and product and brand management.

Other marketing-related options available to students include a minor in marketing analytics and combined degrees in business administration (marketing). Three of the available combined majors are a Bachelor of Science in Business Administration (marketing) and Design, a Bachelor of Science in Business Administration (marketing) and Communication Studies, and Bachelor of Science in Business Administration (marketing) and Psychology.



## Concentration Requirements

### CONCENTRATION IN MARKETING

Code	Title	Hours
<b>Required Courses</b>		
MKTG 3401	Marketing Research	4
MKTG 3301	Marketing Management	4
or MKTG 4506	Consumer Behavior	
<b>Electives</b>		
Complete two of the following:		8
MKTG 2301	Marketing and Society	
MKTG 3301	Marketing Management (if not selected as a required course)	
MKTG 3501	Marketing Analytics	
MKTG 4220	Marketing in Asia	
MKTG 4420	Sales Management	
MKTG 4502	Managing Customer Engagement in a Service World	
MKTG 4504	Advertising and Brand Promotion	
MKTG 4506	Consumer Behavior (if not selected as a required course)	
MKTG 4508	Digital Marketing	
MKTG 4510	New Product Development	
MKTG 4512	International Marketing	
MKTG 4983	Special Topics in Marketing	

## Marketing Analytics

Marketing analytics comprises the data-driven methods, techniques, and technologies that enable marketers to evaluate the success of their marketing initiatives and campaigns. This concentration offers the opportunity to learn the cutting-edge skills necessary to harness, process, and analyze data to address modern marketing challenges. It combines programming, quantitative analysis, data-driven consumer insights, and predictive modeling into an integrated curriculum that is designed to prepare students for successful careers in marketing analytics and other data-driven business specializations.

## Concentration Requirements

### CONCENTRATION IN MARKETING ANALYTICS

*Note:* Students may double count up to one course in another business concentration.

Code	Title	Hours
<b>Required Courses</b>		
MKTG 2602	Quantitative Analysis of Consumer Data	4
MKTG 3402	Gaining Insights from Consumer Data	4
MKTG 3501	Marketing Analytics	4
<b>Elective</b>		
Complete one of the following:		4-5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	

## Social Innovation and Entrepreneurship

Social entrepreneurship involves creating new products, services, or programs to address social or environmental needs. The Business Concentration in Social Innovation and Entrepreneurship is designed to prepare students from any background or area of study with the knowledge, skills, and experience to launch a new venture or project focused on creating social change through business, partner or work with innovation-driven nonprofit and for-profit social enterprises, work for a business in any industry with an emerging strategic commitment to positive social impact, work in the social finance and impact-investing sectors within the financial services industry, and create and lead intrapreneurial ventures and projects in any business or industry that evidence a commitment to the “stakeholder” model of business.

These five areas fall within the rapidly growing segments of the global economy in which social returns are elevated alongside financial returns in order to create a more equitable and inclusive society. Students will consider ethical and social issues in creating, building, managing, and growing small, medium, and large businesses. The concentration includes a structured community engagement and service requirement, either through participation in international fieldwork (Dialogues, Alternative Spring Break, or other embedded travel programs) and/or local community service programs. Students will have the opportunity to develop specific skill sets in entrepreneurial thinking and critical analysis, creative problem solving, professional communications (writing and presentations), working in diverse and multicultural teams, and interdisciplinary research and data analysis.

## Concentration Requirements

### CONCENTRATION IN SOCIAL INNOVATION AND ENTREPRENEURSHIP

Code	Title	Hours
<b>Required Courses</b>		
ENTR 2301	Innovation!	4
ENTR 4506	Advanced Studies in Social Innovation Entrepreneurship	4
<b>Electives</b>		
Complete two of the following, one of which may come from the additional elective list:		8
ENTR 2206	Global Social Enterprise	
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
ENTR 3520	Impact Investing and Social Finance	
<i>Additional Electives</i>		
ENTR 2215	Understanding Family Enterprise	
ENTR 2303	Marketing Strategies for Startups	
ENTR 2304	Industry Disruption and Corporate Transformation	
ENTR 4983	Special Topics in Entrepreneurship	
FINA 4610	Entrepreneurial Finance and Private Equity	
MGMT 3302	Negotiating in Business	
MKTG 2301	Marketing and Society	

One course from an approved Dialogue may count toward an elective.

## Supply Chain Management

From the Fortune 500 manufacturer to the small firm that produces, sells, or distributes products, all companies have a supply chain function that must be effectively managed if they are to be competitive. A supply chain manager is typically involved in making critical decisions about such matters as procurement of supplies and/or services, demand planning and forecasting, inventory policies, order fulfillment, transportation of company's materials and products, warehouse and distribution operations, location of facilities, managing interfirm relationships, and customer service. As companies become increasingly involved in global markets as both buyers and sellers, supply chain managers play a major role not only in assessing the feasibility of international activity but also in developing supply and distribution networks to support that involvement. Because supply chain managers frequently interact with those involved in other areas of management, many supply chain management students have chosen to complete a second concentration in such areas as marketing, management information systems, finance, or entrepreneurship.

There are many career options for supply chain management students. In addition to finding career opportunities with manufacturers, retailers, and distributors, supply chain management students may find similar opportunities with companies that sell supply chain services; consulting firms; financial institutions; healthcare firms; and government agencies at the federal, state, and local levels.

### Concentration Requirements

#### CONCENTRATION IN SUPPLY CHAIN MANAGEMENT

Code	Title	Hours
<b>Required Courses</b>		
SCHM 3301	Global Supply Chain Strategy	4
SCHM 3305	Sourcing, Procurement, and Negotiation	4
SCHM 3310	Logistics and Transportation Management	4
<b>Elective</b>		
Complete one of the following:		4
SCHM 3308	Supply Chain Analytics and Emerging Technologies	
SCHM 3315	Managing Healthcare Operations and Supply Chain	
SCHM 3320	Forecasting and Sales Operations Planning	
SCHM 4401	Contemporary Topics in Supply Chain Management	
SCHM 4983	Special Topics in Supply Chain Management	

## Minors

Students who wish to enter one of the minor programs listed below should complete the online minor form accessible via the D'Amore-McKim School of Business Undergraduate Programs website. Students who complete all required courses successfully and have earned at least a C (2.000) average in them will be awarded the minor at graduation.

- Accounting and Advisory Services (p. 297)
- Brand Management (p. 298)
- Business Administration (p. 298)
- Business Analytics (p. 299)

- Consulting (p. 299)
- Corporate Innovation and Venture (p. 300)
- Emerging Markets (p. 301)
- Entrepreneurial Startups (p. 301)
- Family Business (p. 301)
- Leadership and Human Capital (p. 302)
- Management Information Systems (p. 302)
- Marketing (p. 303)
- Marketing Analytics (p. 303)
- Social Innovation and Entrepreneurship (p. 304)
- Strategy (p. 304)
- Supply Chain Management (p. 304)
- Sustainable Business Practices (p. 305)

## Accounting and Advisory Services, Minor

### Overview

The accounting and advisory services minor is aimed at nonbusiness students who wish to complement their current studies with a focus in accounting and advisory services. Accounting knowledge is the foundation for business decision makers to make sound judgments and support the operational and strategic decisions in a firm. Importantly, public accounting firms are hiring students from nonaccounting disciplines for their advisory services practices. These students work in interdisciplinary areas including mergers and acquisitions, risk management, operations, data analytics, and digital transformation where accounting knowledge from this minor will provide them with a competitive advantage. Students pursuing the minor may select among accounting courses that explore topics such as financial reporting, advisory services and emerging accounting systems, strategic cost analysis, and tax planning. Students can also choose courses from other disciplines that would benefit from accounting knowledge such as engineering, computer science, and healthcare.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. The accounting and advisory services minor is not open to D'Amore-McKim students or students pursuing a combined major with the D'Amore-McKim School of Business.

### Required Courses

Code	Title	Hours
ACCT 1209	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4

### Electives

Code	Title	Hours
Complete one of the following:		
ACCT 3401	Financial Reporting and Analysis 1	
ACCT 3403	Advisory Services and Emerging Accounting Systems	
ACCT 3416	Strategic Cost Analysis for Decision Making	
ACCT 4414	Income Tax Determination and Planning	

Code	Title	Hours
Complete one of the following:		4
ACCT 3304	Business Law and Professional Ethics	
ACCT 3401	Financial Reporting and Analysis 1	
ACCT 3403	Advisory Services and Emerging Accounting Systems	
ACCT 3416	Strategic Cost Analysis for Decision Making	
ACCT 4412	Auditing and Other Assurance Services	
ACCT 4414	Income Tax Determination and Planning	
ACCT 4501	Financial Reporting and Analysis 2	
EMGT 5220	Engineering Project Management	
IE 3425	Engineering Database Systems	
IE 3500	Introduction to Healthcare Systems Engineering	
IE 4512	Engineering Economy	
IE 5400	Healthcare Systems Modeling and Analysis	
IE 5617	Lean Concepts and Applications	
IS 2000	Principles of Information Science	
IS 3500	Information System Design and Development	

### GPA Requirement

2.000 GPA required in the minor

### Brand Management, Minor

Think about some of your favorite brands—chances are, there is a high-powered brand manager working behind the scenes to ensure the brand resonates with you, one of its target consumers. Brand managers oversee the integrity of a brand across all marketing activities in tech, consumer packaged goods (CPG), and service industries. The position of brand manager requires strategic thinking, focus on the customer experience, communication with multiple stakeholders and cross-functional teams, creativity, and analytical skills. Brand managers are creative, organized multitaskers, who often serve as the liaison between the marketing group, design team, and engineers to oversee the consistency of the brand image. While every day is different, typical activities of a brand manager include conducting and analyzing research to identify brand opportunities, understanding market trends and competitive landscape, creating and maintaining brand marketing budget, managing cross-platform brand communication strategy, developing the brand story, executing marketing and advertising campaigns, and overseeing the overall health of a brand. When managing a brand's products or services in a tech firm, brand and product managers may also be involved in ideation, prototyping, user experience (UX) testing, and business casing. This minor offers the opportunity to learn these skills across coursework in marketing, consumer behavior, advertising, new product development, marketing analytics, project management, demand planning and forecasting, and product innovation. As such, the required courses, paired with a flexible, yet focused list of electives, support students in the aspects of brand management that are most relevant for their future career prospects.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* Students in the D'Amore-McKim School of Business or in a combined major with D'Amore McKim School of Business are not allowed to pursue this minor.

### Required Courses

Code	Title	Hours
MKTG 2209	Introduction to Marketing	4
or MKTG 2201	Introduction to Marketing	
MKTG 3720	Brand Management	4

### Electives

Complete two of the following with at least one course from MKTG:

Code	Title	Hours
ENTR 2301	Innovation!	
MGMT 3530	Project Management	
MKTG 2720	Enabling Technologies for Consumer Engagement	
MKTG 3401	Marketing Research	
or MKTG 3402	Gaining Insights from Consumer Data	
MKTG 4502	Managing Customer Engagement in a Service World	
MKTG 4504	Advertising and Brand Promotion	
MKTG 4506	Consumer Behavior	
MKTG 4510	New Product Development	
or ENTR 3330	Lean Design and Rapid Prototyping	
or ENTR 3335	Product Innovation and Portfolio Management	
MKTG 4720	Understanding the Platform Economy	
SCHM 3320	Forecasting and Sales Operations Planning	

### GPA Requirement

Minimum 2.000 GPA required in all courses completed

### Business Administration, Minor

The minor in business administration introduces nonbusiness students to the key functional areas in business, providing a broad overview of the business world. The minor is available to nonbusiness students only.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Accounting

Code	Title	Hours
ACCT 1209	Financial Accounting and Reporting	4

### Organizational Behavior

Code	Title	Hours
ORGB 3209	Organizational Behavior	4

**Finance**

Code	Title	Hours
FINA 2209	Financial Management (ACCT 1209 is a prerequisite)	4

**Marketing**

Code	Title	Hours
MKTG 2209	Introduction to Marketing	4

**Business Elective**

Code	Title	Hours
Complete one of the following courses or, with the approval of the undergraduate dean's office, any business course for which the prerequisites have been met:		
BUSN 1110	Fundamentals of Business	4
ENTR 1201	The Entrepreneurial Universe	
ENTR 2206	Global Social Enterprise	
ENTR 2215	Understanding Family Enterprise	
ENTR 2301	Innovation!	
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
FINA 1209	Personal Finance	
FINA 2720	Sustainability in the Business Environment	
INTB 1209	International Business and Global Social Responsibility	
INTB 2501	Competing to Win in Emerging Markets	

**GPA Requirement**

2.000 GPA required in the minor

**Business Analytics, Minor**

The business analytics minor is open to non-business undergraduate students with any major and offers analytics courses from a business decision-making perspective. The goal of these courses is to help students develop data-driven insights into business problems and solutions, along with the skills to communicate these insights effectively across the organization. The courses include both foundational courses, those geared toward more specific data analytics challenges, and those that apply analytical techniques to specific functional areas. Business analytics courses are grounded in relevant theory and principles and explore real-world problems and data. The courses explore analytics techniques and topics such as information visualization, artificial intelligence, machine learning, and data mining. Course tools are selected based on their effectiveness, usefulness, and their widespread use by employers. Depending on the courses chosen, students can develop skills using packages and languages such as R, Python, SQL, and Tableau. Students have the opportunity to develop technical and problem-solving skills that are in high demand by many types of organizations. The business analytics minor can fit well with any majors across colleges and schools.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Starting Fall 2021 the Business Analytics minor is available to non-business majors only .

**Required Course**

Code	Title	Hours
MISM 2510	Fundamentals of Information Analytics	4

**Electives**

Code	Title	Hours
Complete three of the following:		12
Note: Only one non-MISM course may be used as an elective.		
BUSN 5001	Data-Driven and Technology-Enabled Value Creation in Digital Economy	4
ECON 2560	Applied Econometrics	
EECE 2300	Computational Methods for Data Analytics	
FINA 4380	Financial Data Analytics	
JRNL 3610	Digital Storytelling and Social Media	
MGMT 4410	Workforce Analytics	
MISM 3403	Data Management in the Enterprise	
MISM 3501	Information Visualization for Business	
MISM 3515	Data Mining for Business	
MISM 3525	Modeling for Business Analytics	
MISM 4983	Special Topics in Management Information Systems	
MKTG 3501	Marketing Analytics	
SCHM 3308	Supply Chain Analytics and Emerging Technologies	

**GPA Requirement**

2.000 GPA required in the minor

**Consulting, Minor**

This minor is designed to provide students with a solid foundation in the skills and concepts needed to succeed in a consulting-oriented environment, as well as an introduction to a variety of possible contexts for consulting work. Consulting skills are essential work skills for many roles beyond the traditional management consultant. Many technical positions within firms demand that consultative skills be used within the firm even in early career positions (e.g., business analyst); in this respect, a consulting minor complements students' technical training. Required courses cover the fundamentals of both management and strategy consulting, as well as a framework of consulting activities that can be applied to many types of consulting and consultative roles. Electives provide students an opportunity to gain deeper knowledge in a specific consulting skill and to explore a context in which they could apply their consulting knowledge.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students may only double-count one course in the minor toward their major, concentration, or another minor.

**Required Courses**

Code	Title	Hours
BUSN 3110	The Consulting Environment	4
MGMT 4550	Management Consulting in Organizations	4
or MGMT 3520	Consulting Fundamentals and Frameworks	

**Electives**

Code	Title	Hours
<b>Consulting Skills</b>		
Complete one of the following: 4		
COMM 4533	Consultation Skills	
ENTR 3220	International Entrepreneurship and Innovation Consulting	
ENTR 4510	Management Consulting Abroad	
FINA 4602	Turnaround Management	
MGMT 3302	Negotiating in Business	
MGMT 3315	Managing Organizational Change and Disruption	
MGMT 3530	Project Management	
MGMT 4310	The Management Practices of Great Organizations	
MGMT 4410	Workforce Analytics	
STRT 4301	Strategic Analysis and Decision Making	

**Consulting Contexts**

Complete one of the following: 4		
ACCT 3403	Advisory Services and Emerging Accounting Systems	
ACCT 3416	Strategic Cost Analysis for Decision Making	
CS 3200	Database Design	
CY 2550	Foundations of Cybersecurity	
DS 3000	Foundations of Data Science	
EMGT 5220	Engineering Project Management	
ENTR 3330	Lean Design and Rapid Prototyping	
ENTR 3401	Consulting Operations Growth in SMEs	
FINA 4420	Mergers and Acquisitions	
FINA 4514	Investment Banking	
IE 3500	Introduction to Healthcare Systems Engineering	
IE 4525	Logistics and Supply Chain Management	
IE 4625	Facilities Planning and Material Handling	
IE 5400	Healthcare Systems Modeling and Analysis	
IE 5640	Data Mining for Engineering Applications	
INTB 2501	Competing to Win in Emerging Markets	
MGMT 3305	Power and Influence	
MGMT 3340	Healthcare Management, Innovation, and Design	
MGMT 3420	Managing Human Capital	
MKTG 3301	Marketing Management	
MKTG 4506	Consumer Behavior	

PHMD 5575	Pharmaceutical Industry
POLS 2340	Business and Government

**GPA Requirement**

2.000 GPA required in the minor

**Corporate Innovation and Venture, Minor**

Corporate innovation is a series of processes by which established companies promote, design, and pursue innovation opportunities that can result in new products, services, and/or business models. It entails R&D activities, product development, internal venture accelerators, acquisitions, and alliances. Innovation is the most powerful competitive weapon for a corporation that wants to ensure growth and relevance over time.

The corporate innovation and venture minor is designed to prepare students to develop new businesses, products, services, or processes inside of an existing organization to create value and generate new revenue growth through entrepreneurial thought and action. A minor in corporate innovation seeks to prepare students to be agents of change and renewal within established companies, aspiring to leading roles in areas such as product development, new business research, and innovation-related projects. This minor targets students with co-op aspirations that involve positions within corporations such as entry-level product line management, project management, consulting, and new product and service development.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. The minor is not available to D'Amore-McKim School of Business students or students pursuing a combined major with the D'Amore-McKim School of Business.

**Required Course**

Code	Title	Hours
ENTR 2301	Innovation!	4

**Electives**

Complete three courses, one of which may be chosen from the additional elective option list: 12

ENTR 2304	Industry Disruption and Corporate Transformation
ENTR 3335	Product Innovation and Portfolio Management
ENTR 4225	Growth, Acquisitions, and Alliances
ENTR 4504	Advanced Studies in Corporate Innovation

**Additional Electives**

ARTG 1250	Design Process Context and Systems
ARTG 3462	Experience Design 1
CS 4500	Software Development
CS 4520	Mobile Application Development
CS 4550	Web Development
ENTR 1201	The Entrepreneurial Universe
GAME 2010	The Business of Games

GE 1110	Engineering Design
GE 5100	Product Development for Engineers

## GPA Requirement

2.000 GPA required in the minor

### Emerging Markets, Minor

Emerging markets, such as Brazil, China, India, and Turkey, account for 85 percent of the world's population, half its GDP, and more than two-thirds of world economic growth. Understanding how to leverage the consumer needs, talent, and innovation potential of these economies will be vital for the future success of all for-profit and not-for-profit organizations. The minor combines course work on the economic, political, and business challenges of operating in emerging markets with a hands-on, immersive field study component. This interdisciplinary minor is open to business and nonbusiness students.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Emerging Markets

Code	Title	Hours
INTB 2501	Competing to Win in Emerging Markets	4

### Field Study

Code	Title	Hours
	Field study (two courses required) approved by the D'Amore-McKim undergraduate dean's office. Please contact the D'Amore-McKim Academic Advising office to confirm option(s).	8

### Electives

Code	Title	Hours
Complete two of the following:		8
AFRS 1101	Introduction to African Studies	
ANTH 2305	Global Markets and Local Culture	
ASNS 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
or HIST 1500	Modern Chinese History and Culture	
CLTR 1505	Latin American Culture, History, and Politics	
COMM 2303	Global and Intercultural Communication	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
POLS 3405	International Political Economy	
POLS 3487	Politics of Developing Nations	
INTB 3310	Cultural Aspects of International Business	

## GPA Requirement

2.000 GPA required in the minor

### Entrepreneurial Startups, Minor

This interdisciplinary minor guides students through the startup process. The Minor in Entrepreneurial Startups is designed to prepare students

from any background or area of study to conceptualize, launch, manage, and grow a new business. Students have an opportunity to learn to shape entrepreneurial opportunities; assess feasibility; and develop other skills needed to conceptualize, launch, manage, and grow a new business venture. Students are exposed to innovation, marketing, and business modeling as they work in interdisciplinary teams to develop business plans. Courses from the College of Arts, Media and Design; College of Engineering; and the Khoury College of Computer Sciences have been carefully selected to allow students to apply the same course to both his or her own college degree and the entrepreneurial startups minor.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students in the D'Amore-McKim School of Business or pursuing a combined major with the D'Amore-McKim School of Business may not pursue this minor.

### Required Course

Code	Title	Hours
ENTR 2301	Innovation!	4

### Electives

Code	Title	Hours
Complete three courses, one of which may be chosen from the additional elective option list:		12
ENTR 2303	Marketing Strategies for Startups	
ENTR 3305	Business Model Innovation for Entrepreneurs	
ENTR 3330	Lean Design and Rapid Prototyping	
ENTR 4501	Advanced Studies in Entrepreneurial Startups	

#### Additional Elective Options

One of the following courses may fulfill an elective:

ARTG 1250	Design Process Context and Systems
ARTG 3462	Experience Design 1
CS 4500	Software Development
CS 4520	Mobile Application Development
CS 4550	Web Development
ENTR 1201	The Entrepreneurial Universe
GAME 2010	The Business of Games
GE 1110	Engineering Design (Engineering Students Only)
GE 5100	Product Development for Engineers (Engineering Students Only)

## GPA Requirement

2.000 GPA required in the minor

### Family Business, Minor

A family business is a commercial organization owned or controlled by members of a single family or extended family, including relatives related by blood, marriage, or adoption. Family controlled companies are a dominant form of enterprise worldwide. Due to the inextricable link between family and the business, family firms must grapple with unique challenges in that the business decisions are often intertwined with family dynamics, as in the case of succession planning and corporate governance. The purpose of this minor is to provide insight and

understanding of the distinct challenges, opportunities, and practices of family/owner-controlled companies.

The minor covers family and business issues of family firms, including family values and culture, managing conflict, sibling rivalry, entitlement, hiring family and nonfamily employees, management of the family business, facilitating growth and change, and succession planning. This minor is intended for those contemplating a career in a family business and for those who plan to consult or provide professional services to family businesses. It will present both a theoretical framework for understanding the family form of business and a practical perspective on working for, or consulting to, a family/owner-controlled business.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. The minor is not available to D'Amore-McKim School of Business students nor students pursuing a combined major with the D'Amore-McKim School of Business.

### Required Course

Code	Title	Hours
ENTR 2301	Innovation!	4

### Electives

Code	Title	Hours
Complete three courses, one of which may be chosen from the additional elective option list:		12

ENTR 2215	Understanding Family Enterprise
ENTR 3302	Managing and Growing the Family Business
ENTR 3401	Consulting Operations Growth in SMEs
ENTR 4503	Advanced Studies in Family Business
<i>Additional Electives</i>	
ARTG 1250	Design Process Context and Systems
ARTG 3462	Experience Design 1
CS 4500	Software Development
CS 4520	Mobile Application Development
CS 4550	Web Development
ENTR 1201	The Entrepreneurial Universe
GAME 2010	The Business of Games
GE 1110	Engineering Design (Engineering Students Only)
GE 5100	Product Development for Engineers (Engineering Students Only)

### GPA Requirement

2.000 GPA required in the minor

## Leadership and Human Capital, Minor

The leadership and human capital minor will deepen students' knowledge and skills that are necessary to attract, retain, develop, lead, and manage employees. Employees of a firm are resources for an employer and based on their expertise provide economic value to a firm. Thus, the effective leadership and management of human capital is instrumental to an organization's success. As organizations are seeking new ways of dealing with problems such as globalization, a weak economy, rapidly changing technology, union-management relations, and changing demographics in the workplace, managers and human resources

professionals use a wide range of techniques for handling these and other challenges and ensuring that their employees and organizations are competitive and high performing.

Managing human capital is a significant component of the strategic management of an organization. The courses offered in the leadership and human capital minor will expose students to the major issues and challenges in leading and managing a global and increasingly diverse workforce. The courses address the human capital issues all employees face and offer ways to deal with them.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Please note, only one course in the minor may double count in one of the seven business concentrations.

### Organizational Behavior

Code	Title	Hours
ORGB 3201	Organizational Behavior	4
or ORGB 3209	Organizational Behavior	

### Managing Human Capital

Code	Title	Hours
MGMT 3420	Managing Human Capital	4

### Electives

Code	Title	Hours
Complete two of the following courses:		8
MGMT 3302	Negotiating in Business	
MGMT 3305	Power and Influence	
MGMT 3315	Managing Organizational Change and Disruption	
MGMT 3350	Managing a Diverse Workforce	
MGMT 3380	Leading with Character	
MGMT 4310	The Management Practices of Great Organizations	
MGMT 4410	Workforce Analytics	

### GPA Requirement

2.000 GPA required in the minor

## Management Information Systems, Minor

The management information systems minor is open to nonbusiness undergraduate students with any major and offers contemporary information-focused courses from a global business perspective. The goal of these courses is to show students how to use and manage data and information technology (IT) to help both individuals and organizations perform more efficiently and effectively. The minor includes both fundamental courses and those geared toward more specific information management challenges. These courses will include real-world examples, grounded in relevant theories and principles, and will be reinforced using appropriate information tools and systems to gain the necessary skills and knowledge for tomorrow's work environment. The MMIS minor requires every student to build a strong understanding of how data is gathered, stored, managed, and used across the organization. Beyond this, students have the opportunity to explore new, cutting-edge areas such as information visualization, data mining, and blockchains.

Other topics such as information privacy and security, mobile information systems, and artificial intelligence can also be examined in greater depth.

### Minor Requirements

The management information systems minor is open to nonbusiness undergraduate students. Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Only 4 credits may be double counted toward another minor.

#### Required Course

Code	Title	Hours
MISM 3403	Data Management in the Enterprise	4

#### Electives

Complete three of the following (at least 8 credits must come from MISM courses):

Code	Title	Hours
COMM 2625	Communication, Technology, and Society	12
ECON 4681	Information Economics and Game Theory	
FINA 4340	Blockchain Applications in Finance	
JRNL 3610	Digital Storytelling and Social Media	
MGMT 3530	Project Management	
MISM 2301	Management Information Systems	
MISM 3501	Information Visualization for Business	
MISM 3515	Data Mining for Business	
MISM 4501	Business Systems Integration	
MISM 4983	Special Topics in Management Information Systems	
PHIL 1145	Technology and Human Values	
SCHM 3301	Global Supply Chain Strategy	

#### GPA Requirement

2.000 GPA required in the minor

### Marketing, Minor

The marketing minor is aimed at non-D'Amore-McKim students who wish to complement their current studies with a focus on marketing. In the marketing minor, students can select among courses that explore topics such as consumer behavior, advertising, services marketing, marketing analytics, and international marketing. Pursuing a marketing minor offers Northeastern students an opportunity to gain a deeper appreciation of consumers, markets, metrics, and brands to help them become better business practitioners no matter where their careers take them.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* Students in D'Amore-McKim or in a combined program with D'Amore McKim are not allowed to take this minor.

### Required Courses

Code	Title	Hours
MKTG 2201	Introduction to Marketing	4
or MKTG 2209	Introduction to Marketing	

### Electives

Code	Title	Hours
Complete three of the following:		12
MKTG 2301	Marketing and Society	
MKTG 3301	Marketing Management	
MKTG 3401	Marketing Research	
MKTG 3501	Marketing Analytics	
MKTG 4220	Marketing in Asia	
MKTG 4420	Sales Management	
MKTG 4502	Managing Customer Engagement in a Service World	
MKTG 4504	Advertising and Brand Promotion	
MKTG 4506	Consumer Behavior	
MKTG 4508	Digital Marketing	
MKTG 4510	New Product Development	
MKTG 4512	International Marketing	

#### GPA Requirement

Minimum 2.000 GPA required in all courses completed

### Marketing Analytics, Minor

Marketing analytics comprises the data-driven methods, techniques, and technologies that enable marketers to evaluate the success of their marketing initiatives and campaigns. This minor, aimed at non-D'Amore-McKim students offers the opportunity to learn the cutting-edge skills necessary to harness, process, and analyze data to address modern marketing challenges. It combines programming, quantitative analysis, data-driven consumer insights and predictive modeling into an integrated curriculum that is designed to prepare students for successful careers in marketing analytics and other data-driven business specializations.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* Students in D'Amore-McKim or in a combined program with D'Amore McKim are not allowed to take this minor.

#### Required Courses

Code	Title	Hours
MKTG 2209	Introduction to Marketing	4
or MKTG 2201	Introduction to Marketing	
MKTG 2602	Quantitative Analysis of Consumer Data	4
MKTG 3402	Gaining Insights from Consumer Data	4
MKTG 3501	Marketing Analytics	4

#### GPA Requirement

Minimum 2.000 GPA required in all completed courses



## Social Innovation and Entrepreneurship, Minor

This five-course interdisciplinary Minor in Social Innovation and Entrepreneurship is administered by the D'Amore-McKim School of Business through its Entrepreneurship and Innovation Group in collaboration with the College of Social Sciences and Humanities (CSSH).

The minor consists of four on-campus courses and one course from a two-course Dialogue of Civilizations program. The minor is open to business and nonbusiness students. Several of the courses included in this minor may also apply to other programs or individual course requirements. Because this minor is interdisciplinary, a student may apply only three courses from any one college toward completion of the minor.

Finally, note that business students can pursue this minor or alternatively choose to pursue the Social Innovation and Entrepreneurship concentration, which requires four ENTR courses in social entrepreneurship and does not require a Dialogue.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* No more than three courses may be taken from any one college.

### Required Courses

Code	Title	Hours
ENTR 2206	Global Social Enterprise	4
Approved course from Dialogue of Civilizations or another approved program.		4
Noncredit community service required if approved Dialogue is not completed.		

### Electives

Code	Title	Hours
Complete one of the following:		4
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
ENTR 3520	Impact Investing and Social Finance	
ENTR 4506	Advanced Studies in Social Innovation Entrepreneurship	
Complete two of the following:		8
ANTH 2305	Global Markets and Local Culture	
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	
INTL 1101	Globalization and International Affairs	
INTL 3400	International Conflict and Negotiation	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
POLS 3406	International Law	
POLS 3487	Politics of Developing Nations	

### GPA Requirement

2.000 GPA required in the minor

## Strategy, Minor

The strategy minor is open to undergraduate business students with any major or concentration. The curriculum develops students' ability

to assume the role of a general manager and to think constructively about the strategic focus and direction of an organization, as well as its relative competitive strengths and weaknesses. Broad topics include the appropriate criteria and processes for general management decision making, especially under conditions of uncertainty; strategies a firm can follow in order to gain competitive advantage when entering into, competing within, and exiting from individual markets and how these strategies interact when the firm competes in several markets; and the optimal boundaries of the firm—the advantages and disadvantages its unique history and resources give it. The strategy minor may be of particular interest for students who plan to pursue careers in general management, management consulting, new venture management, venture capital, corporate planning, and investment banking.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
STRT 4501	Strategy in Action	4
or INTB 4202	Executing Global Strategy	

### Electives

Code	Title	Hours
Complete three of the following:		12
ENTR 4225	Growth, Acquisitions, and Alliances	
ENTR 3305	Business Model Innovation for Entrepreneurs	
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
FINA 4420	Mergers and Acquisitions	
INTB 2501	Competing to Win in Emerging Markets	
MKTG 3301	Marketing Management	
MGMT 4310	The Management Practices of Great Organizations	
MGMT 4550	Management Consulting in Organizations	
or BUSN 3110	The Consulting Environment	
SCHM 4401	Contemporary Topics in Supply Chain Management	
STRT 4301	Strategic Analysis and Decision Making	

### GPA Requirement

2.000 GPA required in the minor

## Supply Chain Management, Minor

The supply chain management minor is open to nonbusiness undergraduate students with any major and is comprised of contemporary courses taught from a global business perspective. Intended for future leaders, this minor intends to prepare students to understand and use supply chain tools and apply that framework to effectively manage numerous opportunities and risks across today's global supply chains. The minor includes both fundamental courses and those geared toward more specific management and analytical challenges. These courses include real-world case examples, grounded in relevant theories and principles. Learning is reinforced through various analytical tools that are designed to develop necessary skills

and knowledge for tomorrow's work environment. Students have the opportunity to explore specific practice areas, such as analytics, healthcare operations, negotiating, demand planning, and logistics/transportation. In addition, the minor offers students an opportunity to gain insight and develop perspectives for important topics such as deglobalization/globalization and emerging technologies, such as blockchain, additive manufacturing, and smart robotics.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Only four credits may be double counted toward a different minor.

### Required Course

Code	Title	Hours
SCHM 2301	Supply Chain and Operations Management	4

### Electives

Code	Title	Hours
Complete three of the following: (At least 8 credits must come from SCHM courses.)		12
ACCT 3416	Strategic Cost Analysis for Decision Making	
ENTR 3401	Consulting Operations Growth in SMEs	
FINA 4340	Blockchain Applications in Finance	
IE 2310	Introduction to Industrial Engineering	
INTB 3310	Cultural Aspects of International Business	
MGMT 3302	Negotiating in Business	
MISM 2301	Management Information Systems	
MISM 2510	Fundamentals of Information Analytics	
MKTG 3501	Marketing Analytics	
SCHM 3301	Global Supply Chain Strategy	
SCHM 3305	Sourcing, Procurement, and Negotiation	
SCHM 3308	Supply Chain Analytics and Emerging Technologies	
SCHM 3310	Logistics and Transportation Management	
SCHM 3315	Managing Healthcare Operations and Supply Chain	
SCHM 3320	Forecasting and Sales Operations Planning	
SCHM 4401	Contemporary Topics in Supply Chain Management	

### GPA Requirement

2.000 GPA required in the minor

### Sustainable Business Practices, Minor

Combining course work and a summer field project, the minor in sustainable business practices seeks to provide students with a deeper understanding of sustainability issues and the tools to address these issues in a business environment. This interdisciplinary minor is open to business and nonbusiness students.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Note: No more than three courses may be taken from any one college.

### Sustainability in Business

Code	Title	Hours
FINA 2720	Sustainability in the Business Environment	4

### Field Study

Code	Title	Hours
Field Study (2 courses required) is approved by the D'Amore-McKim Undergraduate Dean's office. Please contact the D'Amore-McKim Academic Advising office to confirm option(s).		6-8

### Electives

Code	Title	Hours
Complete two of the following:		8
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	
ECON 3423	Environmental Economics	
ECON 3425	Energy Economics	
ENVR 1101	Environmental Science	
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
GE 1201	Alternative Energy Technologies Abroad	
PHIL 1180	Environmental Ethics	
PHYS 1132	Energy, Environment, and Society	
POLS 2395	Environmental Politics and Policy	
SOCL 1246	Environment and Society	

### GPA Requirement

2.000 GPA required in the minor

### Accelerated Bachelor/Graduate Degree Programs

Northeastern University's D'Amore-McKim School of Business develops leaders and thinkers who will guide the future of work that is being transformed by technology and data. The D'Amore-McKim PlusOne accelerated master's programs (<https://damore-mckim.northeastern.edu/programs/?s=&filters%5B%5D=program%7Ctype%7Cplus-one&filters%5B%5D=program%7Ctype%7Cundergraduate>) provide motivated students with the opportunity to start earning their master's degree while pursuing their undergraduate education.

Depending on the program, students accepted into a PlusOne accelerated master's may take up to a total of 16 graduate credits while they are undergraduates and can apply those credits toward both of their bachelor and master's degrees.

### Khoury College of Computer Sciences

Website (<http://www.khoury.northeastern.edu/undergraduate/>)

Carla E. Brodley, PhD, Dean

**Ben Hescott, PhD**, Teaching Professor, Associate Dean of Undergraduate Education and Experience

**Byron Wallace, PhD**, Assistant Professor, Director of Data Science Program

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Computing has transformed the way people work and live, and its applications are limitless. Today, an understanding of computing is critical in business, healthcare, science, digital art, and other areas of our information-driven society. Computing knowledge and computing technology also contribute to resolving major issues in an increasingly complex world.

The Khoury College of Computer Sciences offers undergraduate programs that combine a strong foundation in computing with the opportunity to acquire a deep knowledge of another discipline in which computing plays a critical role. The college offers undergraduate degree programs in computer science (BS and BA), data science (BS), and cybersecurity (BS) and over 25 combined majors with partner departments in six other Northeastern colleges, allowing students to engage in intense study in two disciplines. The Bachelor of Science in Computer Science emphasizes strong technical competence in computer science, mathematics, science, and electrical engineering. The Bachelor of Arts in Computer Science combines computer science with a broad-based liberal arts education. The Bachelor of Science in Data Science combines computer science, information science, mathematics, statistics, and probability theory into an integrated curriculum. The Bachelor of Science in Cybersecurity provides the fundamental knowledge of computer science with an essential focus on experiential learning through security-related courses.

## Academic Progression Standards

In addition to meeting university progression standards, it is expected that full-time Khoury students enroll in four courses with appropriate labs and recitations and successfully complete at least 12 semester hours each academic semester with an acceptable grade-point average (GPA) as noted below. Any exceptions to the course load requirement must be approved by the student's academic advisor prior to the start of each semester. Pass/fail courses are restricted to electives outside of the major, minor, and NUPath requirements.

### GPA REQUIREMENTS FOR GRADUATION

A minimum cumulative GPA requirement of 2.000 in major (CS/CY/DS/IS) courses and a minimum cumulative GPA requirement of 2.000 overall are required for graduation.

### CRITERIA FOR ACADEMIC PROBATION

Full-time students in Khoury College of Computer Sciences will be placed on academic probation effective for the following academic semester for any of the reasons noted below:

- Not earning at least 12 semester hours in each academic full-term semester (fall, spring)
- Not following a program of study approved by the student's academic advisor

#### *First-Year Students*

- Not maintaining an overall cumulative GPA of at least 1.800 at the end of each full-term semester (fall, spring) of the first-year

curriculum and a GPA of at least 2.000 in the major at the end of the second academic full-term semester of the curriculum (spring)

#### *Upperclass and Transfer Students*

- Not maintaining an overall cumulative GPA of at least 2.000 and a GPA of at least 2.000 in the major at the end of the second academic full-term semester of the curriculum completed on campus (fall or spring) and at the end of each full-term academic semester thereafter (fall, spring)

### ACADEMIC DISMISSAL FROM MAJOR

Not maintaining a GPA of at least 2.000 in the major at the end of the third academic full-term semester and at the end of each full-term academic semester (fall, spring) thereafter will result in dismissal from Khoury College of Computer Sciences.

Students not following a program of study approved by the student's academic advisor for more than one semester may be dismissed from Khoury College of Computer Sciences.

Students dismissed from their major but who are otherwise eligible to remain an active student within the university may continue within Khoury College of Computer Sciences as a transitional major for one semester.

### ACADEMIC DISMISSAL FROM UNIVERSITY

Students who remain on probation after two full-term academic semesters may be dismissed from the university. This action may appear on the transcript at the end of the second probationary semester. In addition, students who have below a 1.000 GPA or fewer than 4 earned semester hours in any semester or cumulatively may be dismissed at the discretion of their college. Students may appeal this decision to the Academic Standing Committee of their college. International students must consult with an advisor in the Office of Global Services (OGS) (<http://www.northeastern.edu/ogs/>) to discuss the impact of an academic dismissal as it relates to nonimmigrant visa status.

## Program Length

The Khoury College of Computer Sciences prides itself on flexibility and a very supportive advising staff. Depending upon the number of entry-level/transfer credits, the academic program, and student planning, it is possible to complete the program within four years with at least one experiential experience and usually with two such experiences.

## Computer Science

Computer science involves the application of theoretical concepts in the context of software development to the solution of problems that arise in almost every human endeavor. Computer science as a discipline draws its inspiration from mathematics, logic, science, and engineering. From these roots, computer science has fashioned paradigms for program structures, algorithms, data representations, efficient use of computational resources, robustness and security, and communication within computers and across networks. The ability to frame problems, select computational models, design program structures, and develop efficient algorithms is as important in computer science as software implementation skill. Computer science is concerned with bringing together all of the intellectual resources needed to enable the rapid and effective development of software to meet the needs of business, research, and end users.

The goal of the undergraduate program in computer science is to teach students the conceptual and practical skills that will enable them to contribute to the development of computational principles

and to play a productive role in the software community. To that end, the undergraduate program focuses on the fundamentals of program design including object-oriented design, software development, computer organization, systems and networks, theory of computation, principles of languages, and advanced algorithms and data. The program also offers a variety of electives at the upper undergraduate and beginning graduate levels ranging from more theoretical courses to those that focus on important applications.

## Programs

### Bachelor of Science in Computer Science (BSCS)

- Computer Science (p. 307)

### Bachelor of Arts in Computer Science (BACS)

- Computer Science (p. 310)

## Minor

- Computer Science (p. 313)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Computer Science, BSCS

The Bachelor of Science in Computer Science focuses on the fundamentals of program design, software development, computer organization, systems and networks, theories of computation, principles of languages, and advanced algorithms and data.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2810	Mathematics of Data Models	4
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4

CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3650	Computer Systems	4
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

## Security Required Course

Complete one of the following:		4
CY 2550	Foundations of Cybersecurity	
CY 3740	Systems Security	
CY 4740	Network Security	

## Presentation Requirement

Choose one:		4
COMM 1112	Public Speaking	
COMM 1113	Business and Professional Speaking	
COMM 1210	Persuasion and Rhetoric	
COMM 1511	Communication and Storytelling	
THTR 1125	Improvisation	
THTR 1130	Introduction to Acting	
THTR 1160	The Professional Voice	
THTR 2345	Acting for the Camera	

## Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	8
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

## Computer Science Concentrations

Pick one of the following concentrations and complete four courses in that concentration. In all concentrations, up to one Research (CS 4991) course can be substituted with advisor approval. Any missing prerequisites or NUpath requirements must be taken using computer science or general electives. In particular, students must arrange to take a NUpath capstone using either a course in the concentration or a CS, CY, DS, or IS course taken as a computer science elective or as a general elective.

### CONCENTRATION: ARTIFICIAL INTELLIGENCE

Code	Title	Hours
CS 4100	Artificial Intelligence	4
DS 4400	Machine Learning and Data Mining 1	4
Complete two of the following courses not already taken:		8
CS 4120	Natural Language Processing	
CS 4150	Game Artificial Intelligence	
CS 4610	Robotic Science and Systems	
IS 4200	Information Retrieval	
DS 4420	Machine Learning and Data Mining 2	
PSYC 3466	Cognition	

**CONCENTRATION: FOUNDATIONS**

Code	Title	Hours
Complete two of the following: 8-9		
CS 2800 and CS 2801 or CS 4820	Logic and Computation and Lab for CS 2800 Computer-Aided Reasoning	
CS 4805 or CS 4810	Fundamentals of Complexity Theory Advanced Algorithms	
Complete two of the following courses not already taken: 8		
CS 4805	Fundamentals of Complexity Theory	
CS 4810	Advanced Algorithms	
CS 4820	Computer-Aided Reasoning	
CS 4830	System Specification, Verification, and Synthesis	
CS 3950 and CS 4950 and CS 4950	Introduction to Computer Science Research and Computer Science Research Seminar and Computer Science Research Seminar	
CY 4770	Cryptography	

**CONCENTRATION: HUMAN-CENTERED COMPUTING**

Code	Title	Hours
IS 4300	Human Computer Interaction	4
IS 4800	Empirical Research Methods	4
Complete two of the following courses not already taken: 8		
IS 2000	Principles of Information Science	
CS 4120	Natural Language Processing	
CS 4520	Mobile Application Development	
CS 4550	Web Development	
DS 4200	Information Presentation and Visualization	

\*The concentration in human-centered computing requires a fall co-op pattern.

**CONCENTRATION: SOFTWARE**

Code	Title	Hours
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
CS 3700	Networks and Distributed Systems	4
CS 4400	Programming Languages	4
Complete one of the following courses not already taken:		
CS 3520	Programming in C++	
CS 3620	Building Extensible Systems	
CS 4240	Large-Scale Parallel Data Processing	
CS 4410	Compilers	
CS 4550	Web Development	
CS 4520	Mobile Application Development	
CS 4820	Computer-Aided Reasoning	

**CONCENTRATION: SYSTEMS**

Code	Title	Hours
CS 3700	Networks and Distributed Systems	4
Complete one of the following courses not already taken: 4		
CY 3740	Systems Security	
CY 4740	Network Security	
Complete two of the following courses not already taken: 8		

CS 3520	Programming in C++
CS 4300	Computer Graphics
CY 3740	Systems Security
CS 4610	Robotic Science and Systems
CS 4710	Mobile and Wireless Systems
CY 4740	Network Security

**Supporting Courses**

Code	Title	Hours
<b>Mathematics Courses</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Computing and Social Issues</b>		
Complete one of the following: 4		
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	
<b>Electrical Engineering</b>		
EECE 2322	Fundamentals of Digital Design and Computer Organization	4
<b>Science Requirement</b>		
Complete two courses from one of the following science categories: 8		
<i>Biology</i>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
Then complete one of the following:		
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	
<i>Chemistry</i>		
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	
<i>Geology/Environmental Science (Option 1)</i>		
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	

ENVR 1202 and ENVR 1203	History of Earth and Life and Interpreting Earth History
<i>Geology/Environmental Science (Option 2)</i>	

ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200
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Then complete one of the following:

ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310
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ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340
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ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300
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ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500
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*Geology/Environmental Science (Option 3)*

ENVR 1202 and ENVR 1203	History of Earth and Life and Interpreting Earth History
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ENVR 5242 and ENVR 5243	Ancient Marine Life and Lab for ENVR 5242
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*Mathematics*

MATH 1342	Calculus 2 for Science and Engineering
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MATH 2331	Linear Algebra
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MATH 3081	Probability and Statistics
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*Physics*

Complete one of the following sequences:

Sequence A

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145
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PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147
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Sequence B

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151
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PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155
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Sequence C

PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161
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PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165
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## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4

### Advanced Writing in the Disciplines

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Required General Electives

Code	Title	Hours
Complete 28 credits of general electives.		28

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## Computer Science Credit Requirements

Complete 72 semester hours in the major.

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

## Program Requirement

133 total semester hours required

## Plan of Study

### Sample Patterns:

#### Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	MATH 1341	4
CS 1800 and CS 1802	5	CS 2810	4	Elective	4	CS 3000	4
CS 2500 and CS 2501	5	Science elective with lab	5				
MATH 1365	4	Elective	4				
ENGW 1111	4						
		19		18		9	
						8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3650	4	Co-op		Co-op		Elective	4
EECE 2160	4					Elective	4
Concentration course	4						
Elective	4						
CS 1210	1						
		17		0		0	
						8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3800	4	Co-op		Co-op		ENGW 3302	4
THTR 1170	1					Elective	4
Concentration course	4						
Presentation Requirement	4						

Computing and social issues	4			
	17	0	0	8

**Year 4**

Fall	Hours Spring	Hours
CS 4500	4 Concentration course	4
Khoury elective	4 Khoury elective	4
Concentration course	4 Security course	4
Science elective with lab	5 Elective	4
	17	16

Total Hours: 137

**Five Years, Three Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 1800 and CS 1802	5 CS 2810	4		
CS 2500 and CS 2501	5 Science elective with lab	5		
MATH 1365	4 Elective	4		
ENGW 1111	4			
	19	18	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 Co-op	0 Co-op	0 Vacation	0
MATH 1341	4			
CS 3000	4			
Presentation Requirement	4			
CS 1210	1			
	18	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3800	4 Co-op	0 Co-op	0 Elective	4
CS 3650	4		Elective	4
Science elective with lab	5			
Concentration course	4			
THTR 1170	1			
	18	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Concentration course	4 Co-op	0 Co-op	0 ENGW 3302	4

Concentration course	4		Elective	4
Elective	4			
Elective	4			
	16	0	0	8

**Year 5**

Fall	Hours Spring	Hours
EECE 2160	4 CS 4500	4
Khoury elective	4 Computing and social issues	4
Khoury elective	4 Security course	4
Concentration course	4 Elective	4
	16	16

Total Hours: 137

**Computer Science, BACS**

The Bachelor of Arts in Computer Science offers a similar curriculum to the BS, with slightly fewer CS requirements to allow students to study a foreign language and have a wider choice of electives.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Requirements for BA**

All BA students are required to complete the BA requirements (p. 49).

**Computer Science Requirements**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2810	Mathematics of Data Models	4
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4

CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3650	Computer Systems	4
CS 3800	Theory of Computation	4
CS 4500	Software Development	4

**Security Required Course**

Complete one of the following:		4
CY 2550	Foundations of Cybersecurity	
CY 3740	Systems Security	
CY 4740	Network Security	

**Presentation Requirement**

Choose one:		4
COMM 1112	Public Speaking	
COMM 1113	Business and Professional Speaking	
COMM 1210	Persuasion and Rhetoric	
COMM 1511	Communication and Storytelling	
THTR 1125	Improvisation	
THTR 1130	Introduction to Acting	
THTR 1160	The Professional Voice	
THTR 2345	Acting for the Camera	

**Khoury Elective Courses**

With adviser approval, directed study, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

**Computer Science Concentrations**

Pick one of the following concentrations and complete four courses in that concentration. In all concentrations, up to one Research (CS 4991) course can be substituted with adviser approval. Any missing prerequisites or NUpath requirements must be taken using computer science or general electives. In particular, students must arrange to take a NUpath capstone using either a course in the concentration or a CS, CY, DS, or IS course taken as a computer science elective or as a general elective.

**CONCENTRATION: ARTIFICIAL INTELLIGENCE**

Code	Title	Hours
CS 4100	Artificial Intelligence	4
DS 4400	Machine Learning and Data Mining 1	4

Complete two of the following classes not already taken: 8

CS 4120	Natural Language Processing	
CS 4150	Game Artificial Intelligence	
CS 4610	Robotic Science and Systems	
IS 4200	Information Retrieval	
DS 4420	Machine Learning and Data Mining 2	
PSYC 3466	Cognition	

**CONCENTRATION: FOUNDATIONS**

Code	Title	Hours
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	4-5

or CS 4820	Computer-Aided Reasoning	
CS 4805 or CS 4810	Fundamentals of Complexity Theory Advanced Algorithms	4
Complete two of the following classes not already taken:		8
CS 4805	Fundamentals of Complexity Theory	
CS 4810	Advanced Algorithms	
CS 4820	Computer-Aided Reasoning	
CS 4830	System Specification, Verification, and Synthesis	
CS 3950 and CS 4950 and CS 4950	Introduction to Computer Science Research and Computer Science Research Seminar and Computer Science Research Seminar	
CY 4770	Cryptography	

**CONCENTRATION: HUMAN-CENTERED COMPUTING**

Code	Title	Hours
IS 4300	Human Computer Interaction	4
IS 4800	Empirical Research Methods	4
Complete two of the following classes not already taken:		8
IS 2000	Principles of Information Science	
CS 4120	Natural Language Processing	
CS 4520	Mobile Application Development	
CS 4550	Web Development	
DS 4200	Information Presentation and Visualization	

\*The concentration in human-centered computing requires a fall co-op pattern.

**CONCENTRATION: SOFTWARE**

Code	Title	Hours
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
CS 3700	Networks and Distributed Systems	4
CS 4400	Programming Languages	4
Complete one of the following classes not already taken:		4
CS 3520	Programming in C++	
CS 3620	Building Extensible Systems	
CS 4240	Large-Scale Parallel Data Processing	
CS 4410	Compilers	
CS 4550	Web Development	
CS 4520	Mobile Application Development	
CS 4820	Computer-Aided Reasoning	

**CONCENTRATION: SYSTEMS**

Code	Title	Hours
CS 3700	Networks and Distributed Systems	4
Complete one of the following classes not already taken:		4
CY 3740	Systems Security	
CY 4740	Network Security	
Complete two of the following classes not already taken:		8
CS 3520	Programming in C++	
CS 4300	Computer Graphics	
CY 3740	Systems Security	
CS 4610	Robotic Science and Systems	



CS 4710	Mobile and Wireless Systems
CY 4740	Network Security

### Supporting Courses

Code	Title	Hours
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#### Mathematics Courses

MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1365	Introduction to Mathematical Reasoning	4

#### Science Courses

Complete one course from one of the following groups: 4-5

##### Biology

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111
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##### Chemistry

CHEM 1101 and CHEM 1102 and CHEM 1103	General Chemistry for Health Sciences and Lab for CHEM 1101 and Recitation for CHEM 1101
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151

##### Geology

ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200
ENVR 1202 and ENVR 1203	History of Earth and Life and Interpreting Earth History

##### Mathematics

MATH 1342	Calculus 2 for Science and Engineering
MATH 2331	Linear Algebra
MATH 3081	Probability and Statistics

##### Physics

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161

#### Computing and Social Issues

Complete one of the following: 4

AFAM 2600	Issues in Race, Science, and Technology
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 28 credits of general electives.		28

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Spring/Summer 1

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	MATH 1341	4
CS 1800 and CS 1802	5	CS 2810	4	Elective	4	Elective	4
CS 2500 and CS 2501	5	MATH 1365	4				
ENGW 1111	4	Elective	4				
Foreign language course	4						
	19		17		9		8

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3650	4	Co-op		Co-op		Elective	4
CS 3000	4					Elective	4
Concentration course	4						
Foreign language course	4						

CS 1210	1				
	17	0	0		8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
CS 3800	4 Co-op	Co-op	ENGW 3302		4
Foreign language course	4		Elective		4
Concentration course	4				
Science course	4				
	16	0	0		8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Khoury elective	4 CS 4500	4			
Computing and social issues course	4 Concentrator course	4			
Concentration course	4 Presentation Requirement	4			
Security course	4 Elective	4			
	16	16			

Total Hours: 134

## Five Years, Three Co-ops in Spring/Summer 1

<b>Year 1</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation		0
CS 1800 and CS 1802	5 CS 2810	4			
CS 2500 and CS 2501	5 MATH 1365	4			
ENGW 1111	4 Security course	4			
Foreign language course	4				
	19	17	0		0
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
CS 3500 and CS 3501	5 Co-op	0 Co-op	0 Vacation		0
MATH 1341	4				
CS 3000	4				
CS 1210	1				
Foreign language course	4				
	18	0	0		0

<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
CS 3650	4 Co-op	0 Co-op	0 Elective		4
CS 3800	4		Elective		4
Foreign language course	4				
Elective	4				
	16	0	0		8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
Elective	4 Co-op	0 Co-op	0 ENGW 3302		4
Concentration course	4		Elective		4
Concentration course	4				
Concentration course	4				
	16	0	0		8

<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Computing and social issues	4 CS 4500	4			
Khoury elective	4 Concentrator course	4			
Science elective	4 Presentation Requirement	4			
Elective	4 Elective	4			
	16	16			

Total Hours: 134

## Computer Science, Minor

A computer science minor is designed to provide the computer science skills and know-how you need to succeed in today's highly digital world. A minor requires completion of five CS courses—more than enough to gain proficiency while easily fitting around your major requirements. No prior programming experience is needed.

Looking to gain technical knowledge that directly applies to your major? Students have the option to pursue a Khoury meaningful minor.

### Minor Requirements

*Note:* Khoury minors are only available to non-Khoury majors; students in Khoury-only or Khoury-combined degrees are not eligible for Khoury minors. A student may receive at most one Khoury minor, regardless of how many Khoury minors they qualify for.

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
<b>Computer Science Fundamental Courses</b>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5

CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
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## Computer Science Electives

Code	Title	Hours
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Complete three courses that are not already required in the following ranges:

CS 2500 to CS 7999 but not CS 3950, CS 4950, or CS 5010 CY 3000 or higher, except CY 4930		12
IS 3000 or higher, except IS 4900		
One course from CCIS meaningful minors list (see below).		

## Khoury Meaningful Minors

The concept of “Khoury meaningful minors” allows students the chance to personalize a computer science minor to meet individual academic needs and interests. Students may take *one elective* related to computation or information from a pre-approved list of courses offered across the university rather than from within Khoury. This allows students to integrate the minor with a course in their own major or with a course in another area of interest. Students may of course choose to take all electives in the minor within Khoury if they wish.

Code	Title	Hours
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Bouvé Health Sciences		
HINF 5101	Introduction to Health Informatics and Health Information Systems	
HINF 5102	Data Management in Healthcare	
HINF 5300	Personal Health Interface Design and Development	
HINF 5301	Evaluating Health Technologies	
Arts, Media and Design		
ARTD 2360	Introduction to Photography	
ARTD 2370	Animation Basics	
ARTD 2380	Video Basics	
ARTG 2260	Programming Basics	
ARTG 2400	Interaction Design 1: Responsive	
ARTG 3250	Physical Computing	
ARTG 3451	Information Design 1	
ARTG 3700	Interaction Design 2: Mobile	
ARTG 5100	Information Design Studio 1: Principles	
ARTG 5110	Information Design History	
ARTG 5120	Research Methods for Design	
COMM 2105	Social Networks	
JRNL 3610	Digital Storytelling and Social Media	
MUST 1220	Introduction to Music Technology	
Engineering		
BIOE 2365	Bioengineering Measurement, Experimentation, and Statistics	
EECE 2160	Embedded Design: Enabling Robotics	
EECE 2322	Fundamentals of Digital Design and Computer Organization	
EECE 3324	Computer Architecture and Organization	
EECE 4542	Advanced Engineering Algorithms	
EECE 5639	Computer Vision	
EECE 5640	High-Performance Computing	

EECE 5644	Introduction to Machine Learning and Pattern Recognition
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Khoury Computer Sciences	
CS 1100	Computer Science and Its Applications
CS 1800	Discrete Structures
IS 1500 or higher, except IS 4900	
Science	
BIOL 2301	Genetics and Molecular Biology
BIOL 3405	Neurobiology
BIOL 5587	Comparative Neurobiology
BINF 6200	Bioinformatics Programming
BINF 6308	Bioinformatics Computational Methods 1
BINF 6309	Bioinformatics Computational Methods 2
CHEM 5638	Molecular Modeling
ENVR 3300	Geographic Information Systems
ENVR 5563	Advanced Spatial Analysis
LING 3450	Syntax
LING 3452	Semantics
MATH 1260	Math Fundamentals for Games
MATH 2331	Linear Algebra
MATH 2341	Differential Equations and Linear Algebra for Engineering
MATH 3530	Numerical Analysis
MATH 4606	Mathematical and Computational Methods for Physics
PHYS 1130	Computing, Data, and Science
PSYC 3452	Sensation and Perception
PSYC 3458	Biological Psychology
PSYC 3464	Psychology of Language
PSYC 3466	Cognition
Social Science and Humanities	
ECON 4653	Mathematics for Economics
ENGL 3340	Technologies of Text
PHIL 1105	Science and Pseudoscience
PHIL 1115	Introduction to Logic
PHIL 1145	Technology and Human Values
PHIL 2001	Ethics and Evolutionary Games
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society
D'Amore-McKim School of Business	
ACCT 3403	Advisory Services and Emerging Accounting Systems
ENTR 4501	Advanced Studies in Entrepreneurial Startups
FINA 4608	Advanced Financial Strategy
MISM 2301	Management Information Systems
MKTG 3401	Marketing Research
MKTG 3501	Marketing Analytics
MKTG 4508	Digital Marketing
SCHM 2301	Supply Chain and Operations Management

Statistics Courses	
CRIM 3700	Analyzing and Using Data on Crime and Justice
ECON 2350	Statistics
ECON 5105	Math and Statistics for Economists
ENVR 2500	Biostatistics
IE 3412	Engineering Probability and Statistics
MATH 2280	Statistics and Software
MATH 3081	Probability and Statistics
MATH 4581	Statistics and Stochastic Processes
MGSC 2301	Business Statistics
PHMD 3450	Research Methodology and Biostatistics
PHTH 2210	Foundations of Biostatistics
POLS 2400	Quantitative Techniques
PSYC 2320	Statistics in Psychological Research

### Credit/GPA Requirement

20 semester hours required  
2.000 GPA required in the minor

## Cybersecurity

Cybersecurity combines essential computer science with conceptual and practical specialization in security to prepare students for hands-on, deeply technical work in the field. The ability to frame problems, select computational models, design program structures, and develop efficient algorithms is as important in computer science as software implementation skill. All cybersecurity students take the standard computer science course sequence, covering content such as basic programming, object-oriented design, computer architecture and operating systems, computer networks and distributed systems, and algorithmic complexity and computability theory. These courses lay the foundation for cybersecurity-specific coursework.

Cybersecurity coursework covers key areas in the field, from a broad overview of the topical space (including threat modeling, symmetric and asymmetric key cryptography, authentication, access control, social engineering, simple exploits, basic systems security, malware, the cybercrime underground, and advanced persistent threat actors) to deep dives into the design of secure operation systems and applications. Fundamental topics include analyzing prevalent classes of attacks against systems; security vulnerabilities and defense techniques; limitation of damage and strategic recovery; design and implementation of distributed authentication protocols; and existing standardized security protocols and legal infrastructure relating to privacy, data ethics, data security, hacking, automation, and intellectual property. In addition, cybersecurity students have access to a wide array of electives, including courses on wireless networking, software vulnerabilities, cybersecurity risk management and assessment, digital forensics, and criminology.

### Programs

#### Bachelor of Science (BS)

- Cybersecurity (p. 315)

## Cybersecurity, BS

The Bachelor of Science in Cybersecurity teaches students the conceptual and practical skills that will enable them to contribute to ensuring the reliability and security of cyberspace. The program will

provide students with the fundamental knowledge of computer science that forms the technical foundation of the field, with an essential focus on experiential learning through laboratory exercises in the security-related courses, as well as through the co-op program. The program's holistic view of cybersecurity gives it a strong interdisciplinary focus, teaching students how social behavior, policy, and legal rules can affect cybersecurity and the tools of information technology.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Hourly Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
CS 3800	Theory of Computation	4
<b>Presentation Requirement</b>		
Choose one:		4
COMM 1112	Public Speaking	
COMM 1113	Business and Professional Speaking	
COMM 1210	Persuasion and Rhetoric	
COMM 1511	Communication and Storytelling	
THTR 1125	Improvisation	
THTR 1130	Introduction to Acting	
THTR 1160	The Professional Voice	
THTR 2345	Acting for the Camera	
<b>Cybersecurity Required Courses</b>		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4740	Network Security	4
CY 4770	Cryptography	4

CY 4930 or CY 4940	Cybersecurity Capstone Research Projects on National Security	4
<b>Cybersecurity and Social Issues Elective List</b>		
Choose one:		4
COMM 2525	Communication and Privacy	
COMM 2551	Free Speech in Cyberspace	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 4040	Crime Prevention	
LPSC 1101	Introduction to Law	
LPSC 2301	Introduction to Law, Policy, and Society	
LPSC 3303	Topics in Law and Public Policy	
POLS 2390	Science, Technology, and Public Policy	
POLS 3307	Public Policy and Administration	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	

### Choose one: Cybersecurity Electives OR Cyber Operations Concentration

Students have a choice between completing the BS Cybersecurity with the below Cybersecurity Elective options, or with the Cyber Operations Concentration. The degree automatically defaults to the Cybersecurity Elective options. Students looking to choose the Cyber Operations Concentration option must declare the concentration with their Academic Advisor.

#### CYBERSECURITY ELECTIVES:

Code	Title	Hours
<b>Law Requirement</b>		
CY 4170 or CY 5240	The Law, Ethics, and Policy of Data and Digital Technologies Cyberlaw: Privacy, Ethics, and Digital Rights	4

#### Cybersecurity Electives

If courses require prerequisites, those should be taken using general electives.

Complete four courses from the following:		16
COMM 2525	Communication and Privacy	
COMM 2551	Free Speech in Cyberspace	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 4040	Crime Prevention	
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	
CS 4240	Large-Scale Parallel Data Processing	
CS 4400	Programming Languages	
CS 4500	Software Development	
CS 4710 or CS 6710	Mobile and Wireless Systems Wireless Network	
CY 5010	Foundations of Information Assurance	
CY 5200	Security Risk Management and Assessment	
CY 5210	Information System Forensics	
CY 5770	Software Vulnerabilities and Security	

DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 3324	Computer Architecture and Organization	
EECE 4534 and EECE 4535	Microprocessor-Based Design and Lab for EECE 4534	
IS 4300	Human Computer Interaction	
LPSC 1101	Introduction to Law	
LPSC 2301	Introduction to Law, Policy, and Society	
LPSC 3303	Topics in Law and Public Policy	
MATH 3527	Number Theory 1	
MATH 4575	Introduction to Cryptography	
MISM 2301	Management Information Systems	
POLS 2390	Science, Technology, and Public Policy	
POLS 3307	Public Policy and Administration	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	

#### CYBER OPERATIONS CONCENTRATION:

Code	Title	Hours
<b>Cyber Operations Required Courses</b>		
CS 4710	Mobile and Wireless Systems	4
CY 5770	Software Vulnerabilities and Security	4
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	4
<b>Electives</b>		
Complete two of the following:		8
CS 4500	Software Development	
CS 4240	Large-Scale Parallel Data Processing	
CY 5200	Security Risk Management and Assessment	
CY 5210	Information System Forensics	
EECE 3324	Computer Architecture and Organization	
EECE 4534	Microprocessor-Based Design	

#### Supporting Courses

Code	Title	Hours
<b>Electrical Engineering Required Course</b>		
EECE 2322	Fundamentals of Digital Design and Computer Organization	4
<b>Mathematics Courses</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 3081	Probability and Statistics	4

## Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

## Computer Science Credit Requirements

Complete 83 semester hours in the major.

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills Through Experience* is satisfied through co-op.

## Program Requirement

133 semester hours required

## Plan of Study

### Sample Plan of Study

#### FOUR YEARS, TWO CO-OPS IN SUMMER 2/FALL

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 CY 2550	4 MATH 1342	4	
CS 2500 and CS 2501	5 MATH 1341	4		
ENGW 1111	4 General elective 2	4		
General elective 1	4			
				19
				17
				9
				0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3650	4 CS 3700	4 ENGW 3302 or 3315	4 Co-op	
CS 3800	4 CY 3740	4 MATH 3081	4	
CS 3000	4 CY 4770	4		

Presentation Requirement	4 General elective 3	4		
CS 1210		1		
				16
				17
				8
				0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CY 4740	4 General elective 4	4 Co-op	
CY 5240		4 EECE 2322	4	
Cybersecurity elective		4		
Cybersecurity elective		4		
				0
				16
				8
				0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Cybersecurity elective	4 (If needed)		
CY 4930 or 4940		4 General elective 5	4	
Cybersecurity elective		4 General elective 6	4	
Cybersecurity elective		4		
				0
				16
				8

Total Hours: 134

#### FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510	4 CS 3500 and CS 3501	5 Vacation	
CS 2500	4 CS 2511	1 MATH 1342	4	
CS 2501	1 CY 2550	4		
ENGW 1111	4 MATH 1341	4		
General elective 1	4 General elective 2	4		
CS 1800 and CS 1802	5			
				19
				17
				9
				0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 CS 3700	4 Vacation	Co-op	
CS 3650	4 CY 3740	4		
MATH 3081	4 General elective 4	4		
General elective 3	4 General elective 5	4		
CS 1210		1		
				16
				17
				0
				0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CY 4740	4 ENGW 3302	4 Co-op	
CS 3800		4 General elective 6	4	
EECE 2322		4		

Presentation Requirement				
	0	16	8	0
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Co-op	CY 5240	4 Vacation	Co-op	
	CY 4770	4		
	Cybersecurity elective 1	4		
	Cybersecurity elective 2	4		
	0	16	0	0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	CY 4930	4		
	Cybersecurity elective 3	4		
	Cybersecurity elective 4	4		
	Cybersecurity elective 5 / social issues	4		
	0	16		

Total Hours: 134

## Data Science

The Bachelor of Science in Data Science studies the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. The program combines computer science, information science, mathematics, statistics, and probability theory into an integrated curriculum that is designed to prepare students for careers or graduate studies in big data analysis, data science, and data analytics. The coursework covers exploratory data analysis, data manipulation in a variety of programming languages, large-scale data storage, predictive analytics, machine learning, data mining, and information visualization and presentation. Data science has emerged as a discipline due to the confluence of two major events:

1. The ability to collect, store, prune, process, and transmit large amounts of data in the cloud.
2. The convergence of programming, statistics, artificial intelligence, and visualization as complementary tools for the analysis and understanding of data.

## Programs

### Bachelor of Science (BS)

- Data Science, BS (p. 318)
- Data Science, Minor (p. 320)

## Data Science, BS

The Bachelor of Science in Data Science studies the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Data Science Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3520	Programming in C++	4
<b>Data Science Electives</b>		
Complete three of the following:		12
CS 4100	Artificial Intelligence	
CS 4120	Natural Language Processing	
IS 4200	Information Retrieval	
IS 4300	Human Computer Interaction	
<b>Data Science Required Courses</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

DS 4420	Machine Learning and Data Mining 2	4
DS 4440	Practical Neural Networks	4
<b>Presentation Requirement</b>		
Choose one:		4
COMM 1112	Public Speaking	
COMM 1113	Business and Professional Speaking	
COMM 1210	Persuasion and Rhetoric	
COMM 1511	Communication and Storytelling	
THTR 1125	Improvisation	
THTR 1130	Introduction to Acting	
THTR 1160	The Professional Voice	
THTR 2345	Acting for the Camera	
<b>Mathematics Foundations</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Data Science and Ethics</b>		
PHIL 1145	Technology and Human Values	4
<b>Khoury Elective Courses</b>		
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
<b>Data Science Related Electives in Other Units</b>		4
Complete one of the following:		
ARTG 3451	Information Design 1	
ARTG 5100	Information Design Studio 1: Principles	
ARTG 5110	Information Design History	
ARTG 5120	Research Methods for Design	
ARTG 5330	Visualization Technologies 1: Fundamentals	
ARTG 6100	Information Design Studio 2: Dynamic Mapping and Models	
ARTG 6200	Information Design Studio 3: Synthesis	
BINF 6308	Bioinformatics Computational Methods 1	
BINF 6309	Bioinformatics Computational Methods 2	
ECON 2350	Statistics	
ECON 2560	Applied Econometrics	
EECE 4542	Advanced Engineering Algorithms	
EECE 5639	Computer Vision	
EECE 5642	Data Visualization	
EECE 5644	Introduction to Machine Learning and Pattern Recognition	
ENVR 2500	Biostatistics	
FINA 4608	Advanced Financial Strategy	
GSND 5110	Game Design and Analysis	
GSND 6350	Data-Driven Player Modeling	

HINF 5101	Introduction to Health Informatics and Health Information Systems	
HINF 5102	Data Management in Healthcare	
HINF 5300	Personal Health Interface Design and Development	
HINF 5301	Evaluating Health Technologies	
IS 4800	Empirical Research Methods	
IE 5640	Data Mining for Engineering Applications	
MATH 2321	Calculus 3 for Science and Engineering	
MATH 4581	Statistics and Stochastic Processes	
MGSC 2301	Business Statistics	
MISM 3403	Data Management in the Enterprise	
MKTG 3401	Marketing Research	
MKTG 3501	Marketing Analytics	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	
PSYC 2320	Statistics in Psychological Research	
PSYC 3466	Cognition	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

130 total semester hours required



**Plan of Study****Sample Patterns:****Four Years, Two Co-ops****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours
CS 1200	1 DS 2500 and DS 2501	5 CS 3200	4
CS 1800 and CS 1802	5 MATH 1342	4 MATH 3081	4
DS 2000 and DS 2001	4 PHIL 1145	4	
ENGW 1111	4 Elective	4	
MATH 1341	4		
	18	17	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3520	4 DS 4200	4 CS 3000	4 Co-op	
DS 3000	4 DS 4300	4 ENGW 3302	4	
MATH 2331	4 IS 4300	4		
DS 3500	4 Elective	4		
	CS 1210	1		
	16	17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4400	4 Co-op	Co-op	
	CS 4100	4		
	Presentation Requirement	4		
	Elective	4		
	0	16	0	0

**Year 4**

Fall	Hours Spring	Hours
IS 4200	4 DS 4420	4
CS 4120	4 DS 4440	4
Khoury Elective	4 Data Science Related Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 132

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 DS 2500 and DS 2501	5 Vacation	Vacation	
DS 2000 and DS 2001	4 MATH 1342	4		
CS 1800 and CS 1802	5 CS 3200	4		
MATH 1341	4 PHIL 1145	4		
ENGW 1111	4			
	18	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
DS 3000	4 CS 1210	1 Vacation	Co-op	
CS 3000	4 CS 3520	4		
MATH 3081	4 DS 4300	4		
DS 3500	4 IS 4300	4		
	MATH 2331	4		
	16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4400	4 ENGW 3302	4 Co-op	
	Presentation Requirement	4 Elective	4	
	CS 4100	4		
	DS 4200	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4420	4 Elective	4 Co-op	
	CS 4120	4 Elective	4	
	IS 4200	4		
	Elective	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	DS 4440	4
	Data Science Related Elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 132

**Data Science, Minor**

The minor in data science studies the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes.

**Minor Requirements**

*Note: Khoury minors are only available to non-Khoury majors; students in Khoury-only or Khoury-combined degrees are not eligible for Khoury minors. A student may receive at most one Khoury minor, regardless of how many Khoury minors they qualify for.*

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
<b>Computer Science Fundamental Courses</b>		
Complete one of the following options:		9-10

*Fundamentals of Computer Science Option*

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510

*Programming with Data Option*

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum
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DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500
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**Data Science Required Course**

DS 3000	Foundations of Data Science	4
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**Data Science Electives**

Code	Title	Hours
Complete two of the following. Only one course from the Meaningful Minor list may contribute toward the minor requirements:		8

CS 3200	Database Design
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DS 2010 to DS 4989

Meaningful Minor list (see below)

**Khoury Meaningful Minors**

The concept of “Khoury Meaningful Minors” allows students the chance to personalize a computer science minor to meet individual academic needs and interests. Students may take *one elective* related to computation or information from a preapproved list of courses offered across the university rather than from within Khoury. This allows students to integrate the minor with a course in their own major or with a course in another area of interest. Students may of course choose to take all electives in the minor within Khoury if they wish.

Code	Title	Hours
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## Arts, Media and Design

ARTG 3451	Information Design 1
ARTG 5100	Information Design Studio 1: Principles
ARTG 5110	Information Design History
ARTG 5120	Research Methods for Design
ARTG 5330	Visualization Technologies 1: Fundamentals
ARTG 6100	Information Design Studio 2: Dynamic Mapping and Models
ARTG 6200	Information Design Studio 3: Synthesis
GSND 5110	Game Design and Analysis
GSND 6350	Data-Driven Player Modeling

## Bouvé Health Sciences

HINF 5101	Introduction to Health Informatics and Health Information Systems
HINF 5102	Data Management in Healthcare
HINF 5300	Personal Health Interface Design and Development
HINF 5301	Evaluating Health Technologies

## D'Amore-McKim—Business

FINA 4350	Applied Financial Econometrics
FINA 4380	Financial Data Analytics
FINA 4390	Machine Learning in Finance

FINA 4608	Advanced Financial Strategy
MISM 2510	Fundamentals of Information Analytics
MISM 3403	Data Management in the Enterprise
MISM 3501	Information Visualization for Business
MISM 3515	Data Mining for Business
MKTG 3401	Marketing Research
MKTG 3501	Marketing Analytics
SCHM 2301	Supply Chain and Operations Management

## Computer and Information Science

CY 5010	Foundations of Information Assurance
CY 5200	Security Risk Management and Assessment

## Engineering

CIVE 3464	Probability and Engineering Economy for Civil Engineering
EECE 4542	Advanced Engineering Algorithms
EECE 5642	Data Visualization
EECE 5644	Introduction to Machine Learning and Pattern Recognition
EECE 5639	Computer Vision
IE 5640	Data Mining for Engineering Applications

## Science

BINF 6308	Bioinformatics Computational Methods 1
BINF 6309	Bioinformatics Computational Methods 2
ENVR 2500	Biostatistics
MATH 2331	Linear Algebra
MATH 2341	Differential Equations and Linear Algebra for Engineering
MATH 3081	Probability and Statistics
MATH 4581	Statistics and Stochastic Processes
PSYC 2320	Statistics in Psychological Research

## Social Science and Humanities

ECON 2350	Statistics
ECON 2560	Applied Econometrics
ECON 3916	Intermediate Selected Topics in Microeconomics
POLS 2400	Quantitative Techniques

**GPA Requirement**

2.000 GPA required in the minor

**Khoury Combined Majors**

Khoury College offers combined majors with over 25 partner disciplines. Combined majors are carefully constructed degrees allowing students to explore multiple academic fields while staying on track for graduation. Each of the combined majors offers the opportunity for intense study in two disciplines with appropriate breadth in the liberal arts. Students take 9 to 13 courses in each subject and at least one integrative course that binds the disciplines together. These programs offer an excellent educational opportunity for the ambitious student.

## Programs

### Bachelor of Science (BS)

- Computer Science and Behavioral Neuroscience (p. 331)
- Computer Science and Biology (p. 334)
- Computer Science and Business Administration (p. 271)
- Computer Science and Cognitive Psychology (p. 341)
- Computer Science and Communication Studies (p. 169)
- Computer Science and Criminal Justice (p. 346)
- Computer Science and Design (p. 93)
- Computer Science and Economics (p. 351)
- Computer Science and English (p. 353)
- Computer Science and Environmental and Sustainability Sciences (p. 357)
- Computer Science and Game Development (p. 96)
- Computer Science and History (p. 361)
- Computer Science and Journalism (p. 195)
- Computer Science and Linguistics (p. 366)
- Computer Science and Mathematics (p. 368)
- Computer Science and Media Arts (p. 97)
- Computer Science and Music with Concentration in Music Technology (p. 215)
- Computer Science and Philosophy (p. 376)
- Computer Science and Physics (p. 378)
- Computer Science and Political Science (p. 381)
- Computer Science and Sociology (p. 385)
- Computer Science and Theatre (p. 242)
- Cybersecurity and Business Administration (p. 274)
- Cybersecurity and Criminal Justice (p. 392)
- Cybersecurity and Economics (p. 394)
- Data Science and Biochemistry (p. 396)
- Data Science and Biology (p. 398)
- Data Science and Behavioral Neuroscience (p. 400)
- Data Science and Business Administration (p. 277)
- Data Science and Chemistry (p. 405)
- Data Science and Environmental and Sustainability Sciences (p. 413)
- Data Science and Ecology and Evolutionary Biology (p. 408)
- Data Science and Economics (p. 411)
- Data Science and Health Science (p. 415)
- Data Science and Journalism (p. 199)
- Data Science and Linguistics (p. 419)
- Data Science and Mathematics (p. 422)
- Data Science and Physics (p. 424)
- Data Science and Psychology (p. 426)

### Bachelor of Science in Civil Engineering (BSCE)

- Civil Engineering and Computer Science (p. 324)

### Bachelor of Science in Chemical Engineering (BSChE)

- Chemical Engineering and Computer Science (p. 322)

### Bachelor of Science in Computer Engineering (BSCmpE)

- Computer Engineering and Computer Science (p. 327)

## Chemical Engineering and Computer Science, BSChE

The Bachelor of Science in Chemical Engineering and Computer Science provides expertise in computational modeling and simulation of chemical processes. The curriculum is designed to prepare students to practice in the engineering and control of processes involving chemicals, biotechnology feedstocks, and pharmaceuticals, as well as the fundamentals of program design, software development, and algorithms and data.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4
<b>Chemical Engineering Capstone</b>		
CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:	2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
3 semester hours from the following course count toward the engineering requirement:	3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3700	Networks and Distributed Systems	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
<b>Khoury Elective Courses</b>		
With advisor approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.		
Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2000 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

**Supporting Courses: Mathematics/Science**

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
Complete one of the following:		4-5
BIOL 1115	General Biology 1 for Engineers	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
<b>Supplemental Credit</b>		
1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1
<b>Additional Required Courses</b>		
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required in each course:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Integrative Courses**

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
CHME 4512	Chemical Engineering Process Control	4

**Required General Electives**

Code	Title	Hours
Complete 8 semester hours of academic, nonremedial, nonrepetitive courses.		8

**Major GPA Requirement**

Minimum 2.000 GPA required in CHME courses

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

135 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, One Co-op in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	CHME 2308	4	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4	MATH 2321 (FQ)	4		
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				

GE 1501	4	PHYS 1153	1	
MATH 1341 (FQ)	4	General elective	4	
	17		17	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1115 (ND)	4 CHME 2310	4 CS 3200 (FQ, AD)	4 Vacation	0
CHME 2320	4 CS 2510 (ND, AD)	4 CS 3500 and CS 3501 (ND, AD)	5	
CS 1800 (FQ)	4 CS 2511	1		
CS 1802	1 ENCP 2000	1		
CS 2500 (ND, FQ)	4 MATH 2341	4		
CS 2501	1 General elective	4		
	18	18	9	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHME 3312	4 CHME 4315 (AD, WI)	4 Vacation	Co-op	0
CHME 3322	4 CHME 4316	0		
CS 3000	4 CHME 4510	4		
ENGW 3302, 3307, or 3315 (WD)	4 CHME 4701	4		
	CS 3700	4		
	16	16	0	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	0 CHME 4512	4
	CHME 4703 (EI, WI, CE)	4
	CHME 4705	0
	CS 4500 (WI)	4
	ENCP 3000	1
	Khoury elective	4
	0	17

Total Hours: 136

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 CHME 2308	4 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4 MATH 2321 (FQ)	4	
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		

MATH 1341 (FQ)	4	General elective	4	
	17		17	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1115 (ND)	4 CHME 2310	4 Vacation	Co-op	0
CHME 2320	4 CS 2510 (ND, AD)	4		
CS 1800 (FQ)	4 CS 2511	1		
CS 1802	1 ENCP 2000	1		
CS 2500 (ND, FQ)	4 MATH 2341	4		
CS 2501	1 General elective	4		
	18	18	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CHME 3312	4 CS 3200 (FQ, AD)	4 Co-op	0
	CHME 3322	4 CS 3500 and CS 3501 (ND, AD)	5	
	CS 3000	4		
	ENGW 3302, 3307, or 3315 (WD)	4		
	0	16	9	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CHME 4315 (AD, WI)	4 Vacation	Co-op	
	CHME 4316	0		
	CHME 4510	4		
	CHME 4701	4		
	CS 3700	4		
	ENCP 3000	1		
	0	17	0	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	CHME 4512 (EI, CE, WI)	4
	CHME 4703	4
	CHME 4705	0
	CS 4500 (WI)	4
	Khoury elective	4
	0	16

Total Hours: 136

**Civil Engineering and Computer Science, BSCE**

The Bachelor of Science in Civil Engineering and Computer Science provides expertise in computational modeling and simulation of civil and environmental processes and systems. Students will be prepared for

practice in the engineering and control of processes and systems vital for the sustainable development and management of civil and environmental infrastructure, as well as the fundamentals of program design, software development, and algorithms and data.

Computational and simulations-based approaches in engineering research and design practices have increased substantially in recent years in response to the rapidly increasing availability of data from remote and in-situ sensors as well as networked systems. Students who graduate with this combined major degree will have the breadth and depth of understanding and abilities to contribute to innovative and sustainable solutions to support global civil and environmental infrastructure demands.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC) and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with their general elective.

## Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2320 and CIVE 2321	Structural Analysis and Recitation for CIVE 2320	4
CIVE 2324	Concrete Structure Design	4
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340	5
GE 3300	Energy Systems: Science, Technology, and Sustainability	4
<b>Civil Engineering Project Elective</b>		
Complete one of the following:		4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 5536	Hydrologic and Hydraulic Design	
<b>Senior Design Elective</b>		
Complete one of the following:		5

CIVE 4765	Senior Design Project—Environmental	
CIVE 4767	Senior Design Project—Structural	
CIVE 4768	Senior Design Project—Transportation	
<b>Supplemental Credit</b>		
1 semester hour from the following course counts toward the engineering requirement:		1
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

## Computer Science Requirements

Code	Title	Hours
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 3000 and CS 3001	Algorithms and Data and Recitation for CS 3000	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3700	Networks and Distributed Systems	4
CS 4500	Software Development	4

## Computer Science Elective

Complete 4 semester hours of the following:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

## Supporting Courses: Mathematics/Science

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

## Science Elective

Complete one of the following science electives:		4
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PHYS 1125	Introduction to Network Science: From the Human Cell to Facebook
PHYS 1132	Energy, Environment, and Society
ENVR 2515	Sustainable Development

**Supplemental Credit**

3 semester hours from the following course count toward the mathematics/science requirement: 3

CIVE 3464	Probability and Engineering Economy for Civil Engineering	3
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	1
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**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 4 semester hours of academic, nonremedial, nonrepetitive courses. 4		

**Integrative Courses**

Code	Title	Hours
Students will complete one of these courses as part of their required courses above.		
CIVE 4765	Senior Design Project—Environmental	5
CIVE 4767	Senior Design Project—Structural	5
CIVE 4768	Senior Design Project—Transportation	5

**Engineering GPA Requirement**

Minimum 2.000 GPA required in all engineering courses

**KHOURY GPA REQUIREMENT**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirements**

138 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, One Co-op in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151	4	GE 1502 (ER)	4	CS 1800 (FQ)	4	Vacation	
CHEM 1153	0	MATH 1342 (FQ)	4	CS 1802	1		
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3	CS 2500 (FQ, ND)	4		
GE 1000	1	PHYS 1152 (AD)	1	CS 2501	1		
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General elective (IC, DD)	4				
		17	17	10	0		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2221	4	CIVE 2260	4	Vacation		CIVE 2340	4
CIVE 2222	0	CIVE 2261 (AD)	1			CIVE 2341	1
CIVE 2334	4	CIVE 2320	4			MATH 2341	4
CS 2510 (AD, ND)	4	CIVE 2321	0				
CS 2511	1	CIVE 2331	4				
ENCP 2000	1	CIVE 3464	4				
MATH 2321 (FQ)	4						
		18	17	0	9		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2324	4	Co-op		Co-op		Vacation	
CS 3000	4						
CS 3001	0						
CS 3200 (AD, FQ)	4						
Civil project elective	4						
		16	0	0	0		

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 and CS 3501 (AD, ND)	5	CS 4500 (WI)	4				
CS 3700	4	GE 3300	4				
ENCP 3000	1	Senior design elective (EI, WI, CE)	5				

ENGW 3302 or 3315 (WD)	4 Computer science elective	4		
Science elective (SI)	4			
	18	17		

Total Hours: 139

## Five Years, Three Co-ops in Spring/Summer 1

### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151	4 GE 1502 (ER)	4 CS 1800 (FQ)	4 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 CS 1802	1	
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3 CS 2500 (FQ, ND)	4	
GE 1000	1 PHYS 1152 (AD)	1 CS 2501	1	
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General elective (IC, DD)	4		
	17	17	10	0

### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2221	4 Co-op	0 Co-op	0 CIVE 2340	4
CIVE 2222	0		CIVE 2341	1
CIVE 2260	4		MATH 2341	4
CIVE 2261 (AD)	1			
CIVE 2334	4			
ENCP 2000	1			
MATH 2321 (FQ)	4			
	18	0	0	9

### Year 3

Fall	Hours Spring	Hours Summer 1	Hours
CIVE 2320	4 Co-op	0 Co-op	0
CIVE 2321	0		
CIVE 2331	4		
CIVE 3464	4		
CS 2510 (AD, ND)	4		
CS 2511	1		
	17	0	0

### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2324	4 Co-op	0 Co-op	0 Vacation	
CS 3000	4			
CS 3001	0			
CS 3200 (AD, FQ)	4			

Civil project elective	4			
	16	0	0	0

### Year 5

Fall	Hours Spring	Hours
CS 3500 and CS 3501 (AD, ND)	5 CS 4500 (WI)	4
CS 3700	4 GE 3300	4
ENCP 3000	1 Senior design elective (EI, WI, CE)	5
ENGW 3302 or 3315 (WD)	4 Computer science elective	4
Science elective (SI)	4	
	18	17

Total Hours: 139

## Computer Engineering and Computer Science, BSCmpE

This intercollege dual major serves students who are interested in both computer hardware and software, combining an accredited Bachelor of Science degree in engineering with the added benefits of depth in software principles found in a Bachelor of Science degree in computer science. This program provides a well-rounded computing education that includes engineering design principles, computational thinking, proper program design, and a solid background in mathematics and science. The degree is fully accredited as a Bachelor of Science in Computer Engineering and adds the computer science depth.

Because of the large body of shared knowledge between computer engineering and computer science, an integrated dual major between these two disciplines is a logical course of study and can be accomplished within a student's usual five-year program (including three co-op placements) without requiring course overloading in any semester. A student graduating from this program will have a solid foundation in both computer hardware and software principles, and should be prepared for a wide range of career paths in the computing field or any related field that relies on the application of engineering or computing principles.

Students interested in this program should contact the Department of Electrical and Computer Engineering or the Department of Computer and Information Science as early as possible, preferably prior to registering for freshman courses.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).



## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2140	Computing Fundamentals for Engineers	4
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Computer Engineering Fundamentals</b>		
CS 3000	Algorithms and Data	4
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
<b>Electrical Engineering Fundamentals</b>		
Complete one of the following: 4		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	
EECE 2520	Fundamentals of Linear Systems	
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	
<b>Computer Engineering Capstone Courses</b>		
EECE 4791	Electrical and Computer Engineering Capstone 1	1
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>EECE Technical Electives</b>		
Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH will be allowed to satisfy the requirement of technical electives. An additional 4SH will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.		
Though students may register for EECE 2750 more than once, only 4SH will be allowed to satisfy the requirements of technical electives. An additional 4SH will be allowed as a general elective.		
Complete two of the following: 8		
EECE 2412 to EECE 2530		
EECE 2750	Enabling Engineering	
EECE 3324 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5115 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
<b>Khoury Elective Courses</b>		<b>8</b>

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

## Computer Science Requirements

Code	Title	Hours
<b>Computer Science Introductory Courses</b>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
<b>Computer Science Upper-Level Courses</b>		
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3650	Computer Systems	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

## Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
<b>Supplemental Credit</b>		

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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### Professional Development

Code	Title	Hours
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#### Required Professional Development

GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

#### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	1
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### Writing Requirements

Code	Title	Hours
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A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
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Complete 8 SH of academic, nonremedial, nonrepetitive courses. 8

### Integrative Courses

Code	Title	Hours
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The following courses are already required above and also fulfill the integrative requirement.

CS 1800	Discrete Structures	
EECE 4791	Electrical and Computer Engineering Capstone 1	
EECE 4792	Electrical and Computer Engineering Capstone 2	
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342	Calculus 2 for Science and Engineering	
MATH 3081	Probability and Statistics	
PHYS 1151 and PHYS 1152	Physics for Engineering 1 and Lab for PHYS 1151	

### Major GPA Requirement

2.000 minimum GPA in EECE courses

2.000 minimum GPA required in all CS, CY, DS, and IS courses

### Program Requirement

140 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	CS 2500 (ND, FQ)	4	MATH 2341	4	General Elective	4
CHEM 1153	0	CS 2501	1	PHYS 1155 (ND)	3	General Elective	4
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1156 (AD)	1		
GE 1000	1	MATH 1342 (FQ)	4	PHYS 1157	1		
GE 1501	4	PHYS 1151 (ND)	3				
MATH 1341 (FQ)	4	PHYS 1152 (AD)	1				
		PHYS 1153	1				
		17		18		9	8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 (FQ)	4	CS 2800	4	CS 3000	4	Co-op	0
CS 1802	1	CS 2801	1	Khoury Elective	4		
CS 2510 (ND, AD)	4	EECE 2160	4				
CS 2511	1	EECE 2540	4				
EECE 2140	4	ENCP 2000	1				
EECE 2150 (AD)	5	MATH 3081 (AD)	4				
		19		18		8	0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 3650	4	CS 3500 and CS 3501 (ND, AD)	5	Co-op	0
		ENCP 3000	1	EECE 4791 (EI, WI, CE)	1		
		EECE 2322	4	EECE Technical Elective	4		
		EECE 2323	1				
		ENGW 3302 or 3315 (WD)	4				
		EE Fundamental:	4				
		0		18		10	0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 4500 or 4530 (WI)	4				
		EECE 4792 (EI, WI, CE)	4				
		EECE Technical Elective	4				

Khoury Elective	4
0	16

Total Hours: 141

### Four Years, Two Co-ops in Spring/Summer 1

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CHEM 1151 (ND)	4 CS 2500 (ND, FQ)	4 MATH 2341	4 General Elective	4	
CHEM 1153	0 CS 2501	1 PHYS 1155 (ND)	3 General Elective	4	
ENGW 1111 (WF)	4 GE 1502 (ER)	4 PHYS 1156 (AD)	1		
GE 1000	1 MATH 1342 (FQ)	4 PHYS 1157	1		
GE 1501	4 PHYS 1151 (ND)	3			
MATH 1341 (FQ)	4 PHYS 1152 (AD)	1			
	PHYS 1153	1			
	17	18	9	8	

Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CS 1800 (FQ)	4 Co-op	0 Co-op	0 CS 3000	4	
CS 1802	1		Khoury Elective	4	
CS 2510 (ND, AD)	4				
CS 2511	1				
EECE 2140	4				
EECE 2150 (AD)	5				
ENCP 2000	1				
	20	0	0	8	

Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CS 2800	4 Co-op	0 Co-op	0 EECE 4791 (EI, WI, CE)	1	
CS 2801	1		Khoury Elective	4	
EECE 2160	4		EECE Technical Elective	4	
ENCP 3000	1				
MATH 3081 (AD)	4				
EECE 2540	4				
	18	0	0	9	

Year 4					
Fall	Hours Spring	Hours			
EECE 2322	4 CS 4500 or 4530 (WI)	4			
EECE 2323	1 ENGW 3302 or 3315 (WD)	4			

EECE 4792 (EI, WI, CE)	4 EECE Technical Elective	4		
CS 3500 and CS 3501	5 CS 3650	4		
EE Fundamentals	4			
	18	16		

Total Hours: 141

### Five Years, Three Co-ops in Summer 2/Fall

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0	
CHEM 1153	0 MATH 1342 (FQ)	4			
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3			
GE 1000	1 PHYS 1152 (AD)	1			
GE 1501	4 PHYS 1153	1			
MATH 1341 (FQ)	4 General Elective	4			
	17	17	0	0	

Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CS 1800 (FQ)	4 CS 2510 (ND, AD)	4 Vacation	0 Co-op	0	
CS 1802	1 CS 2511	1			
CS 2500 (ND, FQ)	4 CS 2800	4			
CS 2501	1 CS 2801	1			
EECE 2140	4 EECE 2160	4			
MATH 2341	4 ENCP 2000	1			
	PHYS 1155 (ND)	3			
	PHYS 1156 (AD)	1			
	PHYS 1157	1			
	18	20	0	0	

Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	0 CS 3650	4 CS 3500 and CS 3501 (ND, AD)	5 Co-op	0	
	EECE 2150 (AD)	5 ENGW 3302 or 3315 (WD)	4		
	EECE 2323	1			
	EECE 2322	4			
	EECE 2540	4			
	0	18	9	0	

Year 4					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	0 ENCP 3000	1 CS 3000	4 Co-op	0	

MATH 3081 (AD)	4	EECE 4791 (EI, WI, CE)	1	
EE Fundamentals	4	General Elective	4	
Khoury Elective	4			
Khoury Elective	4			
	0	17	9	0

**Year 5**

Fall	Hours Spring	Hours	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 4500 or 4530 (WI)	4			
	EECE 4792 (EI, WI, CE)	4			
	EECE Technical Elective	4			
	EECE Technical Elective	4			
	0	16			

Total Hours: 141

**Five Years, Three Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 (FQ)	4 Co-op	0 Co-op	0 Vacation	0
CS 1802	1			
CS 2500 (ND, FQ)	4			
CS 2501	1			
EECE 2140	4			
ENCP 2000	1			
MATH 2341	4			
	19	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 2510 (ND, AD)	4 Co-op	0 Co-op	0 ENGW 3302 or 3315 (WD)	4
CS 2511	1		MATH 3081 (AD)	4

CS 2800	4			
CS 2801	1			
EECE 2160	4			
PHYS 1155 (ND)	3			
PHYS 1156 (AD)	1			
PHYS 1157	1			
	19	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501 (ND, AD)	5 Co-op	0 Co-op	0 CS 3000	4
CS 3650	4		EECE 4791 (EI, WI, CE)	1
EECE 2150 (AD)	5		EECE Technical Elective	4
EECE 2540	4			
ENCP 3000	1			
	19	0	0	9

**Year 5**

Fall	Hours Spring	Hours
EECE 2322	4 CS 4500 or 4530 (WI)	4
EECE 2323	1 EE Fundamentals	4
EECE 4792 (EI, WI, CE)	4 EECE Technical Elective	4
Khoury Elective	4 General Elective	4
Khoury Elective	4	
	17	16

Total Hours: 141

**Notes**

- Computing Fundamentals for Engineers (EECE 2140) can be taken in Year 1 Spring during the five year plan instead of a General Elective by students who are interested in the course in preparation for co-ops involving programming and computing hardware.
- The Capstone Design Courses are taken as follows: (Electrical and Computer Engineering Capstone 1 (EECE 4791) - Summer 1 and Electrical and Computer Engineering Capstone 2 (EECE 4792) - Spring) OR (Electrical and Computer Engineering Capstone 1 (EECE 4791) - Summer 2 and Electrical and Computer Engineering Capstone 2 (EECE 4792) - Fall).

**Computer Science and Behavioral Neuroscience, BS**

The Bachelor of Science in Computer Science and Behavioral Neuroscience underscores how research in neuroscience has become a computational field of study. The combined major is designed for students who are interested in applying mathematical and computational methodologies toward understanding human behavior, artificial

intelligence, and the human-machine interface. Courses across multiple science disciplines—including biology, chemistry, and computer science—lay a strong foundation necessary to explore brain mechanisms and how they give rise to behavioral functions and pathological states using computational approaches. Students will have an opportunity to develop skills in software development as they apply algorithms and data structures to brain research and neurotechnology.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Requirements

Code	Title	Hours
<b>Overview</b>		
CS 1200	First Year Seminar <sup>1</sup>	1
CS 1210	Professional Development for Khoury Co-op <sup>2</sup>	1
<b>Computer Science Foundations</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4100	Artificial Intelligence	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
<b>Statistics Foundation</b>		
Complete one of the following:		4-5
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
PSYC 2320	Statistics in Psychological Research	

<sup>1</sup> Students entering through the behavioral neuroscience program may take Behavioral Neuroscience at Northeastern (BNSC 1000).

<sup>2</sup> Students entering through the behavioral neuroscience program may take Professional Development for Co-op (EESC 2000).

## Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4

or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Behavioral Neuroscience Requirements

Code	Title	Hours
<b>COS Foundations</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
PSYC 1101	Foundations of Psychology	4
<b>Mathematics Foundation</b>		
MATH 1341 or MATH 1251	Calculus 1 for Science and Engineering Calculus and Differential Equations for Biology 1	4
<b>Behavioral Neuroscience Foundations</b>		
BIOL 3405 or BIOL 5587	Neurobiology Comparative Neurobiology	4
PT 5410 and PT 5411 or PSYC 3200	Functional Human Neuroanatomy and Lab for PT 5410 Clinical Neuroanatomy	4-5
<b>Psychology Elective</b>		
Complete one of the following:		4
PSYC 3358	Behavior Therapies	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	
<b>Behavioral Neuroscience Core Courses</b>		
Complete two of the following:		8
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5595	Cell and Molecular Neuroscience	

BIOL 5601	Multidisciplinary Approaches in Motor Control
PSYC 3506	Neuropsychology of Fear
PSYC 3508	Behavioral Endocrinology
PSYC 3510	Brain, Behavior, and Immunity
PSYC 4510	Psychopharmacology
PSYC 4512	Neuropsychology
PSYC 4514	Clinical Neuroscience
PSYC 4570	Behavioral Genetics

## Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
IS 4300 or CS 4120 or CS 4180	Human Computer Interaction Natural Language Processing Reinforcement Learning	4
PSYC 4540 or BINF 6308	Quantitative Topics in Psychology and Behavioral Neuroscience Bioinformatics Computational Methods 1	4
<b>Upper-Division Elective</b>		
Complete four credits from the following list, not taken to fulfill previous requirements:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
BNSC 4970 or higher		
BIOL 3400 or higher		
BINF 6309	Bioinformatics Computational Methods 2	
PSYC 3200 or higher		

## Supporting Courses

Code	Title	Hours
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

## Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## Computer Science and Behavioral Neuroscience Major Credit Requirement

102 SH required in the major

## Program Requirement

133 total semester hours required

## Plan of Study

### Sample Patterns:

#### Five Years, Three Co-ops

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	Vacation
CS 1800 and CS 1802	5	BIOL 2299	4		
CS 2500 and CS 2501	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5		
BIOL 1107 and BIOL 1108	5	MATH 1341	4		
ENGW 1111	4				
		20	18	0	0
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 3500 and CS 3501	5	CS 3000	4	Vacation	Co-op
BIOL 3405 or 5587	4	CHEM 2311 and CHEM 2312	5		
PSYC 1101	4	PSYC 3200	4		
BIOL 2301 and BIOL 2302	5	General elective	4		
		CS 1210	1		
		18	18	0	0
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		CS 3200	4	General elective	4
		CS 4500	4	PSYC elective	4
		Statistics requirement	4		
		BNS core	4		
		0	16	8	0
Year 4					
Fall	Hours	Spring	Hours	Summer 2	Hours
Co-op		CS 4100	4	Co-op	
		CS integrative course	4	ENGW 3302 (online)	4

	BNS core	4		
	General elective	4		
	0	16		4
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	Upper-division elective	4		
	BNS integrative course	4		
	Computing and social issues	4		
	General elective	4		
	0	16		

Total Hours: 134

### Four Years, Two Co-ops

<b>Year 1</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 MATH 1341	4 PSYC 1101	4	
CS 2500 and CS 2501	5 BIOL 2299	4		
BIOL 1107 and BIOL 1108	5 CHEM 1161 and CHEM 1162 and CHEM 1163	5		
ENGW 1111	4			
	20	18	9	0

<b>Year 2</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
CS 3200	4 CS 1210	1 PSYC elective	4 Co-op	
CS 3000	4 CHEM 2311 and CHEM 2312	5 General elective	4	
BIOL 3405 or 5587	4 PSYC 3200	4		
BIOL 2301 and BIOL 2302	5 General elective	4		
	Statistics course	4		
	17	18	8	0

<b>Year 3</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Co-op	CS 4500	4 General elective	4 Co-op	
	BNS core	4 Upper-division elective	4 ENGW 3302 (online)	4

	CS integrative course	4		
	BNS core	4		
	0	16	8	4
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	CS 4100	4		
	Computing and social issues	4		
	BNS integrative course	4		
	General elective	4		
	0	16		

Total Hours: 134

## Computer Science and Biology, BS

The computer science and biology combined major reflects how research in biology, especially genetics, has become a computational science. The program provides a strong foundation in biology, chemistry, and mathematics, as well as software development and algorithms.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar <sup>1</sup>	
CS 1210	Professional Development for Khoury Co-op <sup>2</sup>	
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4

CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3800	Theory of Computation (integrative course)	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

**Khoury Elective Courses**

With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

<sup>1</sup> Students entering through the biology department may take Biology at Northeastern (BIOL 1000).

<sup>2</sup> Students entering through the biology department may take Professional Development for Co-op (EESC 2000).

**Biology Courses**

Code	Title	Hours
<b>Foundations of Biology</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<b>Inquiries</b>		
BIOL 2299	Inquiries in Biological Sciences	4
<b>Molecular Biology</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<b>Techniques in Biology</b>		
BIOL 2309	Biology Project Lab	4
<b>Chemistry</b>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Biology Capstone</b>		
Choose one:		4
BIOL 4701	Biology Capstone	
BIOL 4971	Junior/Senior Honors Project 2	
BIOL 4900	Biology Research Capstone	
<b>Intermediate and Advanced Biology Electives</b>		
Complete two biology courses (with corequisite labs if offered). Choose one of these two courses from the following list:		9-10
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	

BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	
Choose the second elective from the following list:		4-5
BIOL 2311 to BIOL 4999		
EEMB 2290 to EEMB 5515		
EEMB 5548 to EEMB 5569		

**Biology Integrative Course**

Complete one of the following:		4-5
BINF 6308	Bioinformatics Computational Methods 1	
BIOL 4707	Cell and Molecular Biology	
BIOL 5569	Advanced Microbiology	
BIOL 5581	Biological Imaging	
BIOL 5587	Comparative Neurobiology	
BIOL 5591	Advanced Genomics	
EEMB 4548	Sociobiology	

**Supporting Courses**

Code	Title	Hours
<b>Calculus</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
MATH 1252	Calculus and Differential Equations for Biology 2	4
<b>Probability and Statistics</b>		
Complete one of the following:		4-5
MATH 3081	Probability and Statistics	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or HIST 1300	Knowledge in a Digital World Introduction to Health and Humanities	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Intermediate or Advanced Science**



Complete one course from the following:	4
BIOL 2327 to BIOL 3999	
BIOL 4705 to BIOL 5999	
CHEM 2311 to CHEM 5999	
EEMB 2290 to EEMB 5999	
ENVR 2310 to ENVR 5999	
MATH 2280 to MATH 5999	
PHYS 2303 to PHYS 5999	
PSYC 2290 to PSYC 5999	

### Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
or ENGW 3307	Advanced Writing in the Sciences	

### Required General Electives

Code	Title	Hours
Complete 16 credits of general electives		16

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Exploring Creative Expression and Innovation
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

141 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 BIOL 2301	4 Vacation	

CS 1800 and CS 1802	5	BIOL 2299	4	BIOL 2302	1
CS 2500 and CS 2501	5	ENGW 1111	4	Elective	4
BIOL 1107 and BIOL 1108	5	Elective	4		
CHEM 1161	4				
CHEM 1162	1				
CHEM 1163	0				
		21	17	9	0

Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CS 3500 and CS 3501	5 CS 1210	1 Elective	4 Co-op		
CHEM 2311 and CHEM 2312	5 CHEM 2313 and CHEM 2314	5 BIOL 2309	4		
CS 3200	4 CS 3000	4			
MATH 1251	4 BIOL 3611	4			
	BIOL 3612	1			
	MATH 1252	4			
		18	19	8	0

Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	CS 3800	4 ENGW 3302	4 Co-op		
	Computing and social issues	4 ENVR 2500 and ENVR 2501 (or MATH 3081)	5		
	BIOL elective	5			
	BIOL integrative elective	4			
		0	17	9	0

Year 4					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	CS 4500	4 BIOL Elective	4 Co-op		
	BIOL 4701	4 Elective	4		
	BIOL Intermediate/Advanced elective	4			
	Khoury Elective	4			
		0	16	8	0

Total Hours: 142

### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 BIOL 2299	4		

BIOL 1107 and BIOL 1108	5	ENGW 1111	4
CS 1200	1	MATH 1251	4
CHEM 1161	4		
CHEM 1162	1		
CHEM 1163	0		

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21                      17                      0                      0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 3000	4 Vacation	0 Co-op	0
CS 3200	4 BIOL 2301	4		
CHEM 2311 and CHEM 2312	5 BIOL 2302	1		
MATH 1252	4 CHEM 2313 and CHEM 2314	5		
	CS 1210	1		
	Elective	4		

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18                      19                      0                      0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 3800	4 ENGW 3302	4 Co-op	0
	BIOL 2309	4 BIOL 3611	4	
	Elective	4 BIOL 3612	1	
	BIOL elective	4		

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0                      16                      9                      0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 BIOL elective	5 Elective	4 Co-op	0
	Khoury Elective	4 Elective	4	
	ENVR 2500 and ENVR 2501 (or MATH 3081)	5		
	Computing and social issues	4		

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0                      18                      8                      0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 CS 4500	4
	BIOL integrative elective	4
	BIOL 4701	4
	BIOL Intermediate/ Advanced elective	4

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0                      16

Total Hours: 142

**Five Years, Three Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 BIOL 2299	4		
BIOL 1107 and BIOL 1108	5 ENGW 1111	4		
CS 1200	1 MATH 1251	4		
CHEM 1161	4			
CHEM 1162	1			
CHEM 1163	0			

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21                      17                      0                      0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 2311 and CHEM 2312	5 Co-op	0 Co-op	0 Vacation	0
CS 3500 and CS 3501	5			
CS 1210	1			
MATH 1252	4			
BIOL 2301	4			
BIOL 2302	1			

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20                      0                      0                      0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 Co-op	0 Co-op	0 Elective	4
CHEM 2313 and CHEM 2314	5		ENGW 3302	4
BIOL 2309	4			
BIOL 3611	4			
BIOL 3612	1			

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18                      0                      0                      8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3800	4 Co-op	0 Co-op	0 Elective	4
BIOL elective	4		Elective	4
Elective	4			
CS 3200	4			

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16                      0                      0                      8

**Year 5**

Fall	Hours Spring	Hours
BIOL elective	5 CS 4500	4
Khoury Elective	4 BIOL 4701	4
ENVR 2500 and ENVR 2501 (or MATH 3081)	5 BIOL integrative elective	4

Computing and social issues	4 BIOL Intermediate/Advanced elective	4
	18	16

Total Hours: 142

## Computer Science and Business Administration, BS

The computer science and business combined major delivers a technical degree with a strong grounding in business. Students will complete most of the requirements of a business major, including macroeconomics and microeconomics, while also focusing on technical skills like program design, software development, computer organization, systems and networks, theories of computation, principles of languages, and advanced algorithms and data.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
Complete two of the following:		8
CS 3650	Computer Systems	
CS 3700	Networks and Distributed Systems	
DS 3000	Foundations of Data Science	
DS 4200	Information Presentation and Visualization	

DS 4300	Large-Scale Information Storage and Retrieval
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### Khoury Elective

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Business Courses

Code	Title	Hours
<b>Required Business Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
ORGB 3201	Organizational Behavior	4
MKTG 2201	Introduction to Marketing	4
MGSC 2301	Business Statistics	4
STRT 4501	Strategy in Action	4

### Business Concentration

Complete a four-course business concentration from the following list.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

### Integrative Course

Code	Title	Hours
<b>Information Resource Management</b>		
MISM 2301	Management Information Systems	4

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341 or MATH 1231	Calculus 1 for Science and Engineering Calculus for Business and Economics	4
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4

ECON 1116	Principles of Microeconomics	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Business GPA Requirement**

Minimum 2.000 GPA required in business courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major

- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills Through Experience* is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	MATH 1341 or 1231	4	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4	ACCT 1201	4		
CS 2500 and CS 2501	5	ECON 1116	4				
ENGW 1111	4	Elective	4				
ECON 1115	4						
		19		17		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ACCT 2301	4	Business concentration 1	4	MKTG 2201	4	Co-op	0
CS 3500 and CS 3501	5	CS 3000	4	Elective	4		
MGSC 2301	4	Computing and social issues	4				
Elective	4	CS 1210	1				
		17		17		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3650	4	FINA 2201	4	Co-op	0
		MISM 2301	4	ORGB 3201	4		
		Business concentration 2	4				
		Khoury Elective	4				
		0		16		8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3700	4	STRT 4501	4		
		CS 4500	4	ENGW 3302	4		
		Business concentration 3	4				

Business concentration 4	4	
0	16	8

Total Hours: 134

### Five Years, Three Co-ops in Summer 2/Fall

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 3200	4		
CS 1200	1 ECON 1116	4		
ECON 1115	4 Elective	4		
ENGW 1111	4			
	19	17	0	0

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 ACCT 2301	4 Vacation	0 Co-op	0
MATH 1341	4 CS 3000	4		
ACCT 1201	4 FINA 2201	4		
MGSC 2301	4 CS 1210	1		
	Elective	4		
	17	17	0	0

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 3650	4 ORGB 3201	4 Co-op	0
	Business concentration 1	4 MKTG 2201	4	
	MISM 2301	4		
	ENGW 3302	4		
	0	16	8	0

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Business concentration 2	4 Elective	4 Co-op	0
	CS 3700	4 Elective	4	
	Business concentration 3	4		
	Khoury Elective	4		
	0	16	8	0

Fall	Hours Spring	Hours
Co-op	0 STRT 4501	4
	Business concentration 4	4
	CS 4500	4

Computing and social issues	4
0	16

Total Hours: 134

### Five Years, Three Co-ops in Spring/Summer 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 3200	4		
CS 1200	1 ECON 1116	4		
ECON 1115	4 Elective	4		
ENGW 1111	4			
	19	17	0	0

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 Co-op	0 Co-op	0 Vacation	0
MATH 1341	4			
ACCT 1201	4			
MGSC 2301	4			
CS 1210	1			
	18	0	0	0

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ACCT 2301	4 Co-op	0 Co-op	0 ORGB 3201	4
CS 3000	4		MKTG 2201	4
Elective	4			
FINA 2201	4			
	16	0	0	8

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3650	4 Co-op	0 Co-op	0 Elective	4
Business concentration 1	4		Elective	4
MISM 2301	4			
ENGW 3302	4			
	16	0	0	8

Fall	Hours Spring	Hours
Khoury Elective	4 STRT 4501	4
Business concentration 2	4 CS 4500	4
Business concentration 3	4 Computing and social issues	4

CS 3700	4 Business concentration 4	4
		16
		16

Total Hours: 134

## Computer Science and Cognitive Psychology, BS

The computer science and cognitive psychology combined major provides a foundation in general psychology, psychology of language, cognition, and statistics—all supplemented by an experimental laboratory course, seminar course, and psychology electives. Students who choose this program often have a general interest in human psychology or specific interests in artificial intelligence or human-computer interaction.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4100	Artificial Intelligence (Integrative course)	4
CS 4500 or CS 4530	Software Development (Integrative course) Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction (Integrative course)	4

### Khoury Elective Courses

With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete twelve credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Psychology Courses

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
PSYC 3466	Cognition	4
<b>Advanced Psychology</b>		
PSYC 3452 or PSYC 3458	Sensation and Perception Biological Psychology	4
<b>Laboratory in Psychology</b>		
Complete one of the following:		4
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4622	Laboratory in Sensation and Perception	
<b>Seminar in Psychology</b>		
Complete one of the following:		4
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
<b>Psychology Electives</b>		
Note: Courses satisfying the categories above cannot be reused.		
Complete two of the following:		8
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 4512	Neuropsychology	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4628	Laboratory in Developmental Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	

With prior approval, directed study research and Honors Project courses can also be counted:

PSYC 4970	Junior/Senior Honors Project 1
PSYC 4971	Junior/Senior Honors Project 2
PSYC 4991	Directed Study Research

### Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 32 credits of general electives.		32

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Writing in the First Year

- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200		1 CS 2510 and CS 2511		5 CS 3500 and CS 3501		5 Vacation	
CS 1800 and CS 1802	5	PSYC 3466	4	Elective		4	
CS 2500 and CS 2501	5	MATH 1341	4				
PSYC 1101	4	Elective	4				
ENGW 1111	4						
		19		17		9	
						0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 2320	4	Khoury elective	4	Elective	4	Co-op	4
CS 3000	4	IS 4300	4	Elective	4		4
Elective	4	PSYC elective	4				
PSYC 3464	4	PSYC 3452 or 3458	4				
		CS 1210	1				
		16		17		8	
						0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4100	4	Elective	4	Co-op	4
		PSYC lab elective	4	Elective	4		4
		Khoury elective	4				
		Khoury elective	4				
		0		16		8	
						0	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4500	4	Elective	4		4
		PSYC elective	4	ENGW 3302	4		4
		PSYC seminar	4				

Computing and social issues	4		
	0	16	8

Total Hours: 134

### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 1800 and CS 1802	5 PSYC 3466	4		
CS 2500 and CS 2501	5 Elective	4		
PSYC 1101	4 Elective	4		
ENGW 1111	4			
	19	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 PSYC 3464	4 Vacation	0 Co-op	0
MATH 1341	4 CS 3000	4		
PSYC 2320	4 PSYC 3452	4		
Elective	4 CS 1210	1		
		Khoury elective	4	
	17	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 IS 4300	4 Elective	4 Co-op	0
		ENGW 3302	4 Elective	4
		PSYC elective	4	
		Khoury elective	4	
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 4100	4 Elective	4 Co-op	0
		Khoury elective	4 Elective	4
		PSYC lab elective	4	
		PSYC elective	4	
	0	16	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	0 CS 4500	4
	PSYC seminar	4
	Computing and social issues	4

Elective	4
	0
	16

Total Hours: 134

### Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 PSYC 3466	4		
PSYC 1101	4 Elective	4		
ENGW 1111	4 Elective	4		
CS 1200	1			
	19	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 Co-op	0 Co-op	0 Vacation	0
MATH 1341	4			
PSYC 2320	4			
Elective	4			
CS 1210	1			
	18	0	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 3464	4 Co-op	0 Co-op	0 Elective	4
CS 3000	4		Elective	4
PSYC 3452	4			
Khoury elective	4			
	16	0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
IS 4300	4 Co-op	0 Co-op	0 Elective	4
ENGW 3302	4		Elective	4
PSYC elective	4			
Khoury elective	4			
	16	0	0	8

Year 5		
Fall	Hours Spring	Hours
CS 4100	4 CS 4500	4
Khoury elective	4 PSYC seminar	4
PSYC lab elective	4 Computing and social issues	4
PSYC elective	4 Elective	4
	16	16

Total Hours: 134



## Computer Science and Communication Studies, BS

The computer science and communication studies combined major integrates practical skills and theory. Students will gain both a strong computer science foundation and a deep understanding of the major conceptual frameworks for human communication—plus how to apply this knowledge to solve problems in today's society.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
CS 4550	Web Development	4
<b>Khoury Elective</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 12 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		12
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

### Communication Studies Courses

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	
<b>Communication Studies Electives</b>		
Complete three courses in the following range: <sup>1</sup>		12
COMM 1131 to COMM 4996		

<sup>1</sup> Special Topics in Communication Studies (COMM 4912), and Junior/Senior Honors Project 1 (COMM 4970) are excluded.

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	

CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
HIST 2220	History of Technology
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300 or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

### Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
COMM 3409	Advocacy Writing <sup>1</sup>	

<sup>2</sup> If Advocacy Writing (COMM 3409) is selected it will also satisfy a communication studies elective requirement. One additional general elective will be then required in its place.

### Required General Electives

Code	Title	Hours
Complete 32 credits of general electives.		32

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Communication Studies Grade Requirement

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, IS

### Communication Studies GPA Requirement

Minimum 2.000 GPA required in all COMM courses

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Elective	4
CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4	Elective	4
CS 2500 and CS 2501	5	COMM 1112 or 2301	4				
ENGW 1111	4	Elective	4				
COMM 1101	4						
		19		17		9	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	Co-op	0	Co-op	0	Elective	4
Communication studies foundation course	4					Elective	4
Khoury elective	4						
CS 3000	4						
Elective	4						
		17		0		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication studies cluster course	4	Co-op	0	Co-op	0	Elective	4
Communication studies writing-intensive course	4					ENGW 3302 or 3315	4
Khoury elective	4						
Elective	4						
		16		0		0	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective	4	CS 4500	4				
Communication studies writing-intensive course	4	CS 4550	4				
Communication studies elective	4	Communication studies elective	4				

Computing and social issues	4	Communicati studies elective	4
16		16	

Total Hours: 134

## Computer Science and Criminal Justice, BS

For students interested in criminal justice in an increasingly digital world, the computer science and criminal justice combined degree offers a strong programming foundation coupled with academic and experiential knowledge of the criminal justice system. Successful students will learn the principles, practices, and responsibilities of criminal justice professionals alongside the computer science skills necessary for practical applications in the field.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
IS 2000	Principles of Information Science	4
<b>Khoury Elective Courses</b>		
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 16 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges:		16
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Criminal Justice Courses

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Crime Problems and Criminal Justice Institutions</b>		
The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students with a deeper look at a range of crime problems.		
Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3070	Corporate and White-Collar Crime	
<b>Systemic Issues</b>		
These courses consider systemic issues facing the criminal justice system.		
Complete one of the following:		4
CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	
<b>Creating Knowledge about Crime and Justice</b>		
How do we know what we know about crime and justice—and how do we develop new knowledge? These courses cover how to harness data to learn about issues, identify solutions, and advocate for change.		
CRIM 3600	Criminal Justice Research Methods	4

CRIM 3700	Analyzing and Using Data on Crime and Justice	4
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**Criminal Justice Capstone**

CRIM 4949	Senior Capstone Seminar	4
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**Criminal Justice Elective**

These courses round out our knowledge of crime and justice.

Complete one additional criminal justice elective from the 3000, 4000, or 5000 level.	4
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**Integrative Course Requirement**

Code	Title	Hours
Complete one of the following: 4		
CRIM 3060	Political Crime and Terrorism	
CRIM 4040	Crime Prevention	
CRIM 4900	Advanced Seminar in Criminology and Criminal Justice	

**Supporting Course**

Code	Title	Hours
<b>Computing and Social Issues</b>		
Complete one of the following: 4		
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one of the following:		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, 2 Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3200	4 Vacation	
CS 1800 and CS 1802	5 IS 2000	4 CS 3500 and CS 3501	5	
CS 2500 and CS 2501	5 CRIM 1110	4		
CRIM 1100	4 CRIM 1120	4		
ENGW 1111	4			
19		17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210 or EESH 2000	1 Co-op	Co-op	ENGW 3302, 3308, or 3315	4
CS 3000	4		Elective	4
CRIM 3600	4			
CJ thematic elective	4			
Elective	4			
17		0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Khoury elective 1	4 Co-op	Co-op	Elective	4
CRIM 3700	4		Elective	4
CJ survey elective	4			
Khoury elective 2	4			
	16	0	0	8

Year 4			
Fall	Hours Spring	Hours Summer 1	Hours
Khoury elective 3	4 Khoury elective 4	4 Elective	4
CJ systemwide elective	4 CRIM 4949	4 Elective	4
CJ elective	4 Elective	4	
Computing and social issues	4 CJ integrative course	4	
	16	16	8

Total Hours: 134

### Five Years, 3 Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 IS 2000	4		
CS 2500 and CS 2501	5 CRIM 1110	4		
CRIM 1100	4 CRIM 1120	4		
ENGW 1111	4			
	19	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210 or EESH 2000	1 Co-op	Co-op	Vacation	
CS 3000	4			
CS 3200	4			
CS 3500 and CS 3501	5			
CRIM 3600	4			
	18	0	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CRIM 3700	4 Co-op	Co-op	ENGW 3302, 3308, or 3315	4
Khoury elective 1	4		Elective	4
CJ thematic elective	4			

CJ survey elective	4			
	16	0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Khoury elective 2	4 Co-op	Co-op	Elective	4
CJ systemwide elective	4		Elective	4
Elective	4			
Computing and social issues	4			
	16	0	0	8

Year 5		
Fall	Hours Spring	Hours
CJ integrative course	4 Khoury elective 4	4
CJ elective	4 CRIM 4949	4
Elective	4 Elective	4
Khoury elective 3	4 Elective	4
	16	16

Total Hours: 134

## Computer Science and Design, BS

The combined major in computer science and design integrates fundamental design courses with a strong programming foundation. Students will declare a concentration in interaction design, graphic and information design, or experience design. Students in this major often have an interest in human-centered design methods used in developing digital interfaces and applications.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ARTF 1000	First Year Seminar Art and Design at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1

or EEAM 2000 Professional Development for Co-op

<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction	4

### Computer Science Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 8

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## Design Requirements

Code	Title	Hours
<b>Art + Design Fundamentals Required</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
<b>Art + Design Fundamentals Elective</b>		
Complete one of the following:		4-5
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
<b>Design Required</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
<b>Design Elective</b>		
Complete any one ARTG design elective course, as long as prerequisites have been met.		4
<b>Art + Design History Elective</b>		
Complete any one ARTH course.		4
<b>Art + Design Elective</b>		
Complete any one ARTG, ARTE, ARTD, ARTH, ARTS, or GAME course as long as prerequisites have been met.		4

## Degree Capstone Project

ARTG 4550	Design Degree Project 1	4
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## Design Options

Code	Title	Hours
Complete one of the following options:		8

### Interaction Design Option

ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)
ARTG 3700	Interaction Design 2: Mobile

Code	Title	Hours
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### Graphic and Information Design Option

ARTG 2252	Graphic Design 1
ARTG 3450	Graphic Design 2

Code	Title	Hours
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### Experience Design Option

ARTG 3462	Experience Design 1
ARTG 3463	Experience Design 2

## Degree-Focused Electives

Code	Title	Hours
Complete two courses from the following lists:		8

### Art + Design

Complete any ARTG or ARTE courses as long as prerequisites have been met.

### Psychology

PSYC 1101	Foundations of Psychology
PSYC 3452	Sensation and Perception
PSYC 3464	Psychology of Language
PSYC 3466	Cognition

### Computer Science

CS 3200	Database Design
CS 3520	Programming in C++
CS 3540	Game Programming
CS 3650	Computer Systems
CS 3700	Networks and Distributed Systems
CS 3800	Theory of Computation
CS 4100	Artificial Intelligence
CS 4150	Game Artificial Intelligence
CS 4300	Computer Graphics
CS 4400	Programming Languages
CS 4520	Mobile Application Development
CS 4550	Web Development
CS 4850	Building Game Engines
CS 4991	Research
CS 4992	Directed Study
CS 4993	Independent Study
DS 3000	Foundations of Data Science
DS 4200	Information Presentation and Visualization
DS 4300	Large-Scale Information Storage and Retrieval
DS 4400	Machine Learning and Data Mining 1

DS 4420	Machine Learning and Data Mining 2
IS 2000	Principles of Information Science

### Integrative Requirement

Code	Title	Hours
The following courses are used in the major but also count as the integrative requirement:		
IS 4300	Human Computer Interaction	
ARTG 4550	Design Degree Project 1	

### Supporting Course

Code	Title	Hours
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines

- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

### Computer Science and Design Major Credit Requirement

96 SH are required in the major.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Spring/Summer 1

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200 or ARTF 1000	1	CS 2510 and CS 2511	5	Vacation	Vacation
CS 1800 and CS 1802	5	ARTG 1250	4		
CS 2500 and CS 2501	5	A+D Fundamentals elective	4		
ARTF 1122 (with optional ARTF 1123)	4	Elective	4		
ENGW 1111	4				
		19		17	
				0	
				0	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 3000	4	Co-op 1		Co-op 1	Elective
CS 3500 and CS 3501	5				Elective
ARTG 2250 (with optional ARTG 2251)	4				
Design option 1	4				
CS 1210 or EEAM 2000	1				
		18		0	
				0	
				8	
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
IS 4300	4	Co-op 2		Co-op 2	ENGW 3302 or 3315
ARTG 3350	4				Elective
Art + Design History Elective	4				
Design option 2	4				
		16		0	
				0	
				8	

Year 4			
Fall	Hours Spring	Hours Summer 1	Hours
ARTG 3451	4 Co-op 3	Co-op 3	
Computing and social issues elective	4		
Degree-focused elective 1	4		
Art + Design elective	4		
	16	0	0
Year 5			
Fall	Hours Spring	Hours	
CS 4500 (and CS 4501)	4 CS elective	4	
ARTG 4550	4 Degree-focused elective 2	4	
CS elective	4 Elective	4	
Elective	4 Elective	4	
	16	16	

Total Hours: 134

\* Indicates course must be taken in the semester listed.

## Four Years, Two Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200 or ARTF 1000	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 ARTG 1250	4 CS 3000	4	
CS 2500 and CS 2501	5 A+D fundamentals elective	4		
ARTF 1122 (with optional ARTF 1123)	4 Elective	4		
ENGW 1111	4			
	19	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTG 2250 (with optional ARTG 2251)	4 Co-op 1	Co-op 1	ENGW 3302	4
Art + Design History Elective	4		Elective	4
Design option 1	4			
Degree-focused elective 1	4			

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
IS 4300	4 Co-op 2	Co-op 2	Elective	4
ARTG 3350	4		Elective	4
Computing and social issues	4			
Design option 2	4			
	16	0	0	8
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours	
CS 4500 (and CS 4501)	4 Degree-focused elective 2	4 Elective	4	
ARTG 3451	4 Art + Design elective	4 Elective	4	
ARTG 4550	4 CS elective	4		
Elective	4 CS elective	4		
	16	16	8	

Total Hours: 134

## Computer Science and Economics, BS

The combined major in computer science and economics integrates fundamental economics courses with a strong programming foundation. Studying both the behavior of individuals and the collective behavior of industries and governments, students will utilize computing skills to address complex issues within the field.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
or ECON 1000	Economics at Northeastern	
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5



CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5

**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
IS 2000	Principles of Information Science	4
Choose one		4
IS 4200	Information Retrieval	
IS 4300	Human Computer Interaction	

**Khoury Elective**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 8

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Economics Requirements**

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

**Economics Electives**

Complete 4 Economics elective courses from the following ranges with no more than 2 at the ECON 1200 – ECON 1999 range: 16

ECON 1200 to ECON 1999

ECON 3000 to ECON 4689

ECON 4900 to ECON 4999

ECON 5200 to ECON 5999

**Economics Capstone**

ECON 4692	Senior Economics Seminar	4
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**Integrative Course Requirement**

Code	Title	Hours
The following courses are used in other areas of the major:		
IS 2000	Principles of Information Science	4
ECON 2560	Applied Econometrics	4

**Supporting Courses**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231	Calculus for Business and Economics	4

or MATH 1241	Calculus 1
or MATH 1245	Calculus with Applications
or MATH 1251	Calculus and Differential Equations for Biology 1
or MATH 1340	Intensive Calculus for Engineers
or MATH 1341	Calculus 1 for Science and Engineering

**Computing and Social Issues**

Complete one of the following: 4

AFAM 2600	Issues in Race, Science, and Technology
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
HIST 2220	History of Technology
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300 or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one course from the following: 4		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 24 credits of general electives.		24

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Economics GPA Requirement**

Grades in the following required Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Exploring Creative Expression and Innovation
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

## Computer Science and Economics Major Credit Requirement

Minimum of 100 SH is required in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

134 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3200	4 Elective	4
CS 1800 and CS 1802	5 IS 2000	4 CS 3500 and CS 3501	5 Elective	4
CS 2500 and CS 2501	5 ECON 1116	4		
ECON 1115	4 MATH 1231, 1241, 1245, 1251, 1340, or 1341	4		
ENGW 1111	4			
	19	17	9	8

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 2800 and CS 2801	5 CS 1210	1 Elective	4 Co-op	
CS 3000	4 Khoury Elective	4 Elective	4	
ECON 2315	4 ECON 2316	4		
ECON 2350	4 ECON elective 1	4		
	Elective	4		
	17	17	8	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Khoury Elective	4 ENGW 3302	4 Co-op	
	ECON elective 2	4 Elective	4	
	Computing and social issues requirement	4		
	ECON 2560	4		
	0	16	8	0

#### Year 4

Fall	Hours Spring	Hours
Co-op	CS elective 3	4
	ECON 4692	4
	ECON elective 3	4
	ECON elective 4	4
	0	16

Total Hours: 135

## Computer Science and English, BS

The computer science and English combined major focuses on the increasingly interdisciplinary processes of creating, interpreting, and analyzing texts and programs. Students will combine communication and critical judgment, gaining the creativity and adaptability necessary to utilize technology in literary studies, and apply humanities skills to solve programming problems.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5

CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
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**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5

**Computing Focus**

Students are required to complete one of the following foci (two courses total): 8

*Focus 1: Natural Language Processing*

CS 3800	Theory of Computation
CS 4120	Natural Language Processing

*Focus 2: Programming Languages*

CS 3800	Theory of Computation
CS 4400	Programming Languages

*Focus 3: Analytics*

DS 3000	Foundations of Data Science
DS 4200	Information Presentation and Visualization

**Computer Science/Information Science Elective Course**

Choose one: 4

IS 2000	Principles of Information Science
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering

**Khoury Elective Courses**

With adviser approval, a directed study, project study, or appropriate graduate-level course may also be taken as an upper-division elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010
CY 2000 or higher, except CY 4930
DS 2500 or higher, except DS 4900
IS 2000 or higher, except IS 4900

**English Requirements**

Code	Title	Hours
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**English Course-Level Requirement**

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

**Introduction to College**

ENGL 1000	English at Northeastern	1
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**Foundational Courses**

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160 or ENGL 1410	Introduction to Rhetoric Introduction to Research on Writing	4

**Diversity**

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below: 4

ENGL 2150	Literature and Digital Diversity
ENGL 2296	Early African-American Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2760	Writing in Global Contexts

ENGL 3663	The African American Novel
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ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
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ENGL 3685	Modern and Contemporary Jewish Literature
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or JWSS 3685 Modern and Contemporary Jewish Literature

**Pre-Nineteenth-Century Literature**

Complete one of the following: 4

ENGL 1600	Introduction to Shakespeare
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ENGL 1700	Global Literatures 1
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ENGL 2296	Early African-American Literature
-----------	-----------------------------------

ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
-----------	---

or JWSS 3678 Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

ENGL 3101	Early Literatures
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ENGL 3120	17th- and 18th-Century Literatures
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**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2330	The American Renaissance
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ENGL 2301	The Graphic Novel
-----------	-------------------

ENGL 2440	The Modern Bestseller
-----------	-----------------------

ENGL 2600	Irish Literary Culture (Abroad)
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ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
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ENGL 3140	19th-Century Literatures
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ENGL 3685	Modern and Contemporary Jewish Literature
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or JWSS 3685 Modern and Contemporary Jewish Literature

ENGL 3720	19th-Century Major Figure
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ENGL 3730	20th- and 21st-Century Major Figure
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**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
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ENGL 1160	Introduction to Rhetoric
-----------	--------------------------

ENGL 1410	Introduction to Research on Writing
-----------	-------------------------------------

ENGL 2150	Literature and Digital Diversity
-----------	----------------------------------

ENGL 3325	Rhetoric of Law
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ENGL 3340	Technologies of Text
-----------	----------------------

ENGL 3370	Writing Cultures
-----------	------------------

ENGL 3381	The Practice and Theory of Teaching Writing
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ENGL 3400	Opening the Archive
-----------	---------------------

ENGL 3700	Narrative Medicine
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ENGL 4410	Research in Rhetoric and Writing
-----------	----------------------------------

LING 1150	Introduction to Language and Linguistics
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LING 2350	Linguistic Analysis
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LING 3450	Syntax
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LING 3452	Semantics
-----------	-----------

LING 3454	History of English
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LING 3456	Language and Gender
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LING 3458	Topics in Linguistics
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**Comparative Literature**

Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 2150	Literature and Digital Diversity	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
ENGL 3487	Film and Text (Abroad)	
ENGL 3663	The African American Novel	

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Writing Seminar	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

**English Electives**

Complete two additional ENGL electives.	8
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**Integrative Course Requirement**

This course will not be allowed to double-count in the Theories and Methods section above.

Code	Title	Hours
ENGL 3340	Technologies of Text	4

**Supporting Course**

Code	Title	Hours
Complete one of the following:		
AFAM 2600	Issues in Race, Science, and Technology	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	

ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3309	Advanced Writing in the Humanities	
ENGW 3310	Advanced Writing in Literature	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 32 credits of general electives.		32

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Exploring Creative Expression and Innovation
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 ENGL 1160 or 1410	4 Elective	4	
CS 2500 and CS 2501	5 Elective	4		
ENGL 1400	4 English literary period 1	4		
ENGW 1111	4			
	19	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 Strand elective 1	4 ENGW 3302, 3309, 3310, or 3315	4 Co-op	
CS 3200	4 CS 1210	1 Elective	4	
English literary period 2	4 IS 2000 (or English Category or Elective)	4		
English category or elective	4 English category or elective	4		
	ENGL 3340	4		
	16	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Strand elective 2	4 Elective	4 Co-op	
	English category or elective	4 Elective	4	
	English category or elective	4		
	Computing and social issues	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours	
Co-op	CS 4500 (or English Category or Elective)	4 Elective	4	
	ENGL 4710 or 4720	4 Elective	4	
	Khoury elective	4		

Elective	4		
0	16	8	

Total Hours: 134

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 ENGL 1160 or 1410	4		
CS 2500 and CS 2501	5 Elective	4		
ENGW 1111	4 English literary period 1	4		
ENGL 1400	4			
	19	17	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 CS 3200	4 Vacation	Co-op	
CS 3500 and CS 3501	5 CS 1210	1		
English literary period 2	4 IS 2000 (or English Category or Elective)	4		
English category or elective	4 English category or elective	4		
	ENGL 3340	4		
	17	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Strand elective 1	4 ENGW 3302, 3309, 3310, or 3315	4 Co-op	
	English category or elective	4 Elective	4	
	English category or elective	4		
	Elective	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Strand elective 2	4 Elective	4 Co-op	
	Computing and social issues	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	CS 4500 (or English Category or Elective)	4
	ENGL 4710 or 4720	4
	Khoury elective	4
	Elective	4
	0	16

Total Hours: 134

## Computer Science and Environmental and Sustainability Sciences, BS

The computer science and the environmental and sustainability sciences combined major focuses on the major environmental challenges facing our planet and provides broad training to understand how these challenges can be met through advances in computer science and artificial intelligence. Understanding these processes requires both the acquisition and computational analysis of large amounts of data—underscoring the synergistic relationship between computer science and environmental and sustainability sciences.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000 and CS 3001	Algorithms and Data and Recitation for CS 3000	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4

CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

### Khoury Elective Courses

With advisor approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Environmental and Sustainability Sciences Courses

Code	Title	Hours
<b>Environmental and Sustainability Sciences Required Courses</b>		
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
ENVR 2200 or ENVR 1200	Earth's Changing Cycles Dynamic Earth	4
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 2515	Sustainable Development	4
Choose one from each category:		
<i>Skills</i>		4-5
ENVR 3300 and ENVR 3301 or EEMB 3555	Geographic Information Systems and Lab for ENVR 3300 Networks and Natural Systems	
<i>Earth Oceans and Environmental Change</i>		4-5
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 3600	Oceanography	
ENVR 3125	Global Oceanic Change	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
<i>Conservation, Restoration, and Management</i>		4
EEMB 2400	Introduction to Evolution	
EEMB 3460	Conservation Biology	
EEMB 4001	Landscape and Restoration Ecology	
EEMB 3465	Ecological and Conservation Genomics	
<i>Sustainable Planning and Development</i>		4
ENVR 3200	Water Resources	
ENVR 3150	Food Security and Sustainability	
ENVR 5210	Environmental Planning	
ENVR 5350	Sustainable Energy and Climate Solutions	
<i>Environment and Society</i>		4
POLS 2395	Environmental Politics and Policy	
PPUA 5260	Ecological Economics	
PPUA 5268	International Environmental Policy	
SOCL 2485	Environment, Technology, and Society	

### Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
MATH 1252	Calculus and Differential Equations for Biology 2	4
or MATH 1342	Calculus 2 for Science and Engineering	
MATH 3081	Probability and Statistics	4
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5
<b>Computing and Social Issues</b>		
Complete one of the following:		4
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 4528	Computers and Society	

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing / First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Integrative Requirement

Code	Title	Hours
Complete one of the following:		4
ENVR 4050	Solving Emerging Environmental Challenges through Capstone	
ENVR 4971	Junior/Senior Honors Project 2	
ENVR 4997	Senior Thesis	
CS 4991	Research	

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, DS, CY, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

136 total semester hours required

### Plan of Study

#### Sample Patterns

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Elective	4
CS 1800 and CS 1802	5	CS 3200	4	Elective	4	Elective	4
CS 2500 and CS 2501	5	ENVR 2200	4				
ENGW 1111	4	ENVR skills course	4				
ENVR 1400 and ENVR 1401	5						
		20		17		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1211 and CHEM 1212 and CHEM 1213	5	CHEM 1214 and CHEM 1215 and CHEM 1216	5	MATH 1252 or 1342	4	Co-op	4
EEMB 2302 and EEMB 2303	5	MATH 1251 or 1341	4	Elective	4		
CS 3000	4	ENVR Earth oceans course	4				

ENVR 2515	4	Khoury elective	4	
		CS 1210	1	
	18		18	8 0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 3800	4 MATH 3081	4 Co-op	
	ENVR conservation course	4 ENGW 3302	4	
	ENVR sustainable course	4		
	Elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	CS 4500	4
	ENVR society course	4
	Integrative course	4
	Computing and social issues	4
	0	16

Total Hours: 137

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 CS 3200	4		
CS 2500 and CS 2501	5 ENVR skills course	4		
ENGW 1111	4 Elective	4		
ENVR 1400 and ENVR 1401	5			
	20	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	4 CHEM 1214 and CHEM 1215 and CHEM 1216	5 Vacation	0 Co-op	
CHEM 1211 and CHEM 1212 and CHEM 1213	5 CS 3000	4		
ENVR 2200	4 ENVR 2515	4		

EEMB 2302 and EEMB 2303	5	Khoury elective	4	
		CS 1210	1	
	18		18	0 0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	MATH 1251 or 1341	4 MATH 3081	4 Co-op	
	ENVR Earth oceans course	4 Elective	4	
	ENVR conservation course	4		
	Elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 3800	4 Elective	4 Co-op	
	MATH 1252 or 1342	4 Elective	4	
	ENGW 3302	4		
	ENVR sustainable course	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	CS 4500	4
	ENVR society course	4
	Integrative course	4
	Computing and social issues	4
	0	16

Total Hours: 137

**Computer Science and Game Development, BS**

The computer science and game development combined major focuses on the specific skills needed to succeed in the highly competitive game industry. Students will engage in building and developing games and playable media experiences while completing courses in computer science and specialized game technology and design. Interdisciplinary courses enable students to develop their creative and entrepreneurial abilities, as well as create a strong portfolio of game pieces.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.



## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ARTF 1000	First Year Seminar Art and Design at Northeastern	1
CS 1210 or EEAM 2000	Professional Development for Khoury Co-op Professional Development for Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3520	Programming in C++ (Integrative course)	4
CS 3540	Game Programming (Integrative course)	4
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
CS 4300	Computer Graphics (Integrative course)	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
CS 4850	Building Game Engines (Integrative course)	4
<b>Computer Science Elective Course</b>		
CS 4150 or IS 4300	Game Artificial Intelligence (Integrative course) Human Computer Interaction	4

## Game Design Courses

Code	Title	Hours
<b>Game Design Required</b>		
GAME 1110	Games and Society	4
GAME 2500	Foundations of Game Design	4
GAME 2950	Game Studio	4
GAME 3400	Level Design and Game Architecture	4
GAME 3700	Rapid Idea Prototyping for Games	4
GAME 3800	Game Concept Development	4
GAME 4700	Game Design Capstone	4
<b>Game Design Elective</b>		
GAME 1850 or GAME 3300	Experimental Game Design Game Interface Design	4

## Khoury/Game-Related Electives

Complete three of the following:		12
Any course in ARTD, ARTE, ARTF, ARTG, ARTH, and GAME subject areas as long as prerequisites have been met.		
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
MATH 1342	Calculus 2 for Science and Engineering	
MATH 2331	Linear Algebra	
ECON 2350 or PSYC 2320	Statistics Statistics in Psychological Research	

## Supporting Courses

Code	Title	Hours
<b>Psychology</b>		
PSYC 1101	Foundations of Psychology	4
<b>Mathematics</b>		
Complete two courses from the following:		8
MATH 1260	Math Fundamentals for Games (Integrative course)	
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342 or higher		

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
Students are strongly encouraged to take Advanced Writing in the Technical Professions (ENGW 3302) but may substitute Interdisciplinary Advanced Writing in the Disciplines (ENGW 3315).		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

## Required General Electives

Code	Title	Hours
Complete 12 semester hours of general electives.		12

## Khoury College GPA Requirements

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Understanding Societies and Institutions
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills through Experience is satisfied through co-op.*

## Program Requirement

133 total semester hours required

## Plan of Study

### Sample Pattern, Four Years, Two Co-ops

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
CS 1200 or ARTF 1000	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Vacation	0	0
CS 1800 and CS 1802	5	GAME 2500	4	Math Elective	4			
CS 2500 and CS 2501	5	Math Elective	4					
ENGW 1111	4	Elective	4					
GAME 1110	4							
	19		17		9		0	

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
CS 3520 (*)	4	CS 1210 or EEAM 2000	1	Elective	4	Co-op	4	0
CS 3000	4	CS 3540 (*)	4	Elective	4			
GAME 2950	4	CS 3650	4					
GAME 3400	4	GAME 3700	4					
		Khoury/game elective	4					
	16		17		8		0	

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
Co-op	0	CS 4850 (*)	4	Co-op	0	Co-op	0	0
		CS 4300	4					
		ENGW 3302	4					
		PSYC 1101	4					
	0		16		0		0	

#### Year 4

Fall	Hours	Spring	Hours	Summer 2	Hours	Hours
CS 3700	4	GAME 4700	4	Vacation	0	0
CS 4500	4	Computer science elective	4			
GAME 3800	4	Khoury/game elective	4			
		Khoury/game elective	4			
	16		16		0	

Total Hours: 134

\*Indicates courses that must be taken in the semester listed.

## Computer Science and History, BS

The computer science and history combined major offers students the opportunity to gain both historical knowledge and a broad range of related analytical skills in both the humanities and computer science. You'll define a history course cluster according to a thematic principle, with a focus on quantitative analysis in the field, complementing your foundation in programming.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
IS 2000	Principles of Information Science	4
<b>Khoury Elective Courses</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 16 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges:		16
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

## History Courses

Code	Title	Hours
<b>History Required Courses</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>History Electives</b>		
Complete one introductory course from the following:		4
ASNS 1150	East Asian Studies	
HIST 1120	Public History, Public Memory	
HIST 1130	Introduction to the History of the United States	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1185	Introduction to Middle Eastern History	
HIST 1190	Picturing Modernity: The Photographic Image in Culture and Society	
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	
Complete one course from the following:		4
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1285	Introduction to Russian Civilization	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 2330	Colonial and Revolutionary America	
Intermediate/Advanced History Cluster		12
Complete three HIST courses numbered 2303 or above. Cluster is subject to Department approval.		
Complete one advanced-level course:		4
Select from any HIST course numbered 3000 or above.		
<b>History Capstone Seminar or Senior Project</b>		
Complete one capstone experience from the following:		4
HIST 4701	Capstone Seminar	
Public history concentrators may also select from the following:		
HIST 4903	Fieldwork in History 1	
<b>Integrative Course Requirement</b>		
Code	Title	Hours
HIST 2211	The World Since 1945	4
<b>Supporting Courses</b>		
Code	Title	Hours
<b>Research Methods</b>		
Complete one course from the following:		4
ECON 2350	Statistics	
ENVR 3300	Geographic Information Systems	
ENVR 5260	Geographical Information Systems	
POLS 2400	Quantitative Techniques	
PSYC 2320	Statistics in Psychological Research	
<b>Computing and Social Issues</b>		
Complete one of the following:		4

AFAM 2600	Issues in Race, Science, and Technology
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
HIST 2220	History of Technology
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300 or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4

### Advanced Writing in the Disciplines

This requirement is satisfied by HIST 2302 taken in conjunction with HIST 2301.

## Required General Electives

Code	Title	Hours
Complete 32 credits of general electives.		32

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## Computer Science and History GPA/Credit Requirement

Complete 98 semester hours in the major with a minimum 2.000 GPA

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Writing-Intensive in the Major
- Advanced Writing in the Disciplines
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

135 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 IS 2000	4 Elective	4	
CS 2500 and CS 2501	5 CS 3200	4		
ENGW 1111	4 Introductory history elective	4		
HIST 1200	1			
HIST 1201	4			
	20	17	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 CS 1210	1 Elective	4 Co-op	
HIST 2301	4 Elective	4 Elective	4	
HIST 2302	1 Khoury elective 1	4		
History Pre-1800 elective	4 Intermediate history elective 1	4		
Research methods requirement	4 Intermediate history elective 2	4		
	17	17	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Khoury elective 2	4 Elective	4 Co-op	
	Intermediate history elective 3	4 Elective	4	
	Advanced history elective	4		
	Computing and social issues	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours	
Co-op	Khoury elective 3	4 Elective	4	
	History capstone seminar or senior project	4 Elective	4	

History integrative requirement	4		
Khoury elective 4	4		
	0	16	8

Total Hours: 136

#### Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 CS 3200	4		
CS 2500 and CS 2501	5 IS 2000	4		
ENGW 1111	4 Introductory history elective	4		
HIST 1200	1			
HIST 1201	4			
	20	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210	1 Co-op	Co-op	Vacation	
CS 3000	4			
CS 3500 and CS 3501	5			
HIST 2301	4			
HIST 2302	1			
Research methods requirement	4			
	19	0	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
History Pre-1800 elective	4 Co-op	Co-op	Elective	4
Intermediate history elective 1	4		Elective	4
Elective	4			
Khoury elective 1	4			
	16	0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Khoury elective 2	4 Co-op	Co-op	Elective	4
Intermediate history elective 2	4		Elective	4
Computing and social issues	4			

Elective	4			
	16	0	0	8
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
Khoury elective 3	4	Khoury elective 4	4	
Intermediate history elective 3	4	Advanced history elective	4	
Elective	4	History capstone seminar or senior project	4	
Elective	4	History integrative requirement	4	
	16	16		

Total Hours: 136

## Computer Science and Journalism, BS

The computer science and journalism combined major supports students who understand that journalism now takes place in both print and the digital world. Students will learn the principles, practices, and responsibilities of the journalism profession while gaining a deep understanding of the systems and technologies that support digital media.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4

CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4200 or IS 4300	Information Retrieval Human Computer Interaction	4

### Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 12 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Journalism Major Requirements

Students transferring from outside institutions must complete a minimum of five 4-credit journalism courses at Northeastern, and these must include:

Code	Title	Hours
JRNL 2201	Journalism 2: Intermediate Reporting	
JRNL 2301	Visual Storytelling in Journalism	
JRNL 4650	Ethics and Issues in Journalism	

Code	Title	Hours
<b>Journalism Courses</b>		

A grade of C or higher is required:

JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

### Required Journalism

JRNL 1150	Understanding Today's News	4
JRNL 2350	The History of Journalism: How the News Became the News	4
JRNL 3550	The First Amendment and the Media	4
JRNL 4650	Ethics and Issues in Journalism	4

### Journalism Electives

Complete two JRNL courses. 8

### Journalism-Related Requirement

HIST 1130	Introduction to the History of the United States	4
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### Supporting Courses

Code	Title	Hours
<b>Mathematics Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following: 4		
AFAM 2600	Issues in Race, Science, and Technology	

CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
HIST 2220	History of Technology
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300 or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

## Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
<i>This course already fulfills a Journalism requirement above</i>		
JRNL 2301	Visual Storytelling in Journalism	

## Required General Electives

Code	Title	Hours
	Complete 28 credits of general electives.	28

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Interpreting Culture
- Engaging Difference and Diversity
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, IS courses

## Journalism GPA Requirement

Minimum 2.000 GPA required in all JRNL courses

## Program Requirement

134 total semester hours required

## Plan of Study

### Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4		
CS 2500 and CS 2501	5	JRNL 1101 and JRNL 1102	5				
JRNL 1150	4	JRNL 2350	4				
ENGW 1111	4						
		19	18	9	0		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	Co-op		Co-op		Elective	4
CS 3000	4					Elective	4
Khoury elective	4						
JRNL 2201	4						
HIST 1130	4						
		17	0	0	8		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective	4	Co-op		Co-op		Elective	4
Khoury elective	4					Elective	4
JRNL 2301	4						
Journalism elective 1	4						
		16	0	0	8		

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 4500	4	JRNL 4650	4	Elective	4		
JRNL 3610	4	Computing and social issues	4	Elective	4		
JRNL 3550	4	Journalism elective 2	4				
IS 4200	4	Elective	4				
		16	16	8	0		

Total Hours: 135

### Sample Pattern, Five Years, Three Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	JRNL 1101 and JRNL 1102	5				

JRNL 1150	4	JRNL 2350	4		
ENGW 1111	4				
	19	18	0		0
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
CS 1210	1 Co-op	0 Co-op	0 Vacation		0
CS 3500	5				
MATH 1341	4				
JRNL 2201	4				
HIST 1130	4				
	18	0	0		0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
CS 3000	4 Co-op	0 Co-op	0 Elective		4
Khoury elective	4		Elective		4
JRNL 2301	4				
Journalism elective 1	4				
	16	0	0		8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Khoury elective	4 Co-op	0 Co-op	0 Elective		4
JRNL 3550	4		Elective		4
JRNL 3610	4				
Elective	4				
	16	0	0		8
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Khoury elective	4 CS 4500	4			
JRNL 4650	4 Computing and social issues	4			
IS 4200	4 Elective	4			
Journalism elective 2	4 Elective	4			
	16	16			

Total Hours: 135

## Computer Science and Linguistics, BS

The computer science and linguistics combined major provides students with extensive background in the formal structures of natural (human) languages, as well as methods and applications of linguistic and psycholinguistic analyses of human language data. This is combined with an emphasis in computer science on artificial intelligence and natural language processing techniques. The major provides excellent preparation for work or more advanced degrees focusing on computational linguistics, natural language processing, speech perception, spoken language interfaces, artificial intelligence, and a wide array of related fields.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
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### Computer Science Overview

CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

### Computer Science Fundamental Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3800	Theory of Computation (Integrative course)	4
CS 4100	Artificial Intelligence (Integrative course)	4
CS 4120	Natural Language Processing (Integrative course)	4
CS 4400	Programming Languages (Integrative course)	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

### Khoury Elective Courses

With adviser approval, directed study, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS courses that are not already required. Choose courses within the following range:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

## Linguistics Requirements

Code	Title	Hours
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### Linguistics Foundations

LING 1150	Introduction to Language and Linguistics	4
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LING 2350	Linguistic Analysis (Integrative course)	4
LING 3412	Language and Culture	4

**Linguistic Structure**

Complete three of the following: 12

LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	

**Psychology Requirements**

PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4

**Laboratory/Directed Study**

Complete one of the following: 4

LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
PSYC 4610	Laboratory in Psycholinguistics	

**Seminar Requirement**

LING 4654	Seminar in Linguistics	4
or PSYC 4658	Seminar in Psycholinguistics	

**Linguistics Elective**

Complete one LING course, not counted elsewhere, numbered 3000-4799, or one of the following: 4

DEAF 2700	ASL Linguistics	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	

With prior approval, directed study research, independent study, and Honors Project courses can also be counted:

LING 4891	Research Seminar in Linguistics	
LING 4970	Junior/Senior Honors Project 1	
LING 4971	Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	
PSYC 4991	Directed Study Research	

**Supporting Courses**

Code	Title	Hours
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**Mathematics Requirement**

MATH 1341	Calculus 1 for Science and Engineering	4
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**Computing and Social Issues**

Complete one of the following: 4

AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
HIST 2220	History of Technology	
ENGL 2150	Literature and Digital Diversity	

INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
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**College Writing**

ENGW 1111	First-Year Writing	4
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**Advanced Writing in the Disciplines**

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
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Complete 20 credits of general electives 20

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Engaging Difference and Diversity
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required



**Plan of Study****Sample Patterns:****Four Years, One Co-op in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 LING 2350	4		
CS 2500 and CS 2501	5 Elective	4		
LING 1150	4 PSYC 1101	4		
ENGW 1111	4			
	19	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 1210	1 Elective	4 Co-op	
MATH 1341	4 CS 3000	4 Elective	4	
LING 3412	4 CS 3800	4		
PSYC 3464	4 Linguistic structure	4		
	PSYC 2320	4		
	17	17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 4120	4 Elective	4 Vacation	
	CS 4400	4 Elective	4	
	Linguistic structure	4		
	ENGW 3302	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours
CS 4500 or 4530	4 CS 4100	4
Linguistic structure	4 Khoury elective	4
LING 4654 or PSYC 4658	4 LING elective	4
Computing and social issues	4 LING lab (or directed study)	4
	16	16

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 LING 2350	4		
CS 1800 and CS 1802	5 PSYC 1101	4		

LING 1150	4 Elective	4		
ENGW 1111	4			
	19	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 1210	1 Vacation	0 Co-op	0
MATH 1341	4 CS 3000	4		
LING 3412	4 CS 3800	4		
PSYC 3464	4 Linguistic structure	4		
	PSYC 2320	4		
	17	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 4120	4 Elective	4 Co-op	0
	CS 4400	4 Elective	4	
	Linguistic structure	4		
	ENGW 3302	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 4100	4 Elective	4 Co-op	0
	Khoury elective	4 Elective	4	
	Linguistic structure	4		
	LING lab (or directed study)	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 CS 4500 or 4530	4
	LING 4654 or PSYC 4658	4
	LING elective	4
	Computing and social issues	4
	0	16

Total Hours: 134

**Computer Science and Mathematics, BS**

The computer science and mathematics combined major was the first dual major created by the college. The mathematics requirements focus on courses that have computing applications or form the basis for further studies in mathematical theory. The program emphasizes the strong ties between computer science and mathematics that date back to the origins of machine computation in the 1930s and 1940s—and persist to this day.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800 (Integrative course)	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3800	Theory of Computation	4
CS 4300 or CS 4100	Computer Graphics Artificial Intelligence	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
<b>Khoury Elective Courses</b>		
With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.		
Complete eight semester hours of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		8
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

## Mathematics Courses

Code	Title	Hours
<b>Calculus Courses</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4

## Mathematics Courses

MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
MATH 3175	Group Theory	4
MATH 3527	Number Theory 1	4

## Mathematics Electives

Complete three courses in the following range: MATH 3001 to MATH 4999 but not MATH 4000	12
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## Supporting Course

Code	Title	Hours
Complete one of the following:		
AFAM 2600	Issues in Race, Science, and Technology	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

## Required General Electives

Code	Title	Hours
Complete 28 semester hours of general electives.		28

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year

- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Elective	4 Vacation	
CS 1800 and CS 1802	5 CS 2800 and CS 2801	5 MATH 2321	4	
CS 2500 and CS 2501	5 MATH 1342	4		
MATH 1341	4 Elective	4		
ENGW 1111	4			
	19	18	8	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	4 CS 1210	1 Elective	4 Co-op	
MATH 2331	4 CS 3000	4 MATH 3081	4	
MATH 2341	4 Khoury elective	4		
CS 3800	4 MATH 3527	4		
	MATH elective	4		
	16	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Math elective	4 Elective	4 Co-op	
	CS 4300	4 Elective	4	
	ENGW 3302	4		
	MATH 3175	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours	Hours
Co-op	CS 4500	4 Elective	4	
	Khoury elective	4 Elective	4	
	Math elective	4		

Computing and social issues	4	
0	16	8

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 2800 and CS 2801	5		
MATH 1341	4 MATH 1342	4		
ENGW 1111	4 Elective	4		
CS 1200	1			
	19	18	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	4 CS 3000	4 Vacation	0 Co-op	0
MATH 2321	4 MATH 2331	4		
MATH 2341	4 MATH 3081	4		
Elective	4 CS 1210	1		
	Elective	4		
	16	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 3800	4 Elective	4 Co-op	0
	CS 4300	4 Elective	4	
	MATH 3175	4		
	ENGW 3302	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 4500	4 Elective	4 Co-op	0
	MATH 3527	4 Elective	4	
	MATH elective	4		
	Khoury elective	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	0 Khoury elective	4		
	Computing and social issues	4		
	MATH elective	4		
	MATH elective	4		
	0	16		

Total Hours: 134

## Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 2800 and CS 2801	5		
MATH 1341	4 MATH 1342	4		
ENGW 1111	4 Elective	4		
CS 1200	1			
	19	18	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	4 Co-op	0 Co-op	0 Vacation	0
MATH 2321	4			
MATH 2341	4			
CS 1210	1			
Elective	4			
	17	0	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 Co-op	0 Co-op	0 Elective	4
MATH 2331	4		Elective	4
MATH 3081	4			
Elective	4			
	16	0	0	8
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3800	4 Co-op	0 Co-op	0 Elective	4
CS 4300	4		Elective	4
MATH 3527	4			
ENGW 3302	4			
	16	0	0	8
Year 5				
Fall	Hours Spring	Hours		
CS 4500	4 Khoury elective	4		
MATH 3175	4 Computing and social issues	4		
MATH elective	4 MATH elective	4		
Khoury elective	4 MATH elective	4		
	16	16		

Total Hours: 134

### Computer Science and Media Arts, BS

The computer science and media arts combined major is ideal for creative students who love technology. Students will acquire a solid foundation in both fields through curriculum that spans photography,

animation, video, database design, computer graphics, and human-computer interaction.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
or ARTF 1000	Art and Design at Northeastern	
CS 1210	Professional Development for Khoury Co-op	1
or EEAM 2000	Professional Development for Co-op	
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4300	Computer Graphics	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction	4

### Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	8
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Media Arts Courses

Code	Title	Hours
<b>Required Media Arts Courses</b>		
ARTD 2100	Narrative Basics	4
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4

### Media Arts Electives

Complete any six courses as long as prerequisites have been met. At least two must be a 3000-level course.

#### Basics

ARTD 2360 and ARTD 2361	Introduction to Photography and Photo Tools	24-25
ARTD 2370	Animation Basics (with optional ARTD 2371)	
ARTD 2380	Video Basics (with optional ARTD 2381)	

#### Photography

ARTD 3460	Photography: Concept + Process	
ARTD 4565	Photography: Visual Strategies + Context	
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	

#### Animation

ARTD 3470	Animation 1	
ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTD 4570	Animation 2	
ARTD 4575	Animation 3	

#### Video

ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	

#### History

ARTH 2212	Survey of the Still and Moving Image	
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### Media Arts Capstone

ARTD 4530	Media Arts Degree Project 1	4
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### Supporting Courses

Code	Title	Hours
<b>Mathematics Requirement</b>		
MATH 2331	Linear Algebra	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	

CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Integrative Courses

Code	Title	Hours
The following courses are fulfilled through the computer science requirement:		
CS 4300	Computer Graphics	
IS 4300	Human Computer Interaction	

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Integrating Knowledge and Skills Through Experience
- Demonstrating Thought and Action in a Capstone

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

137 total semester hours required

### Plan of Study

#### Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510	4	CS 3500 and CS 3501	5	Elective	4
CS 1800 and CS 1802	5	CS 2511	1	ARTF 1120	4	Elective	4
CS 2500	4	CS 3200	4				

CS 2501	1	ARTF 1122 (with optionals ARTF 1123)	4		
ARTF 1124 and ARTF 1125	5	ARTF 2223 (with optional 2224)	4		
ENGW 1111	4				
		20	17	9	8
<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
CS 1210	1	Co-op		Co-op	MATH 2331
IS 4300	4				Khoury elective
CS 3000	4				
ARTF 2220 (with optional 2221)	4				
ARTD 2100	4				
		17	0	0	8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
CS 4300	4	Co-op	0	Co-op	0 Elective
Khoury elective	4	ENGW 3302	4		Elective
Media arts elective	4				
Media arts elective	4				
		16	4	0	8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
CS 4500	4	ARTD 4530	4		
Elective	4	Computing and social issues	4		
Media arts elective	4	Media arts elective	4		
Media arts elective	4	Media arts elective	4		
		16	16		

Total Hours: 139

\*Indicates course must be taken in the term listed.

### Sample Pattern, Five Years, Three Co-ops in Spring/Summer 1

<b>Year 1</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5 Vacation
CS 1800 and CS 1802	5	CS 3200	4	Elective	4
CS 2500 and CS 2501	5	ARTF 1120	4		

ARTF 1122 (with optional ARTF 1123)	4	ARTF 2220 (with optional ARTF 2221)	4		
ENGW 1111	4				
		19	17	9	0

<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
CS 1210	1	Co-op		Co-op	Elective
IS 4300	4				Elective
CS 3000	4				
ARTD 2100	4				
Media arts elective	4				
		17	0	0	8

<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
MATH 2331	4	Co-op	0	Co-op	0 Vacation
Khoury elective	4				
ARTF 1124 and ARTF 1125	5				
ARTF 2223 (with optional ARTF 2224)	4				
		17	0	0	0

<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
CS 4300	4	Co-op	0	Co-op	0 Vacation
Khoury elective	4	ENGW 3302	4		
Media arts elective	4				
Media arts elective	4				
		16	4	0	0

<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
CS 4500	4	ARTD 4530	4		
Media arts elective	4	Computing and social issues	4		
Media arts elective	4	Media arts elective	4		
Elective	4	Elective	4		
		16	16		

Total Hours: 139

\*Indicates course must be taken in the term listed.

### Computer Science and Music with Concentration in Music Technology, BS

The computer science and music combined major with concentration in music technology focuses on the creative application of sound and

music technologies to a broad range of artistic, social, and industrial purposes. An emphasis is maintained throughout on imaginative exploration, collaboration across disciplines, and real-world experience. It is designed to give students a firm foundation in music and computing for digital audio technologies. This program is recommended for students with a strong background in music prior to entering Northeastern.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction (Integrative)	4
<b>Khoury Elective</b>		
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 8 credits of CS, CY, DS or IS classes that are not already required. Choose courses within the following ranges:		8
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

## Music Courses

Code	Title	Hours
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4

MUSC 1202	Music Theory 2	4
Complete one of the following:		4
MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition (Music Perception and Cognition)	
MUSC 3541	Music Analysis Seminar	
<b>Music in Context</b>		
MUSC 1001	Music in Everyday Life	4
<b>Contemporary / Popular Music</b>		
Complete one of the following:		4
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2311	Topics in American Music	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 2380	The World of Choral Music	
MUSC 3353	Music and the Racial Imagination	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 3360	Global Music Industries in Context	
<b>Music Technology</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2102	Composing with Digital Technologies	4
MUST 2431	Computer Music Fundamentals	4
<b>Music Industry</b>		
Complete one of the following:		4
MUSI 1230	Introduction to Music Industry	
MUSI 2331	Music Recording 2	
<b>Music Technology Electives</b>		
Complete two of the following:		8
MUSC 4510	Music and the Brain Research	
MUST 3540	Special Topics in Music Technology	
MUST 3601	Digital Audio Signal Processing	
MUST 3602	Electronics for Music	
MUST 3603	Embedded Audio Programming	
MUST 4610	Composition for Electronic Instruments	
<b>Music Technology Capstone</b>		
MUST 4611	Music Technology Capstone/Senior Recital	4

## Foundations of Psychology

Code	Title	Hours
PSYC 1101	Foundations of Psychology	4

### Computing and Social Issues

Code	Title	Hours
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation;

those who remain on probation for two consecutive semesters will be dropped from the major.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Pattern, Five Years, Three Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Vacation	0
CS 1800 and CS 1802	5	MUST 1220 (*)	4	CS 3200	4		
CS 2500 and CS 2501	5	MUSC 1202 (*)	4				
MUSC 1201 (*)	4	MUSC 2350	4				
ENGW 1111	4						
		19		17		9	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	Co-op		Co-op		ENGW 3302	4
MUSC 1001	4					Elective	4
CS 3000	4						
MUST 2431	4						
MUST 2102	4						
		17		0		0	8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 3541, 2111, or 3300	4	Co-op		0 Co-op		0 Vacation	0
Contemporary music requirement*	4						
Music technology elective	4						
Khoury elective	4						
		16		0		0	0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
IS 4300	4	Co-op		0 Co-op		0 Vacation	0
PSYC 1101	4						
Music technology elective*	4						
Khoury elective	4						
		16		0		0	0

Year 5			
Fall	Hours	Spring	Hours
CS 4500	4	MUST 4611 (*)	4



MUSC 3541, 2111, or 3300	4 Elective	4
Computing and social issues	4 Music industry elective	4
Elective	4 Elective	4
	16	16

Total Hours: 134

\*Indicates course must be taken in the term listed.

**Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	0
CS 1800 and CS 1802	5 MUST 1220 (*)	4 CS 3200	4	
CS 2500 and CS 2501	5 MUSC 1202 (*)	4		
MUSC 1201 (*)	4 MUSC 2350	4		
ENGW 1111	4			
	19	17	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210	1 Co-op	Co-op	ENGW 3302	4
MUSC 1001	4		Elective	4
CS 3000	4			
Khoury elective	4			
MUST 2431	4			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MUSC 2111, MUSC 3541 or MUSC 3300	4 Co-op	0 Co-op	0 PSYC 1101	4
MUSC 2111, MUSC 3541 or MUSC 3300	4		Elective	4
Contemporary music requirement*	4			
Music technology elective*	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
IS 4300	4 MUST 4611 (*)	4 Elective	4
CS 4500	4 Computing and social issues	4 Elective	4

Khoury elective	4 Music industry elective	4
MUST 2102	4 Music technology elective	4
	16	16
		8

Total Hours: 134

\*Indicates course must be taken in the term listed.

**Computer Science and Philosophy, BS**

The computer science and philosophy combined major offers an opportunity to obtain a fluency in formal logic, including logical proofs and the ability to represent arguments clearly and evaluate them for cogency. Students will find that logic plays a fundamental role in computer science as they experience an in-depth programming foundation. The philosophy curriculum also focuses on oral and written communication, as well as ethical and social issues related to computing and information technologies.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

**Khoury Elective**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken for upper-division electives.

Complete 8 credits of upper-division CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Philosophy Courses**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
or PHIL 2330	Modern Philosophy	
PHIL 1145	Technology and Human Values	4
PHIL 4515	Advanced Logic	4
PHIL 5005	Information Ethics	4
or PHIL 5010	AI Ethics	
<b>Electives</b>		
Take four additional PHIL courses, at least one of which is 4000 or above		16

**Integrative Course Requirement**

Code	Title	Hours
These courses will double count in other areas of your major.		
CS 3800	Theory of Computation	
PHIL 4515	Advanced Logic	

**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3309	Advanced Writing in the Humanities	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 44 credits of general electives.		44

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World

- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing-Intensive in the Major
- Interpreting Culture
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5
CS 1800 and CS 1802	5	CS 2800 and CS 2801	5	Elective	4
CS 2500 and CS 2501	5	PHIL 2325, POLS 2325, or PHIL 2330	4		
ENGW 1111	4	Elective	4		
PHIL 1115	4				
19		18		9	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 3000	4	Khoury Elective	4	ENGW 3302, 3309, or 3315	4
PHIL 1145	4	PHIL elective 2	4	Elective	4
PHIL elective 1	4	PHIL elective 3	4		
Elective	4	Elective	4		
		CS 1210	1		
16		17		8	
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		CS 3800	4	Elective	4
				Co-op	

	Khoury Elective	4	Elective	4	
	PHIL 4515	4			
	Elective	4			
	0	16	8	0	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours</b>		
Co-op	CS 4500	4	Elective	4	
	PHIL intermediate/advanced elective	4	Elective	4	
	PHIL capstone	4			
	Elective	4			
	0	16	8		

Total Hours: 135

**Five Years, Three Co-ops in Summer 2/Fall**

<b>Year 1</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
CS 1200	1 CS 2510 and CS 2511	5	Vacation	Vacation	
CS 1800 and CS 1802	5 CS 2800 and CS 2801	5			
CS 2500 and CS 2501	5 PHIL 2325, POLS 2325, or PHIL 2330	4			
ENGW 1111	4 Elective	4			
PHIL 1115	4				
	19	18	0	0	
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
CS 3000	4 Khoury Elective	4	Vacation	Co-op	
CS 3500 and CS 3501	5 PHIL elective 1	4			
PHIL 1145	4 PHIL elective 2	4			
Elective	4 Elective	4			
	CS 1210	1			
	17	17	0	0	
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	CS 3800	4	ENGW 3302, 3309, or 3315	4	Co-op
	PHIL 4515	4	Elective	4	
	PHIL elective 3	4			
	Elective	4			
	0	16	8	0	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	Khoury Elective	4	Elective	4	Co-op

	PHIL intermediate/advanced elective	4	Elective	4	
	Elective	4			
	Elective	4			
	0	16	8	0	
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	CS 4500	4			
	PHIL capstone	4			
	Elective	4			
	Elective	4			
	0	16			

Total Hours: 135

**Computer Science and Physics, BS**

The computer science and physics combined major brings together three disciplines: computer science, physics, and mathematics. The mathematics requirements serve as a foundation for both computer science and physics. From hands-on experience with sophisticated physics instruments, to mathematical theory, to the latest computational innovations, our interdisciplinary approach will prepare students for the myriad challenges in today's rapidly changing world.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 46).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5

**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

## Physics Courses

Code	Title	Hours
<b>Required Courses</b>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	5
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371 (Integrative course)	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

## Capstone and Electives

Code	Title	Hours
<b>Capstone</b>		
Complete either one computer science capstone or the physics capstone:		4
<i>Computer Science Capstone</i>		
CS 4100	Artificial Intelligence	
CS 4300	Computer Graphics	
CS 4410	Compilers	
CS 4150	Game Artificial Intelligence	
CS 4550	Web Development	
<i>Physics Capstone</i>		
PHYS 5318	Principles of Experimental Physics	
<b>Khoury Elective</b>		
The computer science elective is not required if the student has completed the computer science capstone (above). With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.		
Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
<b>Physics Elective</b>		
Only one physics elective is required if the student has completed the physics capstone (above).		
Complete two courses in the following range:		8
PHYS 3000 to PHYS 5999		

## Integrative Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Additional Mathematics Requirements</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4

## Supporting Course

Code	Title	Hours
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

## Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data

- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

136 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	0
CS 1800 and CS 1802	5 MATH 1342	4 MATH 2321	4	
CS 2500 and CS 2501	5 PHYS 1165	4		
MATH 1341	4 PHYS 1166	1		
PHYS 1161	4 ENGW 1111	4		
PHYS 1162	1			
	20	18	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 2800 and CS 2801	5 CS 3000	4 Elective	4 Co-op	
MATH 2341	4 PHYS 3602	4 Elective	4	
PHYS 2371	3 PHYS 4305	4		
PHYS 2372	1 Computing and social issues	4		
PHYS 2303	4 CS 1210	1		
	17	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 3800 Elective	4 PHYS 3600 4 Elective	4 Co-op 4	
	PHYS elective if CS capstone (Khoury elective if PHYS capstone)	4		
	CS or PHYS capstone	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours	Hours
Co-op	CS 4500	4 Elective	4 Co-op	0
	PHYS elective	4 Elective	4	
	MATH 3081	4		
	Computing and social issues	4		
	0	16	8	0

PHYS elective	4 Elective	4
MATH 3081	4	
ENGW 3302	4	
0	16	8

Total Hours: 137

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 1800 and CS 1802	5 MATH 1342	4		
CS 2500 and CS 2501	5 PHYS 1165	4		
MATH 1341	4 PHYS 1166	1		
PHYS 1161	4 ENGW 1111	4		
PHYS 1162	1			
	20	18	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 3000	4 Vacation	0 Co-op	0
PHYS 2303	4 MATH 2321	4		
PHYS 2371	3 MATH 2341	4		
PHYS 2372	1 PHYS 4305	4		
CS 2800 and CS 2801	5 CS 1210	1		
	18	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 3800 Elective	4 PHYS 3600 4 Elective	4 Co-op 4	0
	PHYS 3602	4		
	ENGW 3302	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 4500	4 Elective	4 Co-op	0
	PHYS elective	4 Elective	4	
	MATH 3081	4		
	Computing and social issues	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours	Hours	Hours
Co-op	0 CS or PHYS capstone	4		

PHYS elective if CS capstone (Khoury elective if PHYS capstone)	4	
Elective	4	
Elective	4	
0	16	

Total Hours: 137

## Five Years, Three Co-ops in Spring/Summer 1

### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 MATH 1342	4		
PHYS 1161	4 PHYS 1165	4		
PHYS 1162	1 PHYS 1166	1		
CS 1200	1 ENGW 1111	4		
MATH 1341	4			
	20	18	0	0

### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 Co-op	0 Co-op	0 Vacation	0
PHYS 2303	4			
PHYS 2371	3			
PHYS 2372	1			
CS 2800 and CS 2801	5			
CS 1210	1			
	19	0	0	0

### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321	4 Co-op	0 Co-op	0 PHYS 3600	4
CS 3000	4		PHYS 4305	4
MATH 2341	4			
Elective	4			
	16	0	0	8

### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3800	4 Co-op	0 Co-op	0 Elective	4
Elective	4		Elective	4
PHYS 3602	4			
ENGW 3302	4			
	16	0	0	8

### Year 5

Fall	Hours Spring	Hours
CS 4500	4 CS or PHYS capstone	4

PHYS elective	4	PHYS elective if CS capstone (CS elective if PHYS capstone)	4
MATH 3081	4	Elective	4
Computing and social issues	4	Elective	4
	16		16

Total Hours: 137

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

## Computer Science and Political Science, BS

The computer science and political science combined major offers both a strong computer science foundation and a deep understanding of global and societal needs. You will become an engaged citizen of the world, participating in interdisciplinary scholarship and translational research to address regional and global issues.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
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#### Computer Science Overview

CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

#### Computer Science Fundamental Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
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CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
IS 2000	Principles of Information Science	4

**Khoury Elective Courses**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 12 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Political Science Courses**

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4

**Political Theory**

Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Capstone**

POLS 4701	Political Science Senior Capstone	4
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**Political Science Electives**

Complete four courses in the following range:		16
POLS 2000 to POLS 5999		

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 383)
- Campaigns and Elections (p. 383)
- Comparative Politics (p. 383)
- Identity, Culture, and Politics (p. 383)
- International Relations and Diplomacy (p. 383)
- Law and Legal Studies (p. 383)
- Public Policy (p. 384)
- Security Studies (p. 384)

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Requirement</b>		
Complete one of the following:		4
POLS 2390	Science, Technology, and Public Policy	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	

**Supporting Courses**

Code	Title	Hours
<b>Supporting Courses</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3311	Advanced Writing for Prelaw	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Computer Science and Political Science Major Credit Requirement**

100 semester hours required in the major

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Writing-Intensive in the Major
- Advanced Writing in the Disciplines
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

133 total semester hours required

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

#### Campaigns and Elections Electives

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4

POLS 2370	Religion and Politics
POLS 3418	Nationalism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3487	Politics of Developing Nations

### Regional Requirements

Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

### Experiential/Practicum Requirement

Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

#### Core Courses

Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

### CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	



POLS 3406	International Law
POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

POLS 2399	4 Khoury elective 1	4 Elective	4		
POLS theory elective	4 POLS 2400	4			
Elective	4 POLS elective 1	4			
	Elective	4			
		16	17	8	0

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

Year 3	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Fall					
Co-op	Khoury elective 2	4 Elective	4 Co-op		
	POLS elective 2	4 Elective	4		
	POLS elective 3	4			
	Computing and social issues requirement	4			
		0	16	8	0

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

Year 4	Hours Spring	Hours Summer 1	Hours	
Fall				
Co-op	Khoury elective 3	4		
	POLS 4701	4 Elective	4	
	POLS elective 4	4 Elective	4	
	POLS integrative requirement	4		
		0	16	8

Total Hours: 134

**Plan of Study**

**Sample Patterns:**

**Four Year, Two Co-ops in Summer 2/Fall**

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 CS 3200	4 Vacation		
CS 2500 and CS 2501	5 IS 2000	4 CS 3500 and CS 3501	5		
CS 1200	1 ENGW 1111	4			
POLS 1150 and POLS 1151	4 POLS 1160	4			
POLS 1155 and POLS 1156	4				
		19	17	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 CS 1210	1 ENGW 3302, 3308, 3311, or 3315	4 Co-op	

**Five Year, Three Co-ops in Summer 2/Fall**

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	Vacation		
CS 2500 and CS 2501	5 IS 2000	4			
CS 1200	1 ENGW 1111	4			
POLS 1150 and POLS 1151	4 POLS 1160	4			
POLS 1155 and POLS 1156	4				
		19	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 CS 1210	1 Vacation	Co-op	
CS 3500 and CS 3501	5 CS 3200	4		
POLS 2399	4 POLS 2400	4		
POLS theory elective	4 POLS elective 1	4		

	Elective	4		
	17	17	0	0
<b>Year 3</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Co-op	Khoury elective 1	4 ENGW 3302, 3308, 3311, or 3315	4 Co-op	
	POLS elective 2	4 Elective	4	
	Computing and social issues requirement	4		
	Elective	4		
	0	16	8	0
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Co-op	Khoury elective 2	4 Elective	4 Co-op	
	POLS elective 3	4 Elective	4	
	POLS integrative requirement	4		
	Elective	4		
	0	16	8	0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	Khoury elective 3	4		
	POLS 4701	4		
	POLS elective 4	4		
	Elective	4		
	0	16		

Total Hours: 134

## Computer Science and Sociology, BS

The social aspects to computing continue to grow, primarily with respect to communication and the internet. The computer science and sociology combined major examines this significant impact on society and how people communicate and share culture. Students will have an opportunity to gain a solid programming foundation, as well as the practical and theoretical skills needed to address the complex social and cultural issues in a period of far-reaching social change.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
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### Computer Science Overview

CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

### Computer Science Fundamental Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
IS 2000	Principles of Information Science	4

### Computer Science Writing-Intensive Requirement

Complete one of the following:		4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	
IS 3500	Information System Design and Development	
DS 4200	Information Presentation and Visualization (Take DS 3000 either as a prerequisite of or concurrently with DS 4200.)	

### Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 12 credits of upper-division CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	12
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

## Sociology Courses

Code	Title	Hours
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### Sociology Required Courses

SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4

### Sociology Electives

Complete one sociology elective in each of the following ranges: 12

Introductory elective: SOCL 1000 to SOCL 1999	
Intermediate elective: SOCL 2000 to SOCL 3999	
Advanced elective: SOCL 4000 to SOCL 4999	

**Sociology Required Capstone**

SOCL 4600	Senior Seminar	4
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**Integrative Course Requirement**

Complete one of the following: 4

SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Complete one of the following: 4

ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one of the following: 4

ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Complete 32 credits of general electives. 32

**Khoury College GPA Requirements**

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

**Sociology GPA Requirements**

2.000 average GPA requirement across all sociology classes

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing-Intensive in the Major
- Writing in the First Year
- Advanced Writing in the Disciplines
- Interpreting Culture
- Understanding Societies and Institutions
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	CS 3200	4	Vacation	
CS 2500 and CS 2501	5	IS 2000	4	CS 3500 and CS 3501	5		
CS 1200	1	SOCL 2320	4				
ENGW 1111	4	ANTH 1101	4				
SOCL 1101	4						
		19		17		9	
						0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Co-op		Co-op		ENGW 3302, 3308, or 3315	4
CS 1210	1					Elective	4
SOCL 2321	4						
ANTH 2305	4						
Elective	4						
		17		0		0	
						8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 1	4	Co-op		Co-op		Elective	4
SOCL 3300	4					Elective	4
Sociology introductory elective	4						
Elective	4						
		16		0		0	
						8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 2	4	SOCL 4600	4	Elective	4		
Sociology intermediate elective	4	CS writing-intensive requirement	4	Elective	4		
Elective	4	Sociology advanced elective	4				

Integrative requirement	4 Khoury elective 3	4	
	16	16	8

Total Hours: 134

## Five Years, Three Co-ops in Spring/Summer 1

### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 2500 and CS 2501	5 IS 2000	4		
CS 1200	1 SOCL 2320	4		
ENGW 1111	4 ANTH 1101	4		
SOCL 1101	4			
	19	17	0	0

### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 Co-op	Co-op	Vacation	
CS 3500 and CS 3501	5			
CS 1210	1			
SOCL 2321	4			
ANTH 2305	4			
	18	0	0	0

### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3200	4 Co-op	Co-op	ENGW 3302, 3308, or 3315	4
Elective	4		Elective	4
SOCL 3300	4			
Sociology introductory elective	4			
	16	0	0	8

### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Khoury elective 1	4 Co-op	Co-op	Elective	4
Sociology intermediate elective	4		Elective	4
Elective	4			
Integrative requirement	4			
	16	0	0	8

### Year 5

Fall	Hours Spring	Hours
Khoury elective 2	4 SOCL 4600	4
Sociology advanced elective	4 CS writing-intensive requirement	4
Elective	4 Khoury elective 3	4

Elective	4 Elective	4
	16	16

Total Hours: 134

## Computer Science and Theatre, BS

The computer science and theatre combined major is ideal for creative students who love technology as a means to expand what is possible in the performing arts. This major combines a strong foundation in computing with the opportunity to acquire a deep knowledge of theatre through curriculum that spans design, performance, and the production of innovative forms of theatre, including interactive media, computer graphics, human-computer interaction, and more.

It offers both classroom and experiential learning on the creative, social, and technological relationship between theatre and computing.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Requirements

Code	Title	Hours
<b>Required Courses</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
CS 4550	Web Development	4
IS 4300	Human Computer Interaction	4

### Khoury Elective Courses

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	8
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Theatre Requirements**

Code	Title	Hours
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**Theatre**

A grade of C or higher is required for all theatre courses.

**Foundational Stages**

THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

**Theatre Texts and Context**

Complete two of the following: 8

THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 3200	Queer Theatre and Performance	

**Making Theatre**

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4

**Intermediate or Advanced Technique**

Complete one of the following: 4

THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2330	Playwriting	
THTR 2335	Boston Theatre Experience	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	

**Integrative Requirement**

Code	Title	Hours
THTR 2370	Lighting Design	4

**Supporting Courses**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**Computer Science and Theatre Combined Major Credit Requirement**

A minimum of 89 semester hours is required in the major.

**Combined Major GPA Requirement**

Minimum 2.000 GPA in all CS, CY, DS, IS courses

**Program Requirement**

133 semester hours required

**Plan of Study****Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4		
CS 2500 and CS 2501	5	THTR 1131	4				

THTR 1101	4	ENGW 1111	4	
THTR 1120	4			
	19	17	9	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	Co-op		Co-op		Elective	4
CS 3000	4					Elective	4
Khoury elective (1/2)	4						
THTR 1270	4						
THTR 1100	1						
Elective	4						
	18		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 4550	4	Co-op		Co-op		ENGW 3302	4
Khoury elective (2/2)	4					Elective	4
THTR 2325	4						
Texts and contexts (1/2)	4						
THTR 2000	1						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 4500 or 4530	4	THTR 4702	4	Elective	4		
IS 4300	4	Computing and social issues	4	Elective	4		
Intermediate/advanced technique	4	Elective	4				
Texts and contexts (2/2)	4	Integrative requirement	4				
	16		16		8		0

Total Hours: 136

## Cybersecurity and Business Administration, BS

The cybersecurity and business combined major delivers a technical and security-focused degree with a strong grounding in business. Students will complete most of the requirements of a business major, including macroeconomics and microeconomics, while also focusing on the conceptual and practical computer science skills that will enable them to contribute to ensuring the reliability and security of cyberspace.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
<b>Cybersecurity Required Courses</b>		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
CY 4740	Network Security	4
<b>Cybersecurity Electives</b>		
If courses require prerequisites, those should be taken using general electives.		
Complete one course from the following:		3-4
COMM 2551	Free Speech in Cyberspace	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 3030	Global Criminology	
CRIM 4040	Crime Prevention	
CS 2800	Logic and Computation	
CS 4240	Large-Scale Parallel Data Processing	
CS 4400	Programming Languages	
CS 4500	Software Development	
CS 4710	Mobile and Wireless Systems	
CS 6710	Wireless Network	
CY 5200	Security Risk Management and Assessment	
CY 5210	Information System Forensics	
CY 5770	Software Vulnerabilities and Security	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	

EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322
EECE 3324	Computer Architecture and Organization
EECE 4534 and EECE 4535	Microprocessor-Based Design and Lab for EECE 4534
IS 4300	Human Computer Interaction
LPSC 1101	Introduction to Law
LPSC 2301	Introduction to Law, Policy, and Society
LPSC 3303	Topics in Law and Public Policy
MATH 3527	Number Theory 1
MATH 4575	Introduction to Cryptography
PHIL 1145	Technology and Human Values
POLS 2390	Science, Technology, and Public Policy
POLS 3307	Public Policy and Administration
POLS 3324	Law and Society
POLS 3406	International Law
POLS 3408	International Security
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism

### Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Statistics</b>		
MGSC 2301	Business Statistics	4
<b>Strategy</b>		
STRT 4501	Strategy in Action	4

### Business Concentration

Complete a four-course business concentration from the following list. (p. )

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Marketing (p. 295)
- Marketing Analytics (p. 296)

- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

### Business Cooperative Education Requirement

Complete one six-month co-op experience.

### Integrative Requirement

Code	Title	Hours
MISM 2301	Management Information Systems	4

### Supporting Courses

Code	Title	Hours
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#### Mathematics Courses

Complete one of the following: 4

MATH 1341	Calculus 1 for Science and Engineering
MATH 1231	Calculus for Business and Economics

#### Economics

Complete one of the following: 4

ECON 1115	Principles of Macroeconomics
ECON 1116	Principles of Microeconomics

### Writing Requirements

Code	Title	Hours
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#### College Writing

ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

#### Advanced Writing in the Disciplines

Complete one of the following: 4

ENGW 3302	Advanced Writing in the Technical Professions
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines

### Required General Electives

Code	Title	Hours
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Complete 16 credits of general electives. 16

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

### Business GPA Requirement

Minimum 2.000 GPA required in all business courses.

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major

Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 semester hours required

**Plan of Study**

Sample Patterns:

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 CY 2550	4 Elective 1	4	
CS 2500 and CS 2501	5 MATH 1341 or 1231	4		
ENGW 1111	4 ACCT 1201	4		
ECON 1115 or 1116	4			
	19	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 CS 3700	4 MKTG 2201	4 Co-op	
CS 3650	4 CY 3740	4 Elective 3	4	
ACCT 2301	4 Business concentration 1	4		
MGSC 2301	4 Elective 2	4		
	CS 1210	1		
	16	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CY 4170 or 5240	4 FINA 2201	4 Co-op	
	Business concentration 2	4 ORGB 3201	4	
	Business concentration 3	4		
	CY 4740	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours	
Co-op	ENGW 3302	4 STRT 4501	4	
	MISM 2301	4 Elective 4	4	
	Business concentration 4	4		

Cybersecurity elective	4	
	0	16 8

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 CY 2550	4		
CS 2500 and CS 2501	5 MATH 1341 or 1231	4		
ENGW 1111	4 ACCT 1201	4		
ECON 1115 or 1116	4			
	19	17	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 1210	1 Vacation	Co-op	
CS 3650	4 CS 3700	4		
ACCT 2301	4 CS 3000	4		
MGSC 2301	4 Business concentration 1	4		
	Elective 1	4		
	17	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CY 3740	4 FINA 2201	4 Co-op	
	MKTG 2201	4 ORGB 3201	4	
	Business concentration 2	4		
	Elective 2	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CY 4170 or 5240	4 ENGW 3302	4 Co-op	
	CY 4740	4 Elective 4	4	
	Business concentration 3	4		
	Elective 3	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	MISM 2301	4		
	STRT 4501	4		
	Business concentration 4	4		



Cybersecurity elective	4
0	16

Total Hours: 134

## Cybersecurity and Criminal Justice, BS

The cybersecurity and criminal justice combined degree applies a multidisciplinary approach to ensuring the reliability and security of cyberspace. The program will provide students with a strong programming foundation coupled with academic and experiential knowledge of the criminal justice system. Students learn how social behavior, policy, and legal rules can affect cybersecurity and utilize comparative social science to understand, predict, and explain crime.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
or CRIM 1000	Criminal Justice at Northeastern	
CS 1210	Professional Development for Hourly Co-op	1
<b>Computer Science Fundamentals Courses</b>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
<b>Cybersecurity Required Courses</b>		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4740	Network Security	4
<b>Cybersecurity Elective</b>		
Complete one of the following:		4
CS 2800	Logic and Computation	
CS 4710	Mobile and Wireless Systems	

or CS 6710	Wireless Network
CS 4400	Programming Languages
CS 4500	Software Development
CS 4240	Large-Scale Parallel Data Processing
CY 4770	Cryptography
DS 4300	Large-Scale Information Storage and Retrieval
DS 4400	Machine Learning and Data Mining 1
CY 5200	Security Risk Management and Assessment
CY 5210	Information System Forensics
CY 5770	Software Vulnerabilities and Security
IS 4300	Human Computer Interaction
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322
EECE 3324	Computer Architecture and Organization
EECE 4534 and EECE 4535	Microprocessor-Based Design and Lab for EECE 4534
MATH 3527	Number Theory 1
MATH 4575	Introduction to Cryptography
COMM 2551	Free Speech in Cyberspace
LPSC 1101	Introduction to Law
LPSC 2301	Introduction to Law, Policy, and Society
LPSC 3303	Topics in Law and Public Policy
PHIL 1145	Technology and Human Values
POLS 2390	Science, Technology, and Public Policy
POLS 3307	Public Policy and Administration
POLS 3324	Law and Society
POLS 3406	International Law
POLS 3408	International Security
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism

### Supporting Courses

Code	Title	Hours
Complete the following course:		
MATH 1341	Calculus 1 for Science and Engineering	4

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
Complete one of the following:		4
ENGW 1111	First-Year Writing	
ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3311	Advanced Writing for Prelaw	

ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
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## Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Crime Problems and Criminal Justice Institutions</b>		
The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students a deeper look at a range of crime problems.		
Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3070	Corporate and White-Collar Crime	
CRIM 3540	Addiction and Recovery	
<b>Creating Knowledge about Crime and Justice</b>		
How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.		
CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4
<b>Systemic Issues</b>		
A consideration of systemic issues facing the criminal justice system.		
Complete one of the following:		4
CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	
<b>Criminal Justice Elective</b>		

Rounding out knowledge of crime and justice.		
Complete one additional criminal justice elective from the 3000, 4000 or 5000-level.		4
<b>Criminal Justice Capstone</b>		
Complete one of the following:		4
CRIM 4949	Senior Capstone Seminar	
CY 4930	Cybersecurity Capstone	
CY 4940	Research Projects on National Security	

## Criminal Justice Co-op Integration

Code	Title	Hours
Co-op students should complete at least one of the following courses. CRIM 3000 is required for the first co-op. CRIM 4000 is required if a second co-op is taken:		
CRIM 3000	Co-op Integration Seminar 2	1
CRIM 4000	Co-op Integration Seminar 3	1

## Integrative Requirement

Code	Title	Hours
<b>Cybersecurity Integrative Course</b>		
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	

## Criminal Justice Integrative Course

Complete one of the following:		4
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	
CRIM 4040	Crime Prevention	
CRIM 5900	Topics in Criminal Justice and Criminology	

## Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

134 total semester hours required.

## Plan of Study

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 CY 2550	4		
CS 2500 and CS 2501	5 CRIM 1110	4		

CRIM 1100	4	CRIM 1120	4		
ENGW 1111	4				
	19		17	0	0
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
CS 3500 and CS 3501	5 CS 3000	4 Vacation	Co-op		
CS 3650	4 CS 1210	1			
MATH 1341	4 CS 3700	4			
CRIM 3600	4 CRIM 3700	4			
	CRIM Elective: Thematic	4			
	17	17	0	0	
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	CY 3740	4 General Elective	4 Co-op		
	CRIM 3000	1 General Elective	4		
	CRIM Elective: Survey	4			
	CRIM Elective: System-wide	4			
	General Elective	4			
	0	17	8	0	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	CY 4740	4 ENGW 3302	4 Co-op		
	CY 4170	4 General Elective	4		
	CRIM 4000	1			
	CRIM Integrative Course	4			
	General Elective	4			
	0	17	8	0	
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	Capstone	4			
	Cybersecurity Elective	4			
	CRIM Elective: General	4			
	General Elective	4			
	0	16			

Total Hours: 136

## Cybersecurity and Economics, BS

The cybersecurity and economics combined degree applies a multidisciplinary approach integrating fundamental economics courses with a strong programming foundation. Students will study both the behavior of individuals and the collective behavior of industries and governments, utilizing computing skills to ensure the reliability and security of cyberspace.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
or ECON 1000	Economics at Northeastern	
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamentals Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
<b>Cybersecurity Required Courses</b>		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4740	Network Security	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
<b>Cybersecurity Elective</b>		
Complete one of the following:		4

CS 2800 Logic and Computation

CS 4710 Mobile and Wireless Systems

CS 4400 Programming Languages

CS 4500 Software Development

CS 4240 Large-Scale Parallel Data Processing

CY 4770	Cryptography
DS 4300	Large-Scale Information Storage and Retrieval
DS 4400	Machine Learning and Data Mining 1
CY 5200	Security Risk Management and Assessment
CY 5210	Information System Forensics
CY 5770	Software Vulnerabilities and Security
IS 4300	Human Computer Interaction
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322
EECE 3324	Computer Architecture and Organization
EECE 4534 and EECE 4535	Microprocessor-Based Design and Lab for EECE 4534
MATH 3527	Number Theory 1
MATH 4575	Introduction to Cryptography
COMM 2551	Free Speech in Cyberspace
CRIM 2340	Corporate Security: Securing the Private Sector
CRIM 3030	Global Criminology
CRIM 4040	Crime Prevention
LPSC 1101	Introduction to Law
LPSC 2301	Introduction to Law, Policy, and Society
LPSC 3303	Topics in Law and Public Policy
PHIL 1145	Technology and Human Values
POLS 2390	Science, Technology, and Public Policy
POLS 3307	Public Policy and Administration
POLS 3324	Law and Society
POLS 3406	International Law
POLS 3408	International Security
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism

### Supporting Course

Code	Title	Hours
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	

### Computer Science Writing Requirement

Code	Title	Hours
College Writing		
Complete one of the following:		4
ENGW 1111	First-Year Writing	
ENGW 1102	First-Year Writing for Multilingual Writers	

### Advanced Writing in the Disciplines

Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	

ENGW 3308	Advanced Writing in the Social Sciences
ENGW 3311	Advanced Writing for Prelaw
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines

### Economics Requirements

Code	Title	Hours
<b>Required Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Electives</b>		
Complete 4 ECON electives that are found in the following ranges, with at least two numbered at ECON 3000 or above:		16
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Integrative Requirement

Code	Title	Hours
<b>Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
CY 4930	Cybersecurity Capstone	
CY 4940	Research Projects on National Security	

### Integrative Requirement

ECON 2560	Applied Econometrics	4
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### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Economics GPA Requirement

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

133 total semester hours required.

## Plan of Study

### Sample Plan of Study: Four Years, Two Co-ops in Summer 2/ Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Elective	4 Elective	4
CS 2500 and CS 2501	5 CY 2550	4 Elective	4 Elective	4
CS 1800 and CS 1802	5 ECON 1116	4		
ENGW 1111	4 MATH 1231, 1241, 1245, 1251, 1340, or 1341	4		
ECON 1115	4			
	19	17	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 3000	4 Elective	4 Co-op	
CS 3650	4 CS 1210	1 Elective	4	
ECON 2315	4 CS 3700	4		
ECON 2350	4 ECON 2316	4		
	ECON elective 1	4		
	17	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CY 3740	4 ECON elective 3	4 Co-op	
	ECON 2560	4 ENGW 3302	4	
	Cybersecurity Elective	4		
	ECON elective 2	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours		
Co-op	CY 4170	4		
	CY 4740	4		
	Capstone	4		
	ECON elective 4	4		
	0	16		
Total Hours: 134				

## Data Science and Biochemistry, BS

The Data Science and Biochemistry Major combines computer science, biochemistry, biology, information science, mathematics, and statistics into an integrated curriculum. The program engages students in rigorous coursework designed to prepare students to interpret the ever-expanding knowledge base.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Khoury Elective</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
DS 2500 or higher, except DS 4900		
CY 2000 or higher, except CY 4930		
IS 2000 or higher, except IS 4900		

**Statistics Foundations**

Complete one of the following:	4
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500
MATH 3081	Probability and Statistics

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing or First-Year Writing for Multilingual Writers	4

**Advanced Writing in the Disciplines**

ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions or Interdisciplinary Advanced Writing in the Disciplines	4
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**Biochemistry Requirements**

Code	Title	Hours
<b>Biology Foundations</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4

**Chemistry Foundations**

CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5

**Mathematics Foundations**

MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4

**Biochemistry Foundations**

BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
CHEM 3331 and CHEM 3332 or CHEM 4620 or CHEM 5620	Bioanalytical Chemistry and Lab for CHEM 3331 or Introduction to Protein Chemistry or Protein Chemistry	3-5

**Intermediate or Advanced Science Elective**

Complete one course from the following	4-5
BIOL 2301 to BIOL 5999	
CHEM 2311 to CHEM 5999	
EEMB 2290 to EEMB 5999	
ENVR 2310 to ENVR 5999	
MATH 2280 to MATH 5999	
PHYS 2303 to PHYS 5999	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Courses</b>		
BINF 6308	Bioinformatics Computational Methods 1	4
BINF 6309	Bioinformatics Computational Methods 2	4
Complete one of the following:		4
BIOL 4701	Biology Capstone	
CHEM 4750	Senior Research	

**Required General Electives**

Code	Title	Hours
Complete 12 credits of general electives.		12

**Major GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

131 total semester hours required

**Plan of Study****Sample Patterns:****Five Years, Three Co-ops**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 BIOL 2299	4		
CS 2500 and CS 2501	5 MATH 1341	4		
BIOL 1107 and BIOL 1108	5 CHEM 1161 and CHEM 1162	5		
ENGW 1111	4			
	20	18	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 BIOL 2301 and BIOL 2302	5 CS 3200	4 Co-op	
DS 3000	4 DS 4200	4 BIOL 2309	4	
MATH 1342	4 CHEM 2311 and CHEM 2312	5		
Intermediate/Advanced Science Elective	4 CS 1210	1		
	Statistics Foundation	4		
	17	19	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4300	4 ENGW 3302	4 Co-op	

	CHEM 2313 and CHEM 2314	5	BIOL 3611 and BIOL 3612	5	
	Khoury Elective	4			
	General Elective	4			
	0	17	9	0	

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4400	4 Vacation	Co-op	
	BINF 6308	4		
	CHEM 3331 or 4620	4		
	General Elective	4		
	0	16	0	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	Capstone	4
	BINF 6309	4
	General Elective	4
	0	12

Total Hours: 136

**Four Years, Two Co-ops****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 BIOL 2299	4 MATH 1342	4	
CS 2500 and CS 2501	5 MATH 1341	4		
BIOL 1107 and BIOL 1108	5 CHEM 1161 and CHEM 1162	5		
ENGW 1111	4			
	20	18	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
DS 3000	4 BIOL 2301 and BIOL 2302	5 CS 3200	4 Co-op	
Intermediate/ Advanced Science Elective	4 DS 4200	4 BIOL 2309	4	
Statistics Foundation	4 DS 4300	4		
General Elective	4 CHEM 2311 and CHEM 2312	5		
	CS 1210	1		
	16	19	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4400	4 ENGW 3302	4 Co-op	
	CHEM 2313 and CHEM 2314	5 BIOL 3611 and BIOL 3612	5	
	BINF 6308	4		
	Khoury Elective	4		
	0	17	9	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
Co-op	BINF 6309	4 General Elective	4
	CHEM 3331 or 4620	4	
	Capstone	4	
	General Elective	4	
	0	16	4

Total Hours: 136

**Data Science and Biology, BS**

The data science and biology major provides a strong foundation in biology, chemistry, and mathematics, as well as software development and algorithms. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. Students also explore the organization and processes of life across broad areas of the field, from molecules and cells through organs and organ systems to populations, ecosystems, and evolution.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Data Science Requirements**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		14
<i>Computer Science Option</i>		

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	

**Data Science Option**

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

**Computer Science Required Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4

**Data Science Foundations**

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

**Khoury Elective**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four semester hours of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

**Statistics Foundations**

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
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**Computer Science Writing Requirements**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4

**Advanced Writing in the Disciplines**

ENGW 3302 or ENGW 3315 or ENGW 3307	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines Advanced Writing in the Sciences	4
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**Biology Requirements**

Code	Title	Hours
<b>Biology Foundations</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4

BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

**Chemistry Foundations**

CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5

**Intermediate and Advanced Biology Elective**

Complete one of the following:		4
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
EEMB 2290 to EEMB 5515		
EEMB 5520 to EEMB5534		
EEMB 5548 to EEMB 5569		
ENVR 5242	Ancient Marine Life Research:	
BIOL 4991	Research	
BIOL 4970	Junior/Senior Honors Project 1	
BIOL 4971	Junior/Senior Honors Project 2	
BIOL 4994	Internship	

**Organismal and Population Biology Elective**

Complete one course and its corresponding lab, if indicated:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	

**Physics Requirement**

Complete one of the following lecture/lab pairs. PHYS 1145/ PHYS 1146 is recommended:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152	Physics for Engineering 1 and Lab for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	

**Mathematics Foundations**

MATH 1251	Calculus and Differential Equations for Biology 1	4
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### Integrative Requirements

Code	Title	Hours
<b>Integrative Course</b>		
Complete one of the following:		4
BIOL 5569	Advanced Microbiology	
BINF 6308	Bioinformatics Computational Methods 1	
BIOL 4707	Cell and Molecular Biology	
BIOL 5581	Biological Imaging	
BIOL 5587	Comparative Neurobiology	
BIOL 5591	Advanced Genomics	
<b>Capstone</b>		
Choose one:		4
BIOL 4701	Biology Capstone	
BIOL 4900	Biology Research Capstone	
BIOL 4971	Junior/Senior Honors Project 2	

### Required General Electives

Code	Title	Hours
Complete 20 semester hours of general electives.		20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

138 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Five Years, Three Co-ops

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 BIOL 2299	4		
CS 2500 and CS 2501	5 MATH 1251	4		
BIOL 1107 and BIOL 1108	5 CHEM 1161 and CHEM 1162	5		
ENGW 1111	4			
20		18	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
DS 3000	4 CS 1210	1 Vacation	Co-op	
CS 3500 and CS 3501	5 DS 4200	4		
PHYS 1145 and PHYS 1146	5 BIOL 2301 and BIOL 2302	5		
CHEM 2311 and CHEM 2312	5 ENVR 2500 and ENVR 2501	5		

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 3200	4 BIOL 3611 and BIOL 3612	5 Co-op	
	DS 4300	4 General elective	4	
	BIOL 2309	4		
	BIOL intermediate/advanced elective	4		
0		16	9	0

  

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4400	4 ENGW 3302	4 Co-op	
	Khoury Elective	4 General elective	4	
	Integrative course	4		
	General elective	4		
0		16	8	0

  

Year 5		
Fall	Hours Spring	Hours
Co-op	Capstone	4
	Organismal and population biology elective	4
	General elective	4
	General elective	4
0		16

Total Hours: 142

## Data Science and Behavioral Neuroscience, BS

The data science and behavioral neuroscience major combines the disciplines of biology, psychology, computer science, and data science into an integrated curriculum. The human brain is a complex information processing system requiring scientists to analyze, integrate, and share large data sets garnered from multiple techniques that image and record the activity of the brain at work. Students investigate the anatomy and physiology of neural circuits that underlie brain mechanisms and pathological states that give rise to behavioral functions. Students have an opportunity to develop skills in large-scale data manipulation and storage, machine learning, data mining, and information visualization necessary to execute big brain-mapping initiatives including human neuroconnectivity maps.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar <sup>1</sup>	1
CS 1210	Professional Development for Khoury Co-op <sup>2</sup>	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Statistics Foundation</b>		
Complete one of the following:		4-5
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
PSYC 2320	Statistics in Psychological Research	

<sup>1</sup> Students entering through the behavioral neuroscience program may take Behavioral Neuroscience at Northeastern (BNSC 1000).

<sup>2</sup> Students entering through the behavioral neuroscience program may take Professional Development for Co-op (EESC 2000).

## Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing or First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Behavioral Neuroscience Requirements

Code	Title	Hours
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1341 or MATH 1251	Calculus 1 for Science and Engineering or Calculus and Differential Equations for Biology 1	4
<b>Behavioral Neuroscience Foundations</b>		
BIOL 3405 or BIOL 5587	Neurobiology or Comparative Neurobiology	4
PT 5410 and PT 5411 or PSYC 3200	Functional Human Neuroanatomy and Lab for PT 5410 or Clinical Neuroanatomy	4-5
<b>Psychology Elective</b>		
Complete one of the following:		4
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3358	Behavior Therapies	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	
<b>Behavioral Neuroscience Core Courses</b>		
Complete two of the following:		8
BIOL 3403	Animal Behavior	

BIOL 3415	Current Topics in Behavioral Neuroscience
BIOL 3601	Neural Systems and Behavior
BIOL 3605	Developmental Neurobiology
BIOL 4705	Neurobiology of Cognitive Decline
BIOL 4709	Neurobiology of Learning and Memory
BIOL 5595	Cell and Molecular Neuroscience
BIOL 5601	Multidisciplinary Approaches in Motor Control
PSYC 3506	Neuropsychology of Fear
PSYC 3508	Behavioral Endocrinology
PSYC 3510	Brain, Behavior, and Immunity
PSYC 4510	Psychopharmacology
PSYC 4512	Neuropsychology
PSYC 4514	Clinical Neuroscience
PSYC 4570	Behavioral Genetics

CS 2500 and CS 2501	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5		
BIOL 1107 and BIOL 1108	5	MATH 1341	4		
ENGW 1111	4				
		20	18	0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 and CS 3501	5	DS 3000	4	Vacation		Co-op	
BIOL 3405 or 5587	4	CS 3200	4				
PSYC 1101	4	CHEM 2311 and CHEM 2312	5				
BIOL 2301 and BIOL 2302	5	CS 1210	1				
		PSYC 2320	4				
		18	18	0	0		

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4200	4	General elective		4 Co-op	
		BNS foundation	4	PSYC elective		4	
		General elective	4				
		PSYC 3200	4				
		0	16	8	0		

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	Vacation		Co-op	
		BNS integrative course	4			ENGW 3315 (online)	4
		BNS foundation	4				
		General elective	4				
		0	16	0	0		4

**Year 5**

Fall	Hours	Spring	Hours
Co-op		DS 4400	4
		CS 4100	4
		Integrative advanced elective	4
		General elective	4
		0	16

Total Hours: 134

### Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience	4
or BINF 6308	Bioinformatics Computational Methods 1	
CS 4100	Artificial Intelligence	4
<b>Upper-Division Elective</b>		
Complete four credits from the following list, not taken to fulfill previous requirements:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
BNSC 4970 or higher		
BIOL 3400 or higher		
BINF 6309	Bioinformatics Computational Methods 2	
PSYC 3200 or higher		

### Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

130 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Five Years, Three Co-ops

Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	BIOL 2299	4				

## Four Years, Two Co-ops

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 MATH 1341	4 PSYC 1101	4	
CS 2500 and CS 2501	5 BIOL 2299	4		
BIOL 1107 and BIOL 1108	5 CHEM 1161 and CHEM 1162 and CHEM 1163	5		
ENGW 1111	4			
	20	18	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3200	4 CS 1210	1 PSYC elective	4 Co-op	
DS 3000	4 DS 4200	4 General elective	4	
BIOL 3405 or 5587	4 CHEM 2311 and CHEM 2312	5		
BIOL 2301 and BIOL 2302	5 BNS foundation	4		
	PSYC 2320	4		
	17	18	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4300	4 General elective	4 Co-op	
	BNS foundation	4 Integrative advanced elective	4 ENGW 3315 (online)	4
	PSYC 3200	4		
	General elective	4		
	0	16	8	4
Year 4				
Fall	Hours Spring	Hours		
Co-op	DS 4400	4		
	CS 4100	4		
	BNS integrative course	4		
	General elective	4		
	0	16		

Total Hours: 134

### Data Science and Business Administration, BS

The data science and business combined major integrates a technical degree with the theory and practice of management through active

learning, problem-driven research, corporate partnerships, and experiential assignments. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. This program reflects the impact of data in modern business practice.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

### Programming Sequence Pathways

Choose one of the two options.	12
<i>Computer Science Option</i>	

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

### Computer Science Required Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4

### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4

### Khoury Elective

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## Business Courses

Code	Title	Hours
<b>Required Business Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
MGSC 2301	<i>Business Statistics</i>	4
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4
Complete one of the following: 4		
ENTR 2301	Innovation!	
MISM 2301	Management Information Systems	
SCHM 2301	Supply Chain and Operations Management	
STRT 4501	Strategy in Action	

## Business Concentration

Complete a four-course business concentration from the following list.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Marketing (p. 295)
- Marketing Analytics (p. 296)

*Note: If the Marketing Analytics concentration is selected an additional general elective is required.*

- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

## Integrative Course

Code	Title	Hours
BUSN 5001	Data-Driven and Technology-Enabled Value Creation in Digital Economy	4

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
or MATH 1231	Calculus for Business and Economics	
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## Business GPA Requirement

Minimum 2.000 GPA required in business courses

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Ethical Reasoning
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills Through Experience* is satisfied through co-op.

## Program Requirement

130 total semester hours required

**Plan of Study****Sample Patterns:****Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 CS 3200	4 ACCT 2301	4	
CS 2500 and CS 2501	5 MATH 1341	4		
ACCT 1201	4 ECON 1115	4		
ENGW 1111	4			
	19	17	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MGSC 2301	4 CS 1210	1 MKTG 2201	4 Co-op	
DS 3000	4 DS 4200	4 Elective	4	
INTB 1203	4 DS 4300	4		
Elective	4 Business concentration 1	4		
	Elective	4		
	16	17	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4400	4 FINA 2201	4 Co-op	
	SCHM 2301	4 ORGB 3201	4	
	Business concentration 2	4		
	Khoury elective	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4420	4 ENGW 3302	4	
	BUSN 5001	4 Elective	4	
	Business concentration 3	4		
	Business concentration 4	4		
	0	16	8	

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 3200	4		
CS 1200	1 ACCT 1201	4		

ECON 1115	4 Elective	4		
ENGW 1111	4			
	19	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 FINA 2201	4 Vacation	0 Co-op	0
MATH 1341	4 INTB 1203	4		
MGSC 2301	4 DS 3000	4		
ACCT 2301	4 CS 1210	1		
	Elective	4		
	17	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 DS 4200	4 ORGB 3201	4 Co-op	0
	DS 4300	4 MKTG 2201	4	
	Business concentration 1	4		
	MISM 2301	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Business concentration 2	4 ENGW 3302	4 Co-op	0
	Business concentration 3	4 Elective	4	
	Khoury elective	4		
	Elective	4		
	0	16	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	0 DS 4420	4
	SCHM 2301	4
	BUSN 5001	4
	Business concentration 4	4
	0	16

Total Hours: 134

**Data Science and Chemistry, BS**

The data science and chemistry major combines chemistry, information science, and mathematics to give students both breadth and depth in chemistry and data science fundamentals. During their course of study, students have an opportunity to develop qualitative and quantitative problem-solving skills as well as effective communication skills. Students will study the collection, manipulation, storage, retrieval, and computational analysis of chemical and other scientific data in its various forms, including numeric, textual, image, and video data from small to large volumes. The program engages students in rigorous

coursework designed to prepare students to interpret the ever-expanding knowledge base.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

## Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options:		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Khoury Elective</b>		
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## Statistics Foundations

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
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## Chemistry Requirements

Code	Title	Hours
<b>General Chemistry</b>		
Choose one pair of courses:		10
CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211	
CHEM 1214 and CHEM 1215	General Chemistry 2 and Lab for CHEM 1214	
OR		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	
CHEM 2161 and CHEM 2162 and CHEM 2163	Concepts in Chemistry and Lab for CHEM 2161 and Recitation for CHEM 2161	
<b>Intermediate-Level Chemistry</b>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
CHEM 2321 and CHEM 2322 and CHEM 2323	Analytical Chemistry and Lab for CHEM 2321 and Recitation for CHEM 2321	5
<b>Advanced-Level Chemistry</b>		
Complete one course from the following options:		4
CHEM 3410	Environmental Geochemistry	
CHEM 3501 to CHEM 4628		
<b>Mathematics Foundations</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
<b>Supporting Course</b>		
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
<b>Integrative Requirements</b>		
Code	Title	Hours
<b>Integrative Course</b>		
CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	5
CHEM 4750	Senior Research	4
<b>Writing Requirements</b>		
Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing or First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4

ENGW 3302	Advanced Writing in the Technical Professions
ENGW 3307	Advanced Writing in the Sciences
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines

	CHEM 2321 and CHEM 2322 and CHEM 2323	5		
		0	18	0

### Required General Electives

Code	Title	Hours
	Complete 24 credits of general electives.	24

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

130 total semester hours required

### Plan of Study

#### Sample Patterns

#### Five Years, Three Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	CHEM 1214 and CHEM 1215	5				
CS 2500 and CS 2501	5	MATH 1341	4				
CHEM 1211 and CHEM 1212	5	CS 3200	4				
ENGW 1111	4						
	20		18			0	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 and CS 3501	5	CS 1210	1	Vacation		Co-op	
MATH 1342	4	DS 3000	4				
CHEM 2311 and CHEM 2312	5	CHEM 2313 and CHEM 2314	5				
General elective	4	ENVR 2500 and ENVR 2501	5				
		General elective	4				
	18		19			0	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4200	4	Vacation		Co-op	
		PHYS 1151 and PHYS 1152 and PHYS 1153	5				
		General elective	4				

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	ENGW 3302	4	Co-op	
		DS 4400	4	General elective	4		
		General elective	4				
		CHEM 3431 and CHEM 3432	5				
	0		17		8		0

Year 5			
Fall	Hours	Spring	Hours
Co-op		CHEM 4750	4
		Chemistry advanced elective	4
		Khoury elective	4
		General elective	4
	0		16

Total Hours: 134

#### Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Vacation	
CS 1800 and CS 1802	5	CHEM 1214 and CHEM 1215	5	General elective	4		
CS 2500 and CS 2501	5	MATH 1341	4				
CHEM 1211 and CHEM 1212	5	General elective	4				
ENGW 1111	4						
	20		18		9		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3200	4	CS 1210	1	General elective	4	Co-op	
DS 3000	4	DS 4200	4	General elective	4		
CHEM 2311 and CHEM 2312	5	CHEM 2313 and CHEM 2314	5				
MATH 1342	4	General elective	4				



	CHEM 2321 and CHEM 2322 and CHEM 2323	5			
		17	19	8	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	DS 4300	4 ENGW 3302	4 Co-op		
	DS 4400	4 CHEM 3431 and CHEM 3432	5		
	PHYS 1151 and PHYS 1152 and PHYS 1153	5			
	ENVR 2500 and ENVR 2501	5			
		0	18	9	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	CHEM 4750	4			
	Khoury elective	4			
	Chemistry advanced elective	4			
	General elective	4			
		0	16		

Total Hours: 134

### Data Science and Ecology and Evolutionary Biology, BS

The combined major in data science and ecology and evolutionary biology provides a strong foundation in the fundamentals of ecology and evolutionary biology, including focal points in population, community, and ecosystem ecology; evolutionary ecology and biology; conservation biology; population genetics; behavior; and ecological and evolutionary genomics. Data science allows students to study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. The interdisciplinary nature of the major fosters critical thinking and creativity in scientific problem solving.

Students majoring in Ecology and Evolutionary Biology and associated combined majors cannot be combined with majors in Biology, Marine Biology, or Environmental and Sustainability Sciences, nor can they minor in Biology, Marine Science, or Environmental and Sustainability Sciences.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Data Science Course Work

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Khoury Elective Courses</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete four semester hours of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

**Ecology and Evolutionary Biology Course Work**

Code	Title	Hours
<b>Ecology and Evolutionary Biology</b>		
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
<b>Ecology and Evolutionary Genomics</b>		
EEMB 1105 and EEMB 1106	Foundations in Ecological and Evolutionary Genomics and Lab for EEMB 1105	5
<b>Genetics</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<b>Evolution</b>		
EEMB 2400	Introduction to Evolution	4
<b>Ecology</b>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
<b>Capstone</b>		
ENVR 4997	Senior Thesis	4

**Ecology and Evolutionary Biology Topical Requirement**

Code	Title	Hours
Complete 16 semester hours of the following. At least one course must be taken from each list.		16

*Evolution of Organisms*

EEMB 2290	Ecology and Evolution of Behavior	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3001	Genetics and Evolution in Action	
EEMB 3450	Physiological Adaptations to the Environment	
EEMB 3700	Desert Ecology	
EEMB 4010	Biology of Mammals	

*Ecology and Conservation Biology*

EEMB 3460	Conservation Biology	
EEMB 3475	Wildlife Ecology	
EEMB 3465	Ecological and Conservation Genomics	
EEMB 3470	Coastal Ecology and Sustainability	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 3125	Global Oceanic Change	
ENVR 3150	Food Security and Sustainability	

*Analytical Skills*

ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3465	Ecological and Conservation Genomics	
EEMB 5130	Ecological Dynamics	
ENVR 5500	Advanced Biostatistics	

**Supporting Courses**

Code	Title	Hours
<b>Calculus</b>		
MATH 1251 or MATH 1341	Calculus and Differential Equations for Biology 1 Calculus 1 for Science and Engineering	4

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
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**Chemistry**

CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
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**Physics**

Complete one of the following:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	

**Computer Science English Requirement**

Code	Title	Hours
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**College Writing**

ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
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**Advanced Writing in the Disciplines**

Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
DS 4420	Machine Learning and Data Mining 2	4

**Required General Electives**

Code	Title	Hours
Complete 16 semester hours of general electives.		16

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS,CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 ENVR 2500 and ENVR 2501	5 Physics requirement	5	
CS 2500 and CS 2501	5 EEMB 1105 and EEMB 1106	5		
ENGW 1111	4 CS 3200	4		
EEMB 1101 and EEMB 1102	5			
	20	19	10	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1211 and CHEM 1212 and CHEM 1213	5 MATH 1251 or 1341	4 Elective	4 Co-op	
BIOL 2301 and BIOL 2302	5 DS 4200	4 Elective	4	
DS 3000	4 DS 4300	4		
EEB topical requirement	4 CS 1210	1		
	Elective	4		
	18	17	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	EEMB 2400	4 ENGW 3302	4 Co-op	
	EEB topical requirement	4 Khoury elective	4	
	DS 4400	4		
	EEMB 2302 and EEMB 2303	5		
	0	17	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours	
Co-op	ENVR 4997	4 Elective	4	
	DS 4420	4		
	EEB topical requirement	4		

EEB topical requirement	4		
	0	16	4

Total Hours: 137

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 1800 and CS 1802	5 CS 3200	4		
CS 2500 and CS 2501	5 EEMB 1105 and EEMB 1106	5		
ENGW 1111	4 MATH 1251 or 1341	4		
EEMB 1101 and EEMB 1102	5			
	20	18	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 DS 3000	4 Vacation	0 Co-op	0
CHEM 1211 and CHEM 1212 and CHEM 1213	5 EEB topical requirement	4		
ENVR 2500 and ENVR 2501	5 CS 1210	1		
BIOL 2301 and BIOL 2302	5 Physics requirement	5		
	20	14	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 DS 4200	4 Elective	4 Co-op	0
	EEB topical requirement	4 Elective	4	
	EEMB 2400	4		
	Khoury elective	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 DS 4300	4 Elective	4 Co-op	0
	DS 4400	4 ENGW 3302	4	
	EEMB 2302 and EEMB 2303	5		
	Elective	4		
	0	17	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	ENVR 4997	4
	DS 4420	4
	EEB topical requirement	4
	EEB topical requirement	4
	0	16

Total Hours: 137

## Data Science and Economics, BS

The combined major in data science and economics integrates fundamental economics courses with a strong programming foundation. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. Utilizing these skill sets allows students to address complex issues in the behavior of individuals and the collective behavior of industries and governments.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ECON 1000	First Year Seminar Economics at Northeastern	1
CS 1210 or EESH 2000	Professional Development for Khoury Co-op Professional Development for Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	

DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

### Computer Science Required Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4

### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

### Khoury Elective

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Economics Requirements

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4

### Economics Electives

Complete five economics elective courses that are found in the following ranges, with no more than two in the ECON 1200 to ECON 1999 range:	20
ECON 1200–ECON 1999	
ECON 3000–ECON 4689	
ECON 4900–ECON 4999	
ECON 5200–ECON 5999	

### Economics Capstone

ECON 4692	Senior Economics Seminar	4
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### Integrative Course Requirement

Code	Title	Hours
ECON 2560	Applied Econometrics	4

### Supporting Course Requirements

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231 or MATH 1241 or MATH 1245 or MATH 1251 or MATH 1340	Calculus for Business and Economics Calculus 1 Calculus with Applications Calculus and Differential Equations for Biology 1 Intensive Calculus for Engineers	4

or MATH 1341	Calculus 1 for Science and Engineering
<b>Computing and Social Issues</b>	
Complete one of the following: 4	
AFAM 2600	Issues in Race, Science, and Technology
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

**English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one of the following: 4		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 24 credits of general electives.		24

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Economics GPA Requirement**

Grades in the following four courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Exploring Creative Expression and Innovation
- Writing in the First Year

- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

130 total semester hours required

**Plan of Study**

**Sample Pattern:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Elective	4
CS 1800 and CS 1802	5	CS 3200	4	ECON 2315	4	Elective	4
CS 2500 and CS 2501	5	ECON 1116	4				
ECON 1115	4	MATH 1231, 1241, 1245, 1251, 1340, or 1341	4				
ENGW 1111	4						
		19		17		9	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
DS 3000	4	CS 1210	1	ENGW 3302, 3308, 3311, or 3315	4	Co-op	
ECON 2350	4	ECON 2316	4	Elective	4		
DS 4200	4	DS 4300	4				
ECON elective 1	4	ECON elective 2	4				
		16		17		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury elective		4 Elective		4 Co-op	
		Computing and social issues requirement		4 Elective		4	
		DS 4400		4			
		ECON 2560		4			
		0		16		8	

**Year 4**

Fall	Hours Spring	Hours
Co-op	ECON 4692	4
	ECON elective 3	4
	ECON elective 4	4
	ECON elective 5	4
	0	16

Total Hours: 134

## Data Science and Environmental and Sustainability Sciences, BS

The data science and environmental and sustainability sciences combined major focuses on major environmental challenges facing our planet and provides broad training to understand how these challenges can be met through advances in data science. Understanding these processes requires acquisition and analysis of large amounts of data—an ideal fit with data science, where students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Data Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options:		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500	Object-Oriented Design	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	

DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

### Computer Science Required Courses

CS 3200	Database Design	4
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### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4

### Khoury Elective Courses

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Environmental Science and Sustainability Courses

Code	Title	Hours
<b>Environmental and Sustainability Sciences Major Requirements</b>		
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
ENVR 2200 or ENVR 1200	Earth's Changing Cycles Dynamic Earth	4
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 2515	Sustainable Development	4
Choose one course from each category:		
<i>Skills Courses</i>		4-5
ENVR 3300 and ENVR 3301 or EEMB 3555	Geographic Information Systems and Lab for ENVR 3300 Networks and Natural Systems	
<i>Earth Oceans and Environmental Change</i>		4-5
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 3600	Oceanography	
ENVR 3125	Global Oceanic Change	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
<i>Conservation, Restoration, and Management</i>		4
EEMB 2400	Introduction to Evolution	
EEMB 3460	Conservation Biology	
EEMB 4001	Landscape and Restoration Ecology	
EEMB 3465	Ecological and Conservation Genomics	
<i>Sustainable Planning and Development</i>		4
ENVR 3200	Water Resources	
ENVR 3150	Food Security and Sustainability	

ENVR 5210	Environmental Planning
ENVR 5350	Sustainable Energy and Climate Solutions
<b>Environment and Society</b> 4	
POLS 2395	Environmental Politics and Policy
PPUA 5260	Ecological Economics
PPUA 5268	International Environmental Policy
SOCL 2485	Environment, Technology, and Society

**Supporting Courses**

Code	Title	Hours
<b>Calculus</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5

**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Integrative Requirement**

Code	Title	Hours
Complete one of the following:		4
ENVR 4050	Solving Emerging Environmental Challenges through Capstone	
ENVR 4971	Junior/Senior Honors Project 2	
ENVR 4997	Senior Thesis	
CS 4991	Research	

**Required General Electives**

Code	Title	Hours
Complete 24 credits of general electives.		24

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World

- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

134 total semester hours required

**Plan of Study**

**Sample Patterns**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Elective	4
CS 1800 and CS 1802	5	ENVR 2515	4	CS 3200	4	Elective	4
CS 2500 and CS 2501	5	ENVR 1400 and ENVR 1401	5				
ENVR 2200	4	EEMB 2302 and EEMB 2303	5				
ENGW 1111	4						
		19	19	8	8		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1211 and CHEM 1212 and CHEM 1213	5	CHEM 1214 and CHEM 1215 and CHEM 1216	5	MATH 1341 or 1251	4	Co-op	
DS 3000	4	DS 4200	4	Elective	4		
ENVR skills course	4	ENVR 2500	4				
ENVR Earth oceans course	4	DS 4300	4				
		CS 1210	1				
		17	18	8	0		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	ENGW 3302	4	Co-op	
		ENVR conservation course	4	Elective	4		

	ENVR sustainable course	4		
	ENVR society course	4		
		0	16	8
				0

**Year 4**

Fall	Hours Spring	Hours		
Co-op	Integrative course	4		
	DS 4420	4		
	Khoury elective	4		
	Elective	4		
	Elective	4		
		0	20	

Total Hours: 141

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 CS 3200	4		
CS 2500 and CS 2501	5 EEMB 2302 and EEMB 2303	5		
ENVR 2200	4 ENVR 1400 and ENVR 1401	5		
ENGW 1111	4			
	19	19	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	4 CHEM 1214 and CHEM 1215 and CHEM 1216	5 Vacation	Co-op	
CHEM 1211 and CHEM 1212 and CHEM 1213	5 DS 3000	4		
ENVR 2515	4 ENVR 2500	4		
ENVR skills course	4 ENVR Earth oceans course	4		
	CS 1210	1		
	17	18	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 MATH 1251 or 1341	4 Elective	4 Co-op	
	DS 4200	4 Elective	4	

	ENVR conservation course	4		
	ENVR sustainable course	4		
		0	16	8
				0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 DS 4300	4 Elective	4 Co-op	
	DS 4400	4 ENGW 3302	4	
	ENVR society course	4		
	Elective	4		
		0	16	8
				0

**Year 5**

Fall	Hours Spring	Hours
Co-op	DS 4420	4
	Integrative course	4
	Khoury elective	4
	Elective	4
	Elective	4
		0
		20

Total Hours: 141

**Data Science and Health Science, BS**

The health science and computer science combined major offers a solid academic and experiential foundation integrating studies in health administration, computer science, mathematics, and statistics. This program reflects the impact of data in modern healthcare and prepares students for success in careers in health administration, community-based health promotion, public health, and big data analysis.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Data Science Requirements**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1



**Programming Sequence Pathways**

Choose one of the two options. 12

**Computer Science Option**CS 2500 Fundamentals of Computer Science 1  
and CS 2501 and Lab for CS 2500CS 2510 Fundamentals of Computer Science 2  
and CS 2511 and Lab for CS 2510CS 3500 Object-Oriented Design  
and CS 3501 and Lab for CS 3500**Data Science Option**DS 2000 Programming with Data  
and DS 2001 and Data Science Programming  
PracticumDS 2500 Intermediate Programming with Data  
and DS 2501 and Lab for DS 2500

DS 3500 Advanced Programming with Data

**Computer Science Required Courses**CS 1800 Discrete Structures 5  
and CS 1802 and Seminar for CS 1800

CS 3200 Database Design 4

**Information Science Requirement**

IS 4300 Human Computer Interaction 4

**Data Science Foundations**

DS 3000 Foundations of Data Science 4

DS 4200 Information Presentation and  
Visualization 4DS 4300 Large-Scale Information Storage and  
Retrieval 4

DS 4400 Machine Learning and Data Mining 1 4

**Supporting Courses for Data Science**

Code	Title	Hours
MATH 1341 or MATH 1241	Calculus 1 for Science and Engineering Calculus 1	4

**Data Science Writing Requirement**

Code	Title	Hours
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**College Writing**

ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
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**Advanced Writing in the Disciplines**

ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4
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**Health Science Requirements**

Code	Title	Hours
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**Public Health Core**

PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
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PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions— Global	4
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PHTH 2350	Community and Public Health	4
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or PHTH 2351	Community and Public Health - Global	
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4

**Supporting Courses for Health Science**

Code	Title	Hours
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**Research Methods**

Complete one of the following: 4

HLTH 5450 or PHTH 4202	Healthcare Research Principles of Epidemiology in Medicine and Public Health	
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IS 4800	Empirical Research Methods	
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**Statistics**

Complete one of the following: 4

PHTH 2210	Foundations of Biostatistics	
PSYC 2320	Statistics in Psychological Research	

ECON 2350	Statistics	
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ENVR 2500	Biostatistics	
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MATH 3081	Probability and Statistics	
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**Philosophy**

Complete one of the following: 4

PHIL 1145	Technology and Human Values	
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PHIL 1165	Moral and Social Problems in Healthcare	
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**Life Sciences Core**

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
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BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
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CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
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PSYC 1101	Foundations of Psychology	4
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**Integrative Requirement**

Code	Title	Hours
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**Upper-Division Elective**

Complete four credits from the following: 4

CS 2500 or higher, except CS 5010		
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CY 2000 or higher, except CY 4930		
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DS 2500 or higher, except DS 4900		
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IS 2000 or higher, except IS 4900		
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PHTH 4000 or higher		
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HSCI 4000 or higher		
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**Integrative Course**

DS 4420	Machine Learning and Data Mining 2	4
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**Required General Electives**

Code	Title	Hours
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Complete 16 credits general electives. 16

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

## Program Requirement

133 semester hours required

## Plan of Study

### Five Year, Two Co-op Sample Plan of Study

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 2500 and CS 2501	5 BIOL 1113 and BIOL 1114	5		
CS 1800 and CS 1802	5 PSYC 1101	4		
BIOL 1111 and BIOL 1112	5 MATH 1341	4		
ENGW 1111	4			
	20	18	0	0

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHTH 1260	4 CS 1210	1 Vacation	Co-op	
PHTH 2300	4 PHTH 2515	4		
CS 3500 and CS 3501	5 DS 3000	4		
CHEM 1161 and CHEM 1162 and CHEM 1163	5 CS 3200	4		
	General Elective	4		
	18	17	0	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	IS 4300	4 Vacation	Co-op	
	DS 4200	4		
	PHTH 2350	4		
	Statistics Course	4		
	0	16	0	0

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Upper Division Elective	4 Vacation	Vacation	
	DS 4300	4		
	DS 4400	4		
	ENGW 3302	4		
	0	16	0	0

#### Year 5

Fall	Hours Spring	Hours
PHTH 4540	4 DS 4420	4
HLTH 5450, PHTH 4202, or IS 4800	4 PHTH 4120	4
PHIL 1145 or 1165	4 General Elective	4
General Elective	4 General Elective	4
	16	16

Total Hours: 137

## Data Science and Journalism, BS

The data science and journalism combined major offers students an opportunity to gain the skills to be able to engage in both the print and digital worlds of journalism. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data. Combined with learning the principles, practices, and responsibilities of journalism, students can extract meaning from massive information flows and utilize it in effective investigative reporting.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	

DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

**Computer Science Required Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4

**Data Science Foundations**

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4

**Khoury Elective Courses**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010		4
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

**Journalism Major Requirements**

Students transferring from outside institutions must complete a minimum of five 4-credit journalism courses at Northeastern, and these must include:

Code	Title	Hours
JRNL 2201	Journalism 2: Intermediate Reporting	
JRNL 2301	Visual Storytelling in Journalism	
JRNL 4650	Ethics and Issues in Journalism	

Code	Title	Hours
<b>Journalism Courses</b>		

A grade of C or higher is required:

JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

**Required Journalism**

JRNL 1150	Understanding Today's News	4
JRNL 3550	The First Amendment and the Media	4
JRNL 4650	Ethics and Issues in Journalism	4

**Journalism Electives**

Complete three JRNL courses. 12

**Supporting Courses**

Code	Title	Hours
<b>Mathematics Requirement</b>		

MATH 1341	Calculus 1 for Science and Engineering	4
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**Statistics Foundation**

ECON 2350	Statistics	4
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**Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		

ENGW 1111	First-Year Writing	4
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**Advanced Writing in the Disciplines**

*This course already fulfills a Journalism requirement above.*

JRNL 2301	Visual Storytelling in Journalism	
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**Computing and Social Issues**

Complete one of the following: 4

AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Integrative Requirement**

Code	Title	Hours
Complete one of the following: 4		

JRNL 3700	Data Storytelling	
JRNL 5500	Coding for Digital Storytelling	

**Required General Electives**

Code	Title	Hours
Complete 20 credits of general electives.		20

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, IS courses

## Journalism GPA Requirement

Minimum 2.000 GPA required in all JRNL courses

## Program Requirement

131 total semester hours required

## Plan of Study

### Sample Pattern, Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4		
CS 2500 and CS 2501	5	JRNL 1101 and JRNL 1102	5				
JRNL 1150	4	JRNL 3550	4				
ENGW 1111	4						
	19		18		9		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2301	4	CS 1210	1	ECON 2350	4	Co-op	
JRNL 2201	4	DS 3000	4	Elective	4		
JRNL elective 1	4	DS 4200	4				
Computing and social issues	4	JRNL 3610	4				
		JRNL 3700 or 5500	4				
	16		17		8		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	Elective	4	Co-op	
		DS 4400	4	Elective	4		
		JRNL 4650	4				
		JRNL elective 2	4				
	0		16		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CY 4170	4				
		DS 4420	4				
		JRNL 3610	4				
		Elective	4				
	0		16				0
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CY 4170	4				
		DS 4420	4				
		JRNL 3610	4				
		Elective	4				
	0		16				0
Total Hours: 135							

Total Hours: 135

### Sample Pattern, Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0

CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	JRNL 1101 and JRNL 1102	5				
JRNL 1150	4	Elective	4				
ENGW 1111	4						
	19		18		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 and CS 3501	5	CS 1210	1	Vacation		Co-op	0
MATH 1341	4	DS 3000	4				
JRNL 2201	4	JRNL 2301	4				
Computing and social issues	4	JRNL elective	4				
		JRNL 3700 or 5500	4				
	17		17		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4200	4	ECON 2350	4	Co-op	
		DS 4300	4	Elective	4		
		JRNL 3550	4				
		JRNL elective	4				
	0		16		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	Elective	4	Co-op	
		Khoury elective	4	Elective	4		
		JRNL 4650	4				
		JRNL elective	4				
	0		16		8		0

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CY 4170	4				
		DS 4420	4				
		JRNL 3610	4				
		Elective	4				
	0		16				0

Total Hours: 135

## Data Science and Linguistics, BS

The data science and linguistics combined major provides students with extensive background in the formal structures of natural (human) languages and in the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms. The program teaches the methods and applications of linguistic and psycholinguistic analyses of human language data combined with skills in big data analysis, data science, and data analytics. The major provides excellent preparation for

work or more advanced degrees focusing on computational linguistics, natural language processing, machine learning, and a wide array of related fields.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of two options		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4
<b>Khoury Elective Course</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Psychology Requirements</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
<b>Laboratory/Directed Study</b>		
Complete one of the following:		4
LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
PSYC 4610	Laboratory in Psycholinguistics	
<b>Seminar Requirement</b>		
LING 4654 or PSYC 4658	Seminar in Linguistics or Seminar in Psycholinguistics	4
<b>Linguistics Elective</b>		
Complete one LING course, not counted elsewhere, numbered 3000–4799, or one of the following:		4
DEAF 2700	ASL Linguistics	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	
With prior approval, directed study research, independent study, and Honors Project courses can also be counted:		
LING 4891	Research Seminar in Linguistics	
LING 4970	Junior/Senior Honors Project 1	
LING 4971	Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	
PSYC 4991	Directed Study Research	

### Supporting Courses

Code	Title	Hours
<b>Mathematics Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering	4

### Integrative Requirement

Code	Title	Hours
<b>Integrative Course</b>		
CS 4120	Natural Language Processing	4

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
	Complete 20 credits of general electives.	20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

130 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Elective	4
CS 1800 and CS 1802	5	LING 2350	4	PSYC 1101	4	Elective	4
CS 2500 and CS 2501	5	CS 3200	4				
LING 1150	4	MATH 1341	4				
ENGW 1111	4						
	19		17		9		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3412	4	CS 1210	1	PSYC 2320	4	Co-op	4
DS 3000	4	DS 4200	4	Elective	4		
PSYC 3464	4	Linguistic structure	4				
Linguistic structure	4	LING elective	4				
		Elective	4				
	16		17		8		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4120	4	ENGW 3302	4	Co-op	4
		DS 4300	4	Elective	4		
		DS 4400	4				
		Linguistic structure	4				
	0		16		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4420	4				
		Khoury elective	4				
		LING lab (or directed study)	4				
		LING seminar	4				
	0		16				

Total Hours: 134

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	5	Vacation	0
CS 2500 and CS 2501	5	CS 3200	4				
CS 1800 and CS 1802	5	LING 2350	4				
LING 1150	4	PSYC 1101	4				
ENGW 1111	4						
	19		17		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 and CS 3501	5	CS 1210	1	Vacation	1	Co-op	0
MATH 1341	4	DS 3000	4				
LING 3412	4	PSYC 2320	4				
PSYC 3464	4	Linguistic structure	4				
		Elective	4				
	17		17		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Linguistic structure	4	Elective	4	Co-op	0
		DS 4300	4	Elective	4		
		DS 4200	4				
		ENGW 3302	4				
	0		16		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4400	4	Elective	4	Co-op	0

CS 4120	4	Elective	4
Linguistic structure	4		
LING lab (or directed study)	4		
0	16	8	0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	DS 4420	4
		LING seminar	4
		LING elective	4
		Khoury elective	4
0		16	

Total Hours: 134

## Data Science and Mathematics, BS

The data science and mathematics combined major combines computer science, data science, and mathematics into an integrated curriculum. The program provides the rigorous theoretical background necessary for success in the data science field.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

#### Programming Sequence Pathways

Choose one of two options 12

##### Computer Science Option

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500	Object-Oriented Design	

##### Data Science Option

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
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DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

#### Computer Science Required Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800 (Integrative course)	5
CS 3200	Database Design	4

#### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4

#### Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete eight credits of CS,CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 8

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Mathematics Courses

Code	Title	Hours
<b>Problem-Solving Requirement</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Math Requirement</b>		
MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
MATH 3175	Group Theory	4
MATH 3527	Number Theory 1	4

#### Mathematics Elective Requirement

Complete four courses in the following range: 16  
MATH 3001 to MATH 4999 but not MATH 4000

### Integrative Requirement

Code	Title	Hours
<b>Integrative Courses</b>		
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4

#### Advanced Writing in the Disciplines

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
	Complete 20 credits of general electives.	20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours	
CS 1200	1 CS 2510 and CS 2511	5 MATH 2321	4	
CS 1800 and CS 1802	5 MATH 1342	4 CS 3500	4	
CS 2500 and CS 2501	5 MATH 1365	4		
MATH 1341	4 Elective	4		
ENGW 1111	4			
19	17	8		

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2331	4 CS 1210	1 MATH 3081	4 Co-op	
MATH 2341	4 MATH 3527	4 Elective	4	
CS 3200	4 DS 4200	4		
DS 3000	4 MATH elective	4		

	Khoury elective	4		
16	17	8	0	

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4300	4 ENGW 3302	4 Co-op	
	DS 4400	4 Elective	4	
	MATH 3175	4		
	MATH elective	4		
0	16	8	0	

Year 4			
Fall	Hours Spring	Hours Summer 1	Hours
Co-op	DS 4420	4 Elective	4
	Khoury elective	4 Elective	4
	MATH elective	4	
	MATH elective	4	
0	16	8	

Total Hours: 133

### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 MATH 1342	4		
MATH 1341	4 MATH 1365	4		
ENGW 1111	4 Elective	4		
CS 1200	1			
19	17	0	0	

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	4 CS 1210	1 Vacation	0 Co-op	0
MATH 2321	4 CS 3200	4		
DS 3000	4 MATH 2331	4		
MATH 2341	4 MATH 3081	4		
	Khoury elective	4		
16	17	0	0	

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 MATH 3175	4 ENGW 3302	4 Co-op	0
	DS 4200	4 Elective	4	
	DS 4300	4		
	Elective	4		
0	16	8	0	

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 MATH 3527	4 Elective	4 Co-op	0
	DS 4400	4 Elective	4	



	MATH elective	4		
	MATH elective	4		
	0	16	8	0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	0 DS 4420	4		
	Khoury elective	4		
	MATH elective	4		
	MATH elective	4		
	0	16		

Total Hours: 133

## Data Science and Physics, BS

The data science and physics combined major brings together computer and data science, physics, and mathematics. The computer science and mathematics requirements serve as a foundation for both data science and physics. From hands-on experience with sophisticated physics instruments, to mathematical theory, to the latest computational innovations, our interdisciplinary approach is designed to prepare students for the myriad challenges in today's rapidly changing world.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Data Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

### Physics Courses

Code	Title	Hours
<b>Required Courses</b>		
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	5
PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	5
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 3603	Electricity and Magnetism 2	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 4115 or PHYS 5116	Quantum Mechanics Complex Networks and Applications	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

### Electives

Code	Title	Hours
<b>Khoury Elective</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete four semester hours of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
<b>Physics Elective</b>		
Complete one course not already required in the following range:		4
PHYS 3000 to PHYS 5999		

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Additional Mathematics Requirements</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4

### Integrative Course and Capstone

Code	Title	Hours
PHYS 5318	Principles of Experimental Physics	4

### Required General Electives

Code	Title	Hours
Complete 16 semester hours of general electives.		16

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

132 total semester hours required

### Plan of Study

Sample Patterns:

### Five Years, Three Co-ops in Summer 2/Fall

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0
CS 1800 and CS 1802	5	MATH 1342	4		
CS 2500 and CS 2501	5	PHYS 1165 and PHYS 1166 and PHYS 1167	5		
PHYS 1161 and PHYS 1162 and PHYS 1163	5	ENGW 1111	4		
MATH 1341	4				
				20                      18                      0                      0	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 3500 and CS 3501	5	MATH 2341	4	CS 3200	4
PHYS 2303	4	PHYS 3601	4	MATH 3081	4
DS 3000	4	DS 4200	4		
MATH 2321	4	General elective	4		
				CS 1210                      1	
				17                      17                      8                      0	
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		PHYS 3602	4	PHYS 3600	4
		PHYS 4305	4	PHYS 3603	4
		DS 4300	4		
		General elective	4		
				0                      16                      8                      0	
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		DS 4400	4	Vacation	
		PHYS 4115 or 5116	4		
		ENGW 3307	4		
		Khoury elective	4		
				0                      16                      0                      0	
Year 5					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		PHYS 5318	4		
		PHYS XXXX advanced physics elective	4		
		General elective	4		

General elective	4
0	16

Total Hours: 136

### Four Years, Two Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 MATH 2331	4 MATH 2341	4
CS 1800 and CS 1802	5 MATH 1342	4 General elective	4 General elective	4
CS 2500 and CS 2501	5 PHYS 1165 and PHYS 1166 and PHYS 1167	5		
PHYS 1161 and PHYS 1162 and PHYS 1163	5 ENGW 1111	4		
MATH 1341	4			
	20	18	8	8

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 1210	1 CS 3200	4 Co-op	0
DS 3000	4 DS 4200	4 MATH 3081	4	
PHYS 2303	4 ENGW 3307	4		
General elective	4 PHYS 3601	4		
	General elective	4		
	17	17	8	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHYS 3602	4 PHYS 3600	4 Co-op	
	PHYS 4305	4 PHYS 3603	4	
	DS 4300	4		
	Khoury elective	4		
	0	16	8	0

#### Year 4

Fall	Hours Spring	Hours
Co-op	DS 4400	4
	PHYS 5318	4
	PHYS 4115 or 5116	4
	PHYS XXXX advanced physics elective	4
	0	16

Total Hours: 136

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

### Data Science and Psychology, BS

The psychology and data science combined major offers an integrative curriculum in the study of mind, brain, and behavior and in the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. The study of psychology draws upon empirical research with both humans and animals to investigate and seek explanations for the behavior and mental life of individuals and develop assessment tools and treatment options for addressing clinical problems. In this program, students have an opportunity to augment such knowledge with skills in big data analysis, data science, and data analytics.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
or PSYC 1000	Psychology at Northeastern	
CS 1210	Professional Development for Khoury Co-op	1
or EESC 2000	Professional Development for Co-op	
<b>Programming Sequence Pathways</b>		
Choose one of two options		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	

CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

**Computer Science Required Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
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CS 3200	Database Design	4
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**Data Science Foundations**

DS 3000	Foundations of Data Science	4
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DS 4200	Information Presentation and Visualization	4
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DS 4300	Large-Scale Information Storage and Retrieval	4
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DS 4400	Machine Learning and Data Mining 1	4
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DS 4420	Machine Learning and Data Mining 2	4
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**Khoury Elective**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Computer Science Writing Requirements**

Code	Title	Hours
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**College Writing**

ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one of the following: 4

ENGW 3302 Advanced Writing in the Technical Professions

ENGW 3307 Advanced Writing in the Sciences

ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

**Psychology Requirements**

Code	Title	Hours
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**Foundations of Psychology**

PSYC 1101	Foundations of Psychology	4
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**Statistics in Psychological Research**

PSYC 2320	Statistics in Psychological Research	4
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**Mathematics Foundations**

MATH 1341	Calculus 1 for Science and Engineering	4
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**Personality/Social Basis of Behavior**

Complete two of the following: 8

PSYC 3400 Personality

PSYC 3402	Social Psychology
PSYC 3404	Developmental Psychology
PSYC 3406	Abnormal Psychology

**Cognitive/Biological Basis of Behavior**

Complete two of the following: 8

PSYC 3450 Learning and Motivation  
or PSYC 3451 Learning Principles and Behavior Analysis

PSYC 3452 Sensation and Perception

PSYC 3458 Biological Psychology

PSYC 3464 Psychology of Language

PSYC 3466 Cognition

**Psychology Laboratory**

Complete one of the following: 4

PSYC 4600 Laboratory in Research Design

PSYC 4606 Laboratory in Biological Psychology

PSYC 4610 Laboratory in Psycholinguistics

PSYC 4612 Laboratory in Cognition

PSYC 4614 Laboratory in Social Psychology

PSYC 4616 Laboratory in Personality

PSYC 4622 Laboratory in Sensation and Perception

PSYC 4624 Laboratory in Affective Science

PSYC 4626 Laboratory in Life-Span Emotional  
Development

PSYC 4628 Laboratory in Developmental  
Psychology

**Psychology Seminar**

Complete one of the following: 4

PSYC 4654 Seminar in Behavioral Modification

PSYC 4656 Seminar in Biological Psychology

PSYC 4658 Seminar in Psycholinguistics

PSYC 4660 Seminar in Cognition

PSYC 4662 Seminar in Personality

PSYC 4664 Seminar in Social Psychology

PSYC 4666 Seminar in Clinical Psychology

PSYC 4668 Seminar in Sensation and Perception

PSYC 4674 Seminar in Cognitive Neuroscience

PSYC 4676 Seminar in Developmental Psychology

PSYC 4678 Seminar in Social and Affective  
Neuroscience

**Psychology Electives**

Complete two of the following: 8

PSYC 2370 to PSYC 5999

**Integrative Requirement**

Code	Title	Hours
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**Integrative Course**

Complete one of the following: 4

PSYC 4540 Quantitative Topics in Psychology and  
Behavioral Neuroscience

IS 4300 Human Computer Interaction

**Required General Electives**

Code	Title	Hours
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Complete 28 credits of general electives. 28

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Psychology GPA Requirement

Minimum 2.000 GPA required in all PSYC courses

### Program Requirement

130 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Five Years, Three Co-ops

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 PSYC 2320	4		
CS 2500 and CS 2501	5 Personality/ social basis of behavior 1	4		
PSYC 1101	4 General elective	4		
ENGW 1111	4			
	19	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 DS 3000	4 Vacation	Co-op	
MATH 1341	4 CS 1210	1		
Cognitive/ biological basis of behavior 1	4 Cognitive/ biological basis of behavior 2	4		
General elective	4 Personality/ social basis of behavior 2	4		
	General elective	4		
	17	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4200	4 General elective	4 Co-op	
	CS 3200	4 PSYC elective	4	
	PSYC laboratory	4		
	General elective	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4300	4 ENGW 3302	4 Co-op	
	DS 4400	4 PSYC elective	4	
	General elective	4		

	PSYC seminar	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	DS 4420	4		
	Integrative requirement	4		
	Khoury Elective	4		
	General elective	4		
	0	16		

Total Hours: 134

#### Four Years, Two Co-ops

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 General elective	4
CS 1800 and CS 1802	5 PSYC 2320	4 General elective	4 General elective	4
CS 2500 and CS 2501	5 Personality/ social basis of behavior 1	4		
PSYC 1101	4 General elective	4		
ENGW 1111	4			
	19	17	9	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3200	4 CS 1210	1 PSYC elective	4 Co-op	
DS 3000	4 DS 4200	4 General elective	4	
Cognitive/ biological basis of behavior 1	4 Personality/ social basis of behavior 2	4		
MATH 1341	4 Cognitive/ biological basis of behavior 2	4		
	General elective	4		
	16	17	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4300	4 PSYC elective	4 Co-op	
	DS 4400	4 ENGW 3302	4	
	PSYC laboratory	4		
	General elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	DS 4420	4
	Khoury elective	4
	PSYC seminar	4
	Integrative requirement	4
	0	16

Total Hours: 134

### Accelerated Bachelor/Graduate Degree Programs

Khoury College of Computer Sciences offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

### College of Engineering

Website (<http://www.coe.neu.edu>)

Gregory D. Abowd, PhD, Dean

Susan Freeman, PhD, Associate Dean for Undergraduate Education

Richard Harris, MS, Assistant Dean for Academic Scholarship, Mentoring, and Outreach; Director of Multicultural Engineering

Candace A. Martel, MEd, Assistant Dean; Director of Undergraduate Academic Advising

Rachelle Reisberg, MS, Assistant Dean for Engineering Enrollment and Retention; Director of Women in Engineering

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The mission of the College of Engineering is to provide a teaching, learning, and research environment that results in the highest-quality education for our students. Consistent with this goal, while providing a practice-oriented, experiential, and interdisciplinary program, the College of Engineering seeks to prepare students to contribute to the accumulation and application of technical knowledge. The college further seeks to help students master the fundamental mathematical and scientific principles underlying a particular branch of engineering; develop and demonstrate competence in analysis and design appropriate to an engineering specialization; reason clearly and communicate effectively; and recognize the need to continue professional development.

Through laboratory exercises, senior design projects, professional association activities, cooperative work assignments, and other experiential opportunities, students put theory into practice and clarify their professional goals.

The college offers a Bachelor of Science degree with specializations in bioengineering, chemical engineering, civil engineering, computer engineering, electrical engineering, environmental engineering, industrial engineering, and mechanical engineering. There are also a number of combined majors offered within the college and between the College of Engineering and other colleges. Combined majors are continually being developed in response to student interest. In addition, students can pursue Accelerated Master's program offerings.

Four-year and five-year options are available to complete the Bachelor of Science degree program. The four-year option includes 12 months of cooperative education experience and the five-year option includes 18 months of cooperative education work experience. Four-year programs are available for all majors and combined majors in the college.

The college encourages students to study the arts, sciences, business, and other areas outside engineering to allow for an increased awareness of the social, economic, political, aesthetic, and philosophical influences that shape the world in which graduates will practice their professions. Students may complete a minor in different areas such as business, computer science, biomedical engineering, math, or music. In many cases, the minor can be completed without course overloads.

The college also offers an array of international educational experiences, including a number of study-abroad options, international cooperative educational experiences, and Dialogue of Civilizations classes (which offer a four- to six-week opportunity to study engineering or a related field in the context of an international experience).

In addition to a full array of university services, specialized advising and other support services (including tutoring) are provided. Students in the University Honors Program may participate in honors sections of a number of courses. Students are encouraged to become involved in a broad range of student organizations offered within the college as an enriching addition to academic studies and co-op experience.

### Academic Standards

#### ACADEMIC PROGRESSION STANDARDS

In addition to meeting university progression standards, it is expected that full-time engineering students enroll in four courses with appropriate labs and recitations and successfully complete at least 12 semester hours each academic semester with an acceptable GPA as noted below. Any exceptions to the course load requirement must be approved in writing by the student's academic advisor prior to the start of each semester.

#### GPA REQUIREMENTS FOR GRADUATION

A minimum cumulative GPA requirement of 2.000 in major (department) courses and a minimum cumulative GPA requirement of 2.000 overall are required for graduation.

#### CRITERIA FOR ACADEMIC PROBATION

Full-time students in the College of Engineering will be placed on academic probation effective for the following academic semester for any of the reasons noted below:

##### *First-year Students:*

- Not maintaining a semester GPA of at least a 1.800 at the end of each full-term semester (fall, spring) of the first-year curriculum
- Not earning at least 12 semester hours at the end of each semester of the first-year curriculum
- Not earning at least 24 semester hours at the end of the two full-term semesters (fall, spring) of the first-year curriculum

**Upperclass and Transfer Students:**

- Not earning at least 12 semester hours in the academic full-term semester (fall, spring) just completed
- Not maintaining an overall cumulative GPA of at least 2.000 at the end of each full-term academic semester (fall, spring)
- Not maintaining a GPA of at least a 2.000 in the major at the end of the fourth academic full-term semester of the curriculum and at the end of each full-term academic semester (fall, spring) thereafter
- Accumulating three outstanding course deficiencies (grades of F, I, W, NE, U, or missing grades)
- Earning a full-term semester (fall, spring) GPA of 1.800 or lower
- Not following a program of study approved by the student's academic advisor

A notation of the academic probation action will appear on the internal record but not on the permanent transcript.

**CRITERIA FOR ACADEMIC DISMISSAL**

Students who have below a 1.000 GPA in any academic term following their first semester or cumulatively may be dismissed, regardless of their prior academic status, at the discretion of the college.

Full-time students on academic probation in the College of Engineering are eligible for academic dismissal from the university for any of the reasons noted below:

- Earning a GPA below 1.800 in a current term (fall, spring, summer, summer 1, or summer 2)
- Completing fewer than 12 semester hours in a full-term (fall, spring) academic semester
- Not following a program of study approved by the student's academic advisor
- Remaining on academic probation after two full-term (fall, spring) academic semesters

Notation of this academic dismissal action will appear on the permanent transcript.

**PASS/FAIL COURSEWORK**

Students may elect to take courses on a pass/fail basis in accordance with university policy. A maximum of 8 semester hours may be taken pass/fail toward fulfillment of degree requirements in the College of Engineering. A maximum of 4 semester hours of pass/fail coursework is allowed per semester. Only general electives taken outside the College of Engineering may be taken on a pass/fail grading basis.

**GRADUATION REQUIREMENTS**

The college reserves the right to amend programs, courses, and degree requirements to fulfill its educational responsibility to respond to relevant changes in the field.

Students must complete all of the requirements in the degree program in which they are candidates. Degree requirements are based upon the year of graduation, determined by the date of entry or reentry into the College of Engineering. Degree requirements and the year of graduation for a degree candidate who fails to make normal academic progress will be subject to review and possible change.

**PROGRESSION TOWARD FULFILLMENT OF DEGREE REQUIREMENTS**

Students are expected to develop and follow a program of study outlining scheduled coursework to complete degree requirements. If changes to the year of graduation are to be made after completion of the third year of study in the major program curriculum, revised plans should be submitted to an academic advisor for review and approval. Students pursuing a

minor course of study should declare their minor no later than the third year.

**General Engineering and First-Year Engineering**

General engineering encompasses the common curriculum for several interdisciplinary initiatives and programs for engineering students: the first-year engineering program, the entrepreneurial engineering minor, and some of the college's Dialogues of Civilizations experience courses.

**First-Year Engineering Program**

With a distinct focus on first-year engineering education, the first-year engineering program at Northeastern University prepares undergraduate engineers with the fundamental building blocks needed for all College of Engineering majors. Emphasizing hands-on, integrated design, our program leverages a state-of-the-art makerspace to provide our students with an immersive experience into the College of Engineering community. Through the lens of the engineering design process, the program weaves engineering ethics and research into designs created with CAD and software development programs used by leading industry engineering firms. Student designs are brought to life through our makerspace's extensive fabrication tools with support from our upperclass engineering student mentors. Dedicated first-year teaching faculty with expertise in engineering pedagogical research and a diverse array of engineering backgrounds focus on creating and evolving teaching practices to ensure that the program scaffolds students in an authentic and fully integrated manner to excel in the rest of their academic scholarship.

**Mission of the Department**

The mission for the first-year engineering program is to inspire our students in their pursuit of an engineering education by fostering a diverse and inclusive learning community centered around project-based, experiential learning.

**Program Values**

To accomplish our mission, we aim to:

- Provide state-of-the-art engineering education informed by best practices in *industry* and *pedagogical research*
- Introduce the fundamentals of problem solving while cultivating *systems thinking*
- Present engineering problems with *authentic complexities* that promote value-sensitive design and social and environmental justice
- Facilitate a *hands-on and teamed* learning experience through access of modern design and fabrication tools in our continually evolving makerspace
- Provide our students with the skills needed to function as independent, *lifelong learners*

**Interdisciplinary Minors**

- Entrepreneurial Engineering, Minor (p. 430)
- Design and Innovation in Engineering, Minor (p. 431)
- Materials Science and Engineering, Minor (p. 432)
- Sustainable Energy Systems, Minor (p. 433)

**Entrepreneurial Engineering, Minor**

The entrepreneurial engineering minor is designed for the technology-minded entrepreneur who seeks to understand disciplinary fundamentals,

assess market needs, create technologies, and determine how to manufacture solutions sustainably and economically. The course requirements for the minor are designed to incorporate both engineering elements (product development and prototyping) and creative elements (product design), along with market and societal considerations (customer discovery and needs assessment). The elective option provides an opportunity to specialize in one of three areas: manufacturing, design, or venture creation. Versions of this minor are available for both engineering and nonengineering majors. Sign up for the minor by contacting your academic advisor.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Core Courses

Code	Title	Hours
<b>For Undergraduates in the College of Engineering</b>		
GE 5010	Customer-Driven Technical Innovation for Engineers	4
GE 5020	Engineering Product Design Methodology	4
GE 5030	Iterative Product Prototyping for Engineers	4
GE 5100	Product Development for Engineers	4
<b>For Undergraduates outside the College of Engineering</b>		
GE 1110	Engineering Design	4
Complete three of the following:		
GE 5010	Customer-Driven Technical Innovation for Engineers	4
GE 5020	Engineering Product Design Methodology	4
GE 5030	Iterative Product Prototyping for Engineers	4
GE 5100	Product Development for Engineers	4

### Elective

Code	Title	Hours
Complete one of the following:		
<i>Venture Creation</i>		
ENTR 2303	Marketing Strategies for Startups	
ENTR 3305	Business Model Innovation for Entrepreneurs	
ENTR 3306	Global Entrepreneurship	
ENTR 3330	Lean Design and Rapid Prototyping	
ENTR 4501	Advanced Studies in Entrepreneurial Startups	
ENTR 4510	Management Consulting Abroad	
<i>Design</i>		
ARTE 3901	Art and Design Special Topics	
ARTF 1122 and ARTF 1123	Color and Composition and Color and Composition Tools	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTG 1250	Design Process Context and Systems	
ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

<i>Manufacturing</i>	
IE 2310	Introduction to Industrial Engineering
IE 4512	Engineering Economy
IE 4525	Logistics and Supply Chain Management
IE 4530	Manufacturing Systems and Techniques

### GPA Requirement

2.000 GPA required in the minor

## Design and Innovation in Engineering, Minor

The design and innovation in engineering minor is designed for nonengineering undergraduate students who wish to explore and develop working solutions as an engineer to the National Academy of Engineering Grand Challenges of the 21st century. The course requirements for the minor are designed to expose the student to the engineering elements necessary to solve the important problems facing society today and include value-sensitive design as well as the ethical and professional obligations of an engineer. The elective options offer a high degree of flexibility and exposure to the engineering design process, CAD, programming, micro-controllers-based projects, and mathematical computation. The aforementioned skills will be used for making interactive open-ended projects that address one of the NAE Grand Challenges. This provides more depth within the student's discipline and improves future career opportunities. Students have an opportunity to model and analyze designs, applying many techniques engineers utilize to create and test designs toward implementation. The student, upon successful completion of the minor, will be able to apply value-sensitive design principles to determine a societal need and propose and build or develop a solution. Students apply teamwork, project management, CAD, and algorithmic thinking to the conception of a particular solution and deliver effective team presentations on engineering projects and topics.

### Minor Requirements

*Note:* This minor is for nonengineering majors.

### Required Courses

*Note:* For students who were previously in the College of Engineering, Cornerstone of Engineering 1 (GE 1501) and Cornerstone of Engineering 2 (GE 1502) may be substituted for Engineering Design (GE 1110) and Engineering Problem Solving and Computation (GE 1111).

Code	Title	Hours
GE 1110	Engineering Design	4
GE 1111	Engineering Problem Solving and Computation	4
GE 2500	Design Analysis and Innovation	4

### Elective

Code	Title	Hours
Complete one of the following:		
ARTG 1250	Design Process Context and Systems	
ARTG 3250	Physical Computing	
ARTG 3462	Experience Design 1	
EECE 2160	Embedded Design: Enabling Robotics	
ENTR 2301	Innovation!	
GE 1201	Alternative Energy Technologies Abroad	



GE 2010	Introduction to Customer-Driven Technical Innovation: Silicon Valley
GE 2030	Introduction to Product Prototyping: Silicon Valley
GE 2300	Engineering Structure and Function: Principles of Design in Nature
GE 2361	Mathematical Methods for Engineers
GE 3300	Energy Systems: Science, Technology, and Sustainability
GE 4993	Independent Study
IE 3412	Engineering Probability and Statistics
IE 2310	Introduction to Industrial Engineering
IE 4510	Simulation Modeling and Analysis

### GPA Requirement

Minimum 2.000 GPA required in the minor

### Credit Requirement

16 hours required

## Materials Science and Engineering, Minor

### Materials Science and Engineering

The study of materials science and engineering has spurred breakthroughs in applications ranging from artificial limbs and organs, to space travel vehicles, to personal MP3 players. For example, the discovery of buckyballs and carbon nanotubes has led to the development of an unprecedented reduction in size of prototype electronic components and points the way to tomorrow's electronic technologies. Porous nanostructures of biocompatible materials are studied for targeted drug delivery within the body. The integration of polymers and semiconductors is used to create efficient, usable solar cells to reduce our dependence on fossil fuels. There are many more examples of both existing technologies and current research areas involving materials science and engineering that impact everyday life both today and in the future.

The minor in materials science and engineering is open to all students of the College of Engineering whose science and technical interests involve the design, processing, and optimization of engineering materials. Since the materials interests may vary across the engineering disciplines, the minor is composed of an interdisciplinary selection of courses that offer a high degree of flexibility to the student. The fundamental goals of the program are to offer the student a broad interdisciplinary program that includes a basic background in the relevant aspects of materials science and the engineering applications of materials. The objectives are to serve the needs of the chemical, civil, electrical, and mechanical engineering departments in providing a vehicle to expose students to materials science and engineering. Particular focus areas include electronic materials and processing for device applications; strength, wear, and corrosion-resistant coatings; molecular-level design of thin films and nanostructures; polymers and biomedical applications; and steels, concretes, and space-based structures.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Course

Code	Title	Hours
ME 2340	Introduction to Material Science	4

### Electives

Code	Title	Hours
Complete three courses from the following disciplines:		11-13

Bioengineering		
BIOE 5820	Biomaterials	

Chemical Engineering		
CHME 5105	Materials Characterization Techniques	
CHME 5160	Drug Delivery: Engineering Analysis	
CHME 5631	Biomaterials Principles and Applications	
CHME 5632	Advanced Topics in Biomaterials	
CHME 5683	Introduction to Polymer Science	

Civil and Environmental Engineering		
CIVE 2260	Materials for the Built Environment and Lab for CIVE 2260	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	

Electrical and Computer Engineering		
EECE 3392	Electronic Materials	
EECE 5606	Micro- and Nanofabrication	
EECE 7296	Electronic Materials (With Instructor Permission)	

Materials Engineering		
MATL 5380	Particulate Materials Processing	
MATL 6250	Soft Matter (With Instructor permission)	
MATL 6270	Principles, Devices, and Materials for Energy Storage and Energy Harvesting (With Instructor permission)	
MATL 6285	Structure, Properties, and Processing of Polymeric Materials (With Instructor Permission)	

Mechanical and Industrial Engineering		
ME 4630	Ceramic Science and Engineering	
ME 4640	Mechanical Behavior and Processing of Materials	
ME 5600	Materials Processing and Process Selection	
ME 5620	Fundamentals of Advanced Materials	
ME 5645	Environmental Issues in Manufacturing and Product Use	

Engineering Interdisciplinary		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	

Chemistry and Chemical Biology		
CHEM 3501	Inorganic Chemistry	
CHEM 5651	Materials Chemistry of Renewable Energy	

Or any advisor-approved course or directed study

## Capstone Design

Code	Title	Hours
Complete one of the following major capstone requirements: <sup>1</sup>		4-5
BIOE 4792	Capstone Design 2	
CHME 4703	Capstone Design 2: Chemical Process Design	
CIVE 4765	Senior Design Project—Environmental	
CIVE 4767	Senior Design Project—Structural	
CIVE 4768	Senior Design Project—Transportation	
EECE 4792	Electrical and Computer Engineering Capstone 2	
MEIE 4702	Capstone Design 2	

## GPA Requirement

2.000 GPA required in the minor

<sup>1</sup> Students may complete 4 semester hours of elective coursework in place of the capstone design project (if major does not have a capstone design project requirement).

## Sustainable Energy Systems, Minor

The sustainable energy systems minor is an interdisciplinary selection of courses designed to offer flexibility and exposure to the principles and applications of sustainable energy systems that are needed to meet the challenges of the world's growing energy needs. Students have an opportunity to learn technical skills, analysis techniques, design strategies, and principles of economics and energy policy in topic areas including traditional (fossil fuel), alternative, renewable, and sustainable energy sources and energy system applications.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* Courses required to fulfill a major requirement may not be used to fulfill minor requirements. However, one engineering course from this minor with course number 4000 to 5999 in the student's major can be used as a technical elective or advanced engineering elective to fulfill the student's major requirements. See curriculum below for details.

## Core Energy Science, Technology Courses

Code	Title	Hours
Complete two of the following:		8
CHME 2320	Chemical Engineering Thermodynamics 1	
or ME 2380	Thermodynamics	
GE 3300	Energy Systems: Science, Technology, and Sustainability	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
ENSY 5000	Fundamentals of Energy System Integration	

## Environmental/Economics/Policy Courses

Code	Title	Hours
Complete one of the following:		4
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
ECON 3423	Environmental Economics	
ECON 3425	Energy Economics	
ENVR 2515	Sustainable Development	
FINA 2720	Sustainability in the Business Environment	
ME 5645	Environmental Issues in Manufacturing and Product Use	

## Electives

Code	Title	Hours
Complete two of the following:		8
CHME 2308	Conservation Principles in Chemical Engineering	
CHME 2320	Chemical Engineering Thermodynamics 1	
CHME 5630	Biochemical Engineering	
CHME 5699	Special Topics in Chemical Engineering	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
EECE 5680	Electric Drives	
EECE 5682	Power Systems Analysis 1	
EECE 5688	Analysis of Unbalanced Power Grids	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
ENSY 5000	Fundamentals of Energy System Integration	
GE 3300	Energy Systems: Science, Technology, and Sustainability	
IE 4512	Engineering Economy (IE students may not count this course toward a sustainable energy minor if used to fulfill a major requirement.)	
ME 2380	Thermodynamics	
ME 5645	Environmental Issues in Manufacturing and Product Use	
ME 5685	Solar Thermal Engineering	
SBSY 5100	Sustainable Design and Technologies in Construction	
SBSY 5200	Sustainable Engineering Systems for Buildings	

## GPA Requirement

2.000 GPA required in the minor

Details about double-counting restrictions between this minor and Engineering major requirements are as follows:

- Civil engineering, environmental engineering and environmental engineering/health science students may not count Energy Systems: Science, Technology, and Sustainability (GE 3300) toward the

sustainable energy systems minor if this course is used to fulfill major requirements.

- Chemical engineering students and mechanical engineering students may not count Chemical Engineering Thermodynamics 1 (CHME 2320) or Thermodynamics (ME 2380) toward the sustainable energy systems minor since these courses are required in their respective majors.
- Chemical engineering students may not count Conservation Principles in Chemical Engineering (CHME 2308) toward the sustainable energy systems minor since this course is required in their major.
- Industrial engineering students may not count Engineering Economy (IE 4512) toward the sustainable energy systems minor since this course is required in their major.

## Bioengineering

Website (<http://www.bioe.neu.edu>)

### Lee Makowski, PhD

Professor and Chair

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The Department of Bioengineering offers students a broad education built on fundamentals in science, mathematics, and engineering, with a focus on the biological applications of engineering. The program is designed to provide a rigorous engineering training along with a comprehensive understanding of the biological constraints intrinsic to designing artificial systems to interface with, augment, replace, repair, or monitor living systems. These constraints depend on the properties of the biological system involved and the functionality that is being created. The living system may be the human body; an ecosystem; or, more broadly, a bioreactor, tissue culture system, or any system with living components. The presence of naturally occurring biological tissue places special constraints on the design and implementation of artificial constructs and their interface to living systems. Bioengineers are engineers with comprehensive understanding of the engineering requirements intrinsic to working within a biological context.

Bioengineering is a relatively new field driven by the recognition that engineering of biological systems or systems that interface with living systems requires a multidisciplinary approach that takes into account the mechanical, electrical, chemical, and materials properties of the biological system. With that in mind, the bioengineering program has been designed to provide a rigorous engineering education that endows a broad understanding of the quantitative analysis of biological systems and a deep expertise in one of four areas of bioengineering. The curriculum is structured around a core of six courses that quantitatively analyze biological systems from multiple points of view. The core provides the fundamentals of quantitative physiology, electrical engineering in the context of excitable tissues; basics of mechanical engineering in the context of the musculoskeletal system; and thermodynamics, heat transfer, and fluids mechanics within the context of physiological systems. On completion of the core, students choose one of three concentrations (cell and tissue engineering, biomechanics, or biomedical devices and bioimaging), which provides the opportunity to develop a deep level of expertise in an important area of bioengineering. The curriculum culminates with a two-semester capstone course to provide experience in design and implementation of a novel bioengineering project.

## Mission of the Department

The program is committed to providing a multidisciplinary education, making connections from the classroom and laboratory to research, co-op, and cocurricular experiences. The curriculum provides fundamentals in mathematics, physical sciences, and engineering science; laboratory experiences; as well as an emphasis on the special considerations intrinsic to design within a biological context. Through the university's general educational requirements, students gain awareness of the impact of engineering decisions in a broader societal and ethical context. The department encourages professional development through active participation and leadership in student organizations, societies, and departmental activities. As a result, the bioengineering program is designed to prepare students for success in industrial careers; graduate programs; or professional medical, law, and business schools.

## Other Programmatic Features

By participating in our cooperative education program, our graduates will have an opportunity to explore what career objectives fit their own skills and interests. The goal of this component of our program is to offer students valuable professional experience and contacts that will help get them started in their professional career, as well as to develop career management skills. The co-op program parallels the academic program in level of responsibility and sophistication.

The department also offers significant research opportunities throughout all fields of bioengineering, including participating in research centers based in our department and college, as well as new interdisciplinary graduate and professional master's programs.

The bioengineering curriculum is an innovative plan that is continuously and carefully assessed and evaluated to ensure that graduates of the program are fully prepared for success as professional bioengineers and are prepared for graduate or professional school.

## Programs

### Bachelor of Science in Bioengineering (BSBioE)

- Bioengineering (p. 434)
- Bioengineering and Biochemistry (p. 439)

### Bachelor of Science in Chemical Engineering (BSChE)

- Chemical Engineering and Bioengineering (p. 443)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Bioengineering, BSBioE

Bioengineering is engineering in a biological context such as the human body, an ecosystem, or a bioreactor. In every case, the interface between engineered and biological systems places unique constraints on the design and implementation of devices, instruments, or implants. These depend on the properties of the biological system involved and the functionality that is being created.

The interface of engineering and medicine as embodied in bioengineering will be one of the most exciting endeavors and greatest adventures of the 21st century. Job opportunities are expected to expand dramatically with a focus on development of entirely new classes of products, instrumentation, and implants. The impact to human health will be extraordinary.

Bioengineering is intrinsically multidisciplinary and it is essential that students learn the languages used by multidisciplinary teams. To that

end, our curriculum is structured around a core of six courses that analyze biological systems from every possible quantitative point of view. On the completion of the core, students choose one of three concentrations, which provides the opportunity to develop a deep level of expertise in a specific area of bioengineering.

Bioengineering students will have unique opportunities in the classroom, research labs, and experiential learning. The projects that they may be able to contribute to include bio-bandages that monitor bacterial growth or that help damaged ligaments heal faster; sheets of cells folded like origami to form a working kidney; and new materials that—like a leaf in the sun—automatically sense and adapt to changes in the environment.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

NUPath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Engineering</b>		
BIOE 2355	Quantitative Physiology for Bioengineers	4
BIOE 2365 and BIOE 2366	Bioengineering Measurement, Experimentation, and Statistics and Lab for BIOE 2365	5
BIOE 2350	Biomechanics	4
BIOE 3210	Bioelectricity	4
BIOE 3310	Transport and Fluids for Bioengineers	4
BIOE 3380	Biomolecular Dynamics and Control	4
<b>Bioengineering Capstone</b>		
BIOE 4790	Capstone Design 1	4
BIOE 4792	Capstone Design 2	4
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

## Concentration

Complete one concentration.

- Biomechanics (p. 435)
- Biomedical Devices and Bioimaging (p. 435)

- Cell and Tissue Engineering (p. 436)
- Computational Bioengineering (p. 436)

## CONCENTRATION IN BIOMECHANICS

Code	Title	Hours
<b>Required Courses</b>		
Complete three of the following courses:		12
BIOE 5630	Physiological Fluid Mechanics	
BIOE 5640	Computational Biomechanics	
BIOE 5650	Multiscale Biomechanics	
ME 5665	Musculoskeletal Biomechanics	
<b>Elective Courses</b>		
Complete two of the following. Any course on the required course list not used towards the core requirement may also be taken.		8
BIOE 4991	Research	
BIOE 5060	Special Topics in Bioengineering	
BIOE 5115	Dynamical Systems in Biological Engineering	
BIOE 5440	The Cell as a Machine	
BIOE 5656	Fields, Forces, and Flows in Biological Systems	
BIOE 5820	Biomaterials	
ME 4508	Mechanical Engineering Computation and Design	
ME 4555	System Analysis and Control	

## CONCENTRATION IN BIOMEDICAL DEVICES AND BIOIMAGING

Code	Title	Hours
<b>Required Courses</b>		
Complete the following:		
BIOE 5800	Systems, Signals, and Controls for Bioengineers	4
Complete two of the following:		8
BIOE 5235	Biomedical Imaging	
BIOE 5250	Design, Manufacture, and Evaluation of Medical Devices	
BIOE 5810	Design of Biomedical Instrumentation	
<b>Elective Courses</b>		
Complete two of the following. Any course on the required course list not used towards the core requirement may also be taken.		8
BIOE 4991	Research	
BIOE 5060	Special Topics in Bioengineering	
BIOE 5115	Dynamical Systems in Biological Engineering	
BIOE 5820	Biomaterials	
BIOE 5850	Design of Implants	
BIOL 5581	Biological Imaging	
EECE 2530	Fundamentals of Electromagnetics	
EECE 2750	Enabling Engineering	
EECE 3468	Noise and Stochastic Processes	
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	
ME 4508	Mechanical Engineering Computation and Design	

**CONCENTRATION IN CELL AND TISSUE ENGINEERING**

Code	Title	Hours
<b>Required Courses</b>		
BIOE 5410	Molecular Bioengineering	4
BIOE 5420	Cellular Engineering	4
BIOE 5430	Principles and Applications of Tissue Engineering	4
<b>Elective Courses</b>		
Complete two of the following:		8
BIOE 4991	Research	
BIOE 5060	Special Topics in Bioengineering	
BIOE 5115	Dynamical Systems in Biological Engineering	
BIOE 5440	The Cell as a Machine	
BIOE 5450	Stem Cell Engineering	
BIOE 5650	Multiscale Biomechanics	
BIOE 5656	Fields, Forces, and Flows in Biological Systems	
BIOE 5820	Biomaterials	
CHME 5630	Biochemical Engineering	

**CONCENTRATION IN COMPUTATIONAL BIOENGINEERING**

Code	Title	Hours
<b>Required Courses</b>		
BIOE 5115	Dynamical Systems in Biological Engineering	4
BIOE 5710	Experimental Systems and Synthetic Bioengineering	4
BIOE 5720	Physical Bioengineering	4
<b>Elective Courses</b>		
Complete two of the following courses:		8
BIOE 5440	The Cell as a Machine	
BIOE 5510	Bioengineering Products/Technology Commercialization	
BIOE 5640	Computational Biomechanics	
BIOE 5750	Modeling and Inference in Bioengineering	
BIOE 5760	Method and Logic in Systems Biology and Bioengineering	
CHME 5630	Biochemical Engineering	

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
BIOL 1115 and BIOL 1116 or BIOL 1111 and BIOL 1112	General Biology 1 for Engineers and Lab for BIOL 1115 General Biology 1 and Lab for BIOL 1111	5
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1171 and PHYS 1172 and PHYS 1173 or PHYS 1151 and PHYS 1152 and PHYS 1153	Physics 1 for Bioscience and Bioengineering and Lab for PHYS 1171 and Interactive Learning Seminar for PHYS 1171 Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1175 and PHYS 1176 and PHYS 1177 or PHYS 1155 and PHYS 1156 and PHYS 1157	Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175 Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28SH of academic, nonremedial, nonrepetitive courses.		28

**Major GPA Requirement**

2.000 minimum required in BIOE courses

**Program Requirement**

135 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 BIOL 1115 or 1111 (ND)	4 General Elective	4
CHEM 1153	0 MATH 1342 (FQ)	4 BIOL 1116 or 1112	1 General Elective	4
ENGW 1111 (WF)	4 PHYS 1171 or 1151 (ND)	3 General Elective	4	
GE 1000	1 PHYS 1172 or 1152 (AD)	1		
GE 1501	4 PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	9	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2365 (AD, WI)	4 MATH 2321 (FQ)	4 BIOE 3310	4 Co-op	0
BIOE 2366	1 BIOE 2350	4 General Elective	4	
MATH 2341	4 BIOE 2355	4		
PHYS 1175 or 1155 (ND)	3 ENCP 2000	1		
PHYS 1176 or 1156 (AD)	1 General Elective	4		
PHYS 1177 or 1157	1			
General Elective	4			
	18	17	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 BIOE 3210	4 BIOE 4790 (EI, CE, WI)	4 Co-op	0
	BIOE 3380	4 ENGW 3302 or 3315 (WD)	4	
	ENCP 3000	1		
	BIOE Concentrator	4		
	BIOE Concentration	4		
	0	17	8	0

Year 4			
Fall	Hours Spring	Hours Summer 1	Hours
Co-op	0 BIOE 4792 (EI, CE, WI)	4	
	BIOE Concentrator	4	
	BIOE Concentration	4	

BIOE Concentrator	4	
	0	16 0

Total Hours: 135

#### Four Years, Two Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 BIOL 1115 or 1111 (ND)	4 General Elective	4
CHEM 1153	0 MATH 1342 (FQ)	4 BIOL 1116 or 1112	1 General Elective	4
ENGW 1111 (WF)	4 PHYS 1171 or 1151 (ND)	3 PHYS 1175 or 1155 (ND)	3	
GE 1000	1 PHYS 1172 or 1152 (AD)	1 PHYS 1176 or 1156 (AD)	1	
GE 1501	4 PHYS 1173 or 1153	1 PHYS 1177 or 1157	1	
MATH 1341 (FQ)	4 General Elective	4		
	17	17	10	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2355	4 Co-op	Co-op	BIOE 3210	4
BIOE 2365 (AD, WI)	4		General Elective	4
BIOE 2366	1			
ENCP 2000	1			
MATH 2321 (FQ)	4			
MATH 2341	4			
	18	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2350	4 Co-op	Co-op	BIOE 4790 (EI, CE, WI)	4
BIOE 3380	4		General Elective	4
BIOE Concentration	4			
General Elective	4			
	16	0	0	8

Year 4		
Fall	Hours Spring	Hours
BIOE 3310	4 ENGW 3302 or 3315 (WD)	4
BIOE 4792 (EI, CE, WI)	4 BIOE Concentrator	4
ENCP 3000	1 BIOE Concentration	4
BIOE Concentrator	4 BIOE Concentrator	4

General Elective	4	
	17	16

Total Hours: 135

### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1171 or 1151 (ND)	3		
GE 1000	1 PHYS 1172 or 1152 (AD)	1		
GE 1501	4 PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2365 (AD, WI)	4 BIOE 2350	4 Vacation	Co-op	
BIOE 2366	1 BIOE 2355	4		
BIOL 1115 or 1111 (ND)	4 ENCP 2000	1		
BIOL 1116 or 1112	1 MATH 2341	4		
MATH 2321 (FQ)	4 General Elective	4		
PHYS 1175 or 1155 (ND)	3			
PHYS 1176 or 1156 (AD)	1			
PHYS 1177 or 1157	1			
	19	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	BIOE 3210	4 BIOE 3310	4 Co-op	
	BIOE 3380	4 General Elective	4	
	ENGW 3302 or 3315 (WD)	4		
	BIOE Concentrator	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ENCP 3000	1 BIOE 4790 (EI, CE, WI)	4 Co-op	
	BIOE Concentrator	4 General Elective	4	
	BIOE Concentration	4		

	BIOE Concentrator	4		
	General Elective	4		
	0	17	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	BIOE 4792 (EI, CE, WI)	4
	BIOE Concentrator	4
	General Elective	4
	General Elective	4
	0	16

Total Hours: 135

### Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1171 or 1151 (ND)	3		
GE 1000	1 PHYS 1172 or 1152 (AD)	1		
GE 1501	4 PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2365 (AD, WI)	4 Co-op	Co-op	Vacation	
BIOE 2366	1			
BIOL 1115 or 1111 (ND)	4			
BIOL 1116 or 1112	1			
ENCP 2000	1			
MATH 2321 (FQ)	4			
PHYS 1175 or 1155 (ND)	3			
PHYS 1176 or 1156 (AD)	1			
PHYS 1177 or 1157	1			
	20	0	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2350	4 Co-op	Co-op	BIOE 3210	4

BIOE 2355	4		General Elective	4
MATH 2341	4			
General Elective	4			
	16	0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>
BIOE 3310	4	Co-op	Co-op	BIOE 4790 (EI, CE, WI)
BIOE 3380	4			General Elective
ENCP 3000	1			
ENGW 3302 or 3315 (WD)	4			
BIOE Concentration	4			
	17	0	0	8
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
BIOE 4792 (EI, CE, WI)	4	BIOE Concentration	4	
BIOE Concentrator	4	BIOE Concentrator	4	
BIOE Concentration	4	General Elective	4	
General Elective	4	General Elective	4	
	16	16		
Total Hours: 135				

## Bioengineering and Biochemistry, BSBioE

This combined major from the College of Engineering and College of Science serves students who wish to develop both a scientific and an engineering mindset to solve problems in bioengineering and biochemistry. The program includes fundamentals and electives in the science of biochemistry; a complete and rigorous bioengineering core; and a series of molecular, cellular, and tissue engineering courses that allow for synthesis of the two. The curriculum aligns well with the coursework required to apply to medical school or other clinical graduate programs and aims to provide the knowledge, skills, and perspective to pursue careers in academia or industry.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Engineering</b>		
BIOE 2350	Biomechanics	4
BIOE 2355	Quantitative Physiology for Bioengineers	4
BIOE 2365 and BIOE 2366	Bioengineering Measurement, Experimentation, and Statistics and Lab for BIOE 2365	5
BIOE 3210	Bioelectricity	4
BIOE 3310	Transport and Fluids for Bioengineers	4
BIOE 3380	Biomolecular Dynamics and Control	4
BIOE 5410	Molecular Bioengineering	4
BIOE 5420	Cellular Engineering	4
BIOE 5430	Principles and Applications of Tissue Engineering	4
<b>Bioengineering Capstone</b>		
BIOE 4790	Capstone Design 1	4
BIOE 4792	Capstone Design 2	4
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

## Mathematics/Science Requirement

Code	Title	Hours
<b>Required Mathematics/Science</b>		
BIOL 1115 and BIOL 1116 or BIOL 1111 and BIOL 1112	General Biology 1 for Engineers and Lab for BIOL 1115 General Biology 1 and Lab for BIOL 1111	5
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4



PHYS 1171 and PHYS 1172 and PHYS 1173	Physics 1 for Bioscience and Bioengineering and Lab for PHYS 1171 and Interactive Learning Seminar for PHYS 1171	5
or PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1175 and PHYS 1176 and PHYS 1177	Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175	5
or PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

**Advanced Biology Elective**

Complete one course in the following range: BIOL 2311 to BIOL 5999	4
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**Advanced Chemistry Elective**

Complete one course in the following range: CHEM 2310 to CHEM 5999	4
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**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:	1
GE 1501 Cornerstone of Engineering 1 <sup>1</sup>	

**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:	1
GE 1501 Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:	1
GE 1502 Cornerstone of Engineering 2 <sup>1</sup>	

**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 12 semester hours of academic, nonremedial, nonrepetitive courses.	12	

**Integrative Course**

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
BIOE 4790	Capstone Design 1	4

**Major GPA Requirement**

2.000 minimum required in BIOE courses

**Program Requirement**

139 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.**Plan of Study****Four Years, One Co-op in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 PHYS 1155 or 1175 (ND)	3 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 PHYS 1156 or 1176 (AD)	1	
ENGW 1111 (WF)	4 PHYS 1171 or 1151 (ND)	3 PHYS 1157 or 1177	1	
GE 1000	1 PHYS 1172 or 1152 (AD)	1 General elective	4	
GE 1501	4 PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4 General elective	4		
	17	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2355	4 BIOE 2350	4 Vacation	Vacation	
BIOE 2365 (AD, WI)	4 BIOL 2301 (ND)	4		
BIOE 2366	1 BIOL 2302 (AD)	1		
BIOL 1115 or 1111 (ND)	4 CHEM 2311	4		
BIOL 1116 or 1112	1 CHEM 2312	1		
MATH 2341	4 ENCP 2000	1		
	MATH 2321 (FQ)	4		
	18	19	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 3380	4 BIOE 3210	4 BIOE 3310	4 Co-op	
CHEM 2313	4 BIOE 5410, 5420, or 5430	4 BIOE 4790 (EI, CE, WI)	4	
CHEM 2314	1 BIOE 5420, 5410, or 5430	4		

ENGW 3302, 3307, or 3315 (WD)	4	BIOL 3611	4		
General elective	4	BIOL 3612 (WI)	1		
	17		17	8	0

**Year 4**

Fall	Hours Spring	Hours			
Co-op	BIOE 4792 (EI, CE, WI)	4			
	BIOE 5430, 5410, or 5420	4			
	ENCP 3000	1			
	Advanced BIOL elective	4			
	Advanced CHEM elective	4			
	0	17			

Total Hours: 139

**Four Years, One Co-op in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 PHYS 1155 or 1175 (ND)	3 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 PHYS 1156 or 1176 (AD)	1	
ENGW 1111 (WF)	4 PHYS 1171 or 1151 (ND)	3 PHYS 1157 or 1177	1	
GE 1000	1 PHYS 1172 or 1152 (AD)	1 General elective	4	
GE 1501	4 PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4 General elective	4		
	17	17	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2355	4 BIOE 2350	4 Vacation	Vacation	0
BIOE 2365 (AD, WI)	4 BIOL 2301 (ND)	4		
BIOE 2366	1 BIOL 2302 (AD)	1		
BIOL 1115 or 1111 (ND)	4 CHEM 2311	4		
BIOL 1116 or 1112	1 CHEM 2312	1		
ENCP 2000	1 MATH 2321 (FQ)	4		
MATH 2341	4			
	19	18	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 3310	4 Co-op	Co-op	BIOE 4790 (EI, CE, WI)	4

BIOE 3380	4	General elective	4
CHEM 2313	4		
CHEM 2314	1		
ENGW 3302, 3307, or 3315 (WD)	4		
	17	0	0

**Year 4**

Fall	Hours Spring	Hours		
BIOE 3210	4 BIOE 5420, 5410, or 5430	4		
BIOE 4792 (EI, CE, WI)	4 BIOE 5430, 5410, or 5420	4		
BIOE 5410, 5420, or 5430	4 Advanced BIOL elective	4		
BIOL 3611	4 Advanced CHEM elective	4		
BIOL 3612 (WI)	1			
ENCP 3000	1			
	18	16		

Total Hours: 139

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1171 or 1151 (ND)	3		
GE 1000	1 PHYS 1172 or 1152 (AD)	1		
GE 1501	4 PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4 General elective	4		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2365 (AD, WI)	4 BIOE 2355	4 Vacation	0 Co-op	0
BIOE 2366	1 BIOL 2301 (ND)	4		
BIOL 1115 or 1111 (ND)	4 BIOL 2302 (AD)	1		
BIOL 1116 or 1112	1 CHEM 2311	4		
MATH 2321 (FQ)	4 CHEM 2312	1		
PHYS 1175 or 1155 (ND)	3 ENCP 2000	1		

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PHYS 1176 or 1156 (AD)	1	MATH 2341	4		
PHYS 1177 or 1157	1				
	19		19	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 BIOE 2350	4 BIOE 3310	4 Co-op	0
	BIOE 3380	4 BIOL 3611	4	
	CHEM 2313	4 BIOL 3612 (WI)	1	
	CHEM 2314	1		
	ENGW 3302, 3307, or 3315 (WD)	4		
	0	17	9	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 BIOE 3210	4 BIOE 4790 (EI, CE, WI)	4 Co-op	0
	BIOE 5410, 5420, or 5430	4 General elective	4	
	ENCP 3000	1		
	Advanced BIOL or CHEM elective	4		
	General elective	4		
	0	17	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 BIOE 4792 (EI, CE, WI)	4
	BIOE 5420, 5410, or 5430	4
	BIOE 5430, 5410, or 5420	4
	Advanced BIOL or CHEM elective	4
	0	16

Total Hours: 139

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4		
GE 1000	1 PHYS 1171 or 1151 (ND)	3		

GE 1501	4	PHYS 1172 or 1152 (AD)	1		
ENGW 1111 (WF)	4	PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4	General elective	4		
	17	17	0	0	

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2365 (AD, WI)	4 Co-op	Co-op	Vacation	
BIOE 2366	1			
BIOL 1115 or 1111 (ND)	4			
BIOL 1116 or 1112	1			
ENCP 2000	1			
MATH 2321 (FQ)	4			
PHYS 1175 or 1155 (ND)	3			
PHYS 1176 or 1156 (AD)	1			
PHYS 1177 or 1157	1			
	20	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2350	4 Co-op	Co-op	BIOE 3210	4
BIOE 2355	4		CHEM 2313	4
CHEM 2311	4		CHEM 2314	1
CHEM 2312	1			
MATH 2341	4			
	17	0	0	9

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 3310	4 Co-op	Co-op	BIOE 4790 (EI, CE, WI)	4
BIOE 3380	4		General elective	4
BIOL 2301 (ND)	4			
BIOL 2302 (AD)	1			
ENGW 3302, 3307, or 3315 (WD)	4			
	17	0	0	8

**Year 5**

Fall	Hours Spring	Hours
BIOE 4792 (EI, CE, WI)	4 BIOE 5420, 5410, or 5430	4
BIOE 5410, 5420, or 5430	4 BIOE 5430, 5410, or 5420	4

BIOL 3611	4	Advanced BIOL elective	4
BIOL 3612 (WI)	1	Advanced CHEM elective	4
ENCP 3000	1		
General elective	4		
	18		16

Total Hours: 139

## Chemical Engineering and Bioengineering, BSChE

The Bachelor of Science in Chemical Engineering and Bioengineering provides students with a broad education built on fundamentals in science, mathematics, and engineering, with the breadth of knowledge and problem solving established in chemical engineering applied through a bioengineering focus. Chemical engineering and bioengineering have long been closely related, working to understand human diseases, developing new therapies and drug delivery systems, and producing new medicines through cell culture techniques. This specific combined major allows for chemical engineering expertise in advanced materials and chemical processes, with the additional specialized bioengineering mastery of the biological constraints intrinsic to supporting and designing systems to aid and repair living systems.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Chemical Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4

CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:

GE 1501 Cornerstone of Engineering 1 <sup>1</sup>

3 semester hours from the following course count toward the engineering requirement:

GE 1502 Cornerstone of Engineering 2 <sup>1</sup>

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Bioengineering

Code	Title	Hours
<b>Core Bioengineering Courses</b>		
BIOE 2355	Quantitative Physiology for Bioengineers	4
BIOE 3210	Bioelectricity	4
<b>Cell and Tissue Engineering Courses</b>		
BIOE 5410	Molecular Bioengineering	4
BIOE 5420	Cellular Engineering	4
BIOE 5430	Principles and Applications of Tissue Engineering	4
<b>Bioengineering Capstone</b>		
BIOE 4790	Capstone Design 1	4
BIOE 4792	Capstone Design 2	4

### Supporting Courses: Mathematics/Science

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
BIOL 1111	General Biology 1	4
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Professional Development

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

#### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	1
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<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 8 semester hours of academic, nonremedial, nonrepetitive courses.		
		8

### Integrative Courses

Code	Title	Hours
These courses are already required above and also fulfill the integrative requirement.		
CHME 4315	Chemical Engineering Experimental Design 2	4
CHME 4510	Chemical Engineering Kinetics	4

### Major GPA Requirement

2.000 minimum GPA required in CHME courses

2.000 minimum GPA required in all BIOE courses

### Program Requirement

135 total semester hours required

## Plan of Study

### Four Years, One Co-op in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 BIOL 1111 (ND)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 GE 1502 (ER)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
17		17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2355	4 CHEM 2313	4 Vacation	Vacation	
CHEM 2311 (AD, WI)	4 CHEM 2314	1		
CHEM 2312	1 CHME 2310	4		
CHME 2308	4 CHME 2320	4		
MATH 2341	4 General elective	4		
17		17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 3210	4 BIOE 5410	4 BIOE 4790 (EI, CE, WI)	4 Co-op	
CHME 3312	4 BIOE 5420	4 General elective	4	
CHME 3322	4 CHME 3315 (AD)	4		
ENGW 3302, 3307, or 3315 (WD)	4 CHME 3316	0		
	CHME 4510	4		
	ENCP 2000	1		
16		17	8	0
Year 4				
Fall	Hours Spring	Hours		
Co-op	BIOE 4792 (EI, CE, WI)	4		
	BIOE 5430	4		
	CHME 4315 (AD, WI)	4		
	CHME 4316	0		
	CHME 4512	4		
	ENCP 3000	1		
0		17		

Total Hours: 135

## Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 BIOL 1111 (ND)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 GE 1502 (ER)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2355	4 CHEM 2313	4 Vacation	Co-op	
CHEM 2311 (AD, WI)	4 CHEM 2314	1		
CHEM 2312	1 CHME 2310	4		
CHME 2308	4 CHME 2320	4		
MATH 2341	4 ENCP 2000	1		
	General elective	4		
	17	18	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	BIOE 3210	4 Vacation	Co-op	
	CHME 3312	4		
	CHME 3322	4		
	ENGW 3302, 3307, or 3315 (WD)	4		
	0	16	0	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	BIOE 5410	4 BIOE 4790 (EI, CE, WI)	4 Co-op	
	BIOE 5420	4 General elective	4	
	CHME 3315 (AD)	4		
	CHME 3316	0		
	CHME 4510	4		
	ENCP 3000	1		
	0	17	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	BIOE 4792 (EI, CE, WI)	4		
	BIOE 5430	4		
	CHME 4315 (AD, WI)	4		

CHME 4316	0
CHME 4512	4
0	16

Total Hours: 135

### Chemical Engineering

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Professor and Chair

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The chemical engineering program offers students a broad education built on fundamentals in science, mathematics, and engineering, which are then applied to a variety of contemporary problems using modern tools, such as computational software and computer-aided design. Chemical engineers have traditionally been employed in chemical, petrochemical, agricultural chemical, pulp and paper, plastics, cosmetics, and textiles industries and in consulting and design firms. Today, chemical engineers also play an integral role in emerging biological and advanced materials fields, including nanotechnology. For example, chemical engineers are creating new materials needed for space exploration, alternative energy sources, and faster, self-powered computer chips. In biotechnology and bioengineering, chemical engineers are working to understand human diseases, developing new therapies and drug delivery systems, and producing new medicines through cell culture techniques. Chemical engineers employ nanotechnology to revolutionize sensors, security systems, and medical diagnostics and treatments. In addition to creating important products, chemical engineers are also involved in protecting our environment by exploring ways to reduce acid rain and smog; to recycle and reduce wastes; to develop new sources of environmentally clean energy; and to design inherently safe, efficient, and "green" processes. The role of chemical engineering is to develop new products and to design processes while reducing costs, increasing production, and improving the quality and safety of new products.

### Mission of the Department

The mission of the Department of Chemical Engineering at Northeastern University is to educate and train students in chemical engineering practice through integrating an inclusive classroom environment with hands-on and co-op experiences while solving research problems that impact our world.

### Other Programmatic Features

By participating in our cooperative education program, our graduates will have an opportunity to explore what career objectives fit their own skills and interests. The goal of this component of our program is to offer students valuable professional experience and contacts that will help get them started in their professional career, as well as to develop career management skills. The co-op program parallels the academic program in level of responsibility and sophistication.

The department also offers research opportunities throughout all aspects of chemical engineering, including participating in research centers based in our department and college, as well as new interdisciplinary graduate and professional master's programs. The chemical engineering curriculum is continuously evaluated and improved to ensure that graduates of the program are given every opportunity for future success.

as professional chemical engineers and are prepared for graduate or professional school.

## Programs

### Bachelor of Science in Chemical Engineering (BSChE)

- Chemical Engineering (p. 446)
- Chemical Engineering and Biochemistry (p. 450)
- Chemical Engineering and Bioengineering (p. 443)
- Chemical Engineering and Computer Science (p. 322)
- Chemical Engineering and Environmental Engineering (p. 457)
- Chemical Engineering and Physics (p. 460)

### Minor

- Biochemical Engineering (p. 462)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Chemical Engineering, BSChE

The chemical engineering program offers students a broad education built on fundamentals in science, mathematics, and engineering, which are then applied to contemporary problems using modern tools, such as computational software and computer-aided design. Chemical engineers have traditionally been employed in chemical, petrochemical, agricultural chemical, pulp and paper, plastics, cosmetics, and textiles industries and in consulting and design firms. Today, chemical engineers also play an integral role in bioprocesses and biomedicine, big data and artificial intelligence, sustainability and energy, and study of advanced materials, including nanotechnology. For example, chemical engineers are creating new materials needed for space exploration, alternative energy sources, and faster, self-powered computer chips. In biotechnology and biomedicine, chemical engineers are working to understand human diseases, developing new therapies and drug delivery systems, and producing new medicines through cell culture techniques. Chemical engineers employ nanotechnology to revolutionize sensors, security systems, and medical diagnostics and treatments. In addition to creating important products, chemical engineers are also involved in protecting our environment by exploring ways to reduce acid rain and smog; to recycle and reduce wastes; to develop new sources of environmentally clean energy; and to design inherently safe, efficient, and “green” processes. The role of a chemical engineer is to develop new products and to design processes while reducing costs, increasing production, and improving the quality and safety of new products.

The degree also serves as a springboard to advanced study in chemical engineering or postgraduate pathways including law school, business school, or medical/health professions school.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315 (Chem Eng Lab 1)	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315 (Chem Eng Lab 2)	4
CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4
<b>Chemical Engineering Capstone</b>		
CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

### Advanced Engineering Elective

Complete one course numbered between 4000 and 5999 in any of the following subject areas:

BIOE, CHME, CIVE, EECE, ME, IE, MEIE, and ENGR

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:

GE 1501 Cornerstone of Engineering 1<sup>1</sup>

3 semester hours from the following course count toward the engineering requirement:

GE 1502 Cornerstone of Engineering 2<sup>1</sup>

## Supporting Courses: Mathematics/Science

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

Complete one of the following: 4-5

BIOL 1111	General Biology 1	
BIOL 1115	General Biology 1 for Engineers	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

#### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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#### Supporting Courses: Advanced Science

Code	Title	Hours
Complete one of the following: 5		

CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	
CHEM 2315 and CHEM 2316	Organic Chemistry 1 for Chemistry Majors and Lab for CHEM 2315	

Complete one of the following: 5

CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	
CHEM 2317 and CHEM 2318	Organic Chemistry 2 for Chemistry Majors and Lab for CHEM 2317	

Complete one of the following: 4-6

BIOL 2301	Genetics and Molecular Biology	
BIOL 2327	Human Parasitology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 3603	Mammalian Systems Physiology	
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	
CHEM 2321 and CHEM 2322	Analytical Chemistry and Lab for CHEM 2321	
CHEM 3403 and CHEM 3404	Quantum Chemistry and Spectroscopy and Lab for CHEM 3403	
CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	
CHEM 3501 and CHEM 3502 and CHEM 3503	Inorganic Chemistry and Lab for CHEM 3501 and Recitation for CHEM 3501	
CHEM 4621 and CHEM 4622	Introduction to Chemical Biology and Lab for CHEM 4621	
CHEM 4628 and CHEM 4629	Introduction to Spectroscopy of Organic Compounds and Identification of Organic Compounds	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 3460	Conservation Biology	

EEMB 3470	Coastal Ecology and Sustainability	
PHYS 1211	Computational Problem Solving in Physics	
PHYS 2303	Modern Physics	
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	
PHYS 3601	Classical Dynamics	
PHYS 3602	Electricity and Magnetism 1	

#### Professional Development

Code	Title	Hours
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##### Professional Development

GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

##### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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#### Writing Requirements

Code	Title	Hours
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A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

#### Required General Electives

Code	Title	Hours
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Complete 24 semester hours of academic, nonremedial, nonrepetitive courses. 24

#### Major GPA Requirement

2.000 minimum GPA required in CHME courses

#### Program Requirement

134 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

#### Plan of Study

##### Four Years, One Co-op in Summer 2/Fall

###### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 CHME 2308	4 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4 MATH 2321 (FQ)	4	
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		



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GE 1000	1	PHYS 1152 (AD)	1
GE 1501	4	PHYS 1153	1
MATH 1341 (FQ)	4	General elective	4
	17		17
			8
			0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2311 or 2315	4	BIOL 1115 or PHYS 1155 and PHYS 1156 and PHYS 1157 (ND)	4	Advanced science elective	4	Vacation	0
CHEM 2312 or 2316	1	CHEM 2313 or 2317	4	General elective	4		0
CHME 2310	4	CHEM 2314 or 2318	1				0
CHME 2320	4	CHME 3312	4				0
MATH 2341	4	CHME 3322	4				0
		ENCP 2000	1				0
	17		18		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 3315 (AD)	4	CHME 4510	4	Vacation	4	Co-op	0
CHME 3316	0	CHME 4701	4				0
ENGW 3302 or 3315 (WD)	4	General elective	4				0
General elective	4	General elective	4				0
General elective	4						0
	16		16		0		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	CHME 4315 (AD, WI)	4
		CHME 4316	0
		CHME 4512	4
		CHME 4703 (EI, CE, WI)	4
		CHME 4705	0
		ENCP 3000	1
		Advanced engineering elective	4
	0		17

Total Hours: 134

**Four Years, One Co-op in Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	CHME 2308	4	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4	MATH 2321 (FQ)	4		0

ENGW 1111 (WF)	4	PHYS 1151 (ND)	3
GE 1000	1	PHYS 1152 (AD)	1
GE 1501	4	PHYS 1153	1
MATH 1341 (FQ)	4	General elective	4
	17		17
			8
			0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1115 or PHYS 1155 and PHYS 1156 and PHYS 1157 (ND)	4	CHME 2310	4	Vacation	4	CHME 2320	4
CHEM 2311 or 2315	4	CHEM 2313 or 2317	4			Advanced science elective	4
CHEM 2312 or 2316	1	CHEM 2314 or 2318	1				0
MATH 2341	4	General elective	4				0
General elective	4	General elective	4				0
	17		17		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 3312	4	Co-op	0	Co-op	0	Vacation	0
CHME 3315 (AD)	4						0
CHME 3316	0						0
CHME 3322	4						0
ENGW 3302 or 3315 (WD)	4						0
ENCP 2000	1						0
	17		0		0		0

**Year 4**

Fall	Hours	Spring	Hours
CHME 4315 (AD, WI)	4	CHME 4512	4
CHME 4316	0	CHME 4703 (EI, CE, WI)	4
CHME 4510	4	CHME 4705	0
CHME 4701	4	Advanced engineering elective	4
ENCP 3000	1	General elective	4
General elective	4		
	17		16

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General elective	4		
	17	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1115 or PHYS 1155 <b>and</b> PHYS 1156 <b>and</b> PHYS 1157 (ND)	4 CHEM 2313 or 2317	4 Vacation	0 Co-op	0
CHEM 2311 or 2315	4 CHEM 2314 or 2318	1		
CHEM 2312 or 2316	1 CHME 2310	4		
CHME 2308	4 CHME 2320	4		
MATH 2321 (FQ)	4 ENCP 2000	1		
	MATH 2341	4		
	17	18	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CHME 3312	4 General elective	4 Co-op	0
	CHME 3315 (AD)	4 General elective	4	
	CHME 3316	0		
	CHME 3322	4		
	ENGW 3302 or 3315 (WD)	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CHME 4315 (AD, WI)	4 General elective	4 Co-op	0
	CHME 4316	0 General elective	4	
	CHME 4510	4		
	CHME 4701	4		
	ENCP 3000	1		
	General elective	4		
	0	17	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	0 CHME 4512	4
	CHME 4703 (EI, CE, WI)	4
	CHME 4705	0
	Advanced engineering elective	4
	Advance science elective	4
	0	16

Total Hours: 134

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General elective	4		
	17	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1115 or PHYS 1155 <b>and</b> PHYS 1156 <b>and</b> PHYS 1157 (ND)	4 Co-op	0 Co-op	0 CHEM 2313 or 2317	4
CHEM 2311 or 2315	4		CHEM 2314 or 2318	1
CHEM 2312 or 2316	1		CHME 2320	4
CHME 2308	4			
ENCP 2000	1			
MATH 2321 (FQ)	4			
	18	0	0	9

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHME 2310	4 Co-op	0 Co-op	0 General elective	4
CHME 3322	4		General elective	4
MATH 2341	4			
General elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHME 3312	4 Co-op	0 Co-op	0 Vacation	0
CHME 3315 (AD)	4			
CHME 3316	0			
ENCP 3000	1			
ENGW 3302 or 3315 (WD)	4			
General elective	4			
	17	0	0	0

**Year 5**

Fall	Hours Spring	Hours
CHME 4315 (AD, WI)	4 CHME 4512	4
CHME 4316	0 CHME 4703 (EI, CE, WI)	4
CHME 4510	4 CHME 4705	0
CHME 4701	4 Advanced engineering elective	4
Advanced science elective	4 General elective	4
	16	16

Total Hours: 134

## Chemical Engineering and Biochemistry, BSChE

This intercollege combined major serves students who would like to explore their interest in biochemistry while earning the benefit of a Bachelor of Science degree in chemical engineering. The program combines the fundamentals of biochemistry with the engineering skills necessary for scale-up of biochemical processes. The curriculum is designed to prepare students well to enter the growing biotechnology industry and be able to converse from the chemistry of organisms to the design of vessels for successful synthesis of cells and pharmaceuticals.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4
<b>Chemical Engineering Capstone</b>		
CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>
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### Mathematics/Science Requirement

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
BIOL 4707	Cell and Molecular Biology	4
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

### Advanced Biology Elective

Complete one course in the following range: 4  
BIOL 2311 to BIOL 5999

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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**Advanced Science Requirement**

Code	Title	Hours
BIOL 1115	General Biology 1 for Engineers	4
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
CHEM 2321 and CHEM 2322 and CHEM 2323 or CHEM 3331 and CHEM 3332	Analytical Chemistry and Lab for CHEM 2321 and Recitation for CHEM 2321 Bioanalytical Chemistry and Lab for CHEM 3331	5

**Advanced Chemistry Elective**

Complete one course in the following range: 4  
CHEM 2310 to CHEM 5999

**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	1
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**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 8 semester hours of academic, nonremedial, nonrepetitive courses.		8

**Major GPA Requirement**

2.000 minimum required in CHME courses

**Program Requirement**

137 total semester hours required

**Plan of Study****Four Years, One Co-op in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	CHME 2308	4	Vacation	0	Vacation	0
CHEM 1153	0	GE 1502 (ER)	4				
ENGW 1111 (WF)	4	MATH 1342 (FQ)	4				
GE 1000	1	PHYS 1151 (ND)	3				
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
		17		17		0	0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1115 (ND)	4	CHEM 2313	4	BIOL 2301 (ND)	4	Vacation	0
CHEM 2311	4	CHEM 2314	1	BIOL 2302 (AD)	1		
CHEM 2312	1	CHEM 2321 (AD, WI)	4	General elective	4		
CHME 2320	4	CHEM 2322	1				
MATH 2321 (FQ)	4	CHEM 2323	0				
		ENCP 2000	1				
		CHME 2310	4				
		MATH 2341	4				
		17		19		9	0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 3312	4	CHME 4315 (AD, WI)	4	BIOL 3611	4	Co-op	0
CHME 3315 (AD)	4	CHME 4316	0	BIOL 3612 (WI)	1		
CHME 3316	0	CHME 4510	4	General elective	4		
CHME 3322	4	CHME 4701	4				
ENGW 3302, 3307, or 3315 (WD)	4	Advanced CHEM elective	4				
		16		16		9	0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	BIOL 4707	4				
		CHME 4512	4				
		CHME 4703 (EI, CE, WI)	4				
		CHME 4705	0				
		ENCP 3000	1				

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

Advanced BIOL elective	
0	13

Total Hours: 133

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 CHME 2308	4 Vacation	Vacation	0
CHEM 1153	0 GE 1502 (ER)	4		
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4		
GE 1000	1 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1115 (ND)	4 CHEM 2313	4 BIOL 2301 (ND)	4 Co-op	0
CHEM 2311	4 CHEM 2314	1 BIOL 2302 (AD)	1	
CHEM 2312	1 CHEM 2321 (AD, WI)	4 General elective	4	
CHME 2320	4 CHEM 2322	1		
MATH 2321 (FQ)	4 CHEM 2323	0		
	ENCP 2000	1		
	CHME 2310	4		
	MATH 2341	4		
	17	19	9	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CHME 3312	4 BIOL 3611	4 Co-op	0
	CHME 3315 (AD)	4 BIOL 3612 (WI)	1	
	CHME 3316	0 General elective	4	
	CHME 3322	4		
	ENGW 3302, 3307, or 3315 (WD)	4		
	0	16	9	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 BIOL 4707	4 Vacation	0 Co-op	0
	CHME 4315 (AD, WI)	4		
	CHME 4316	0		
	CHME 4510	4		
	CHME 4701	4		

ENCP 3000	1		
0	17	0	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 CHME 4512	4
	CHME 4703 (EI, WI, CE)	4
	CHME 4705	0
	Advanced BIOL elective	4
	Advanced CHEM elective	4
	0	16

Total Hours: 137

**Chemical Engineering and Bioengineering, BSChE**

The Bachelor of Science in Chemical Engineering and Bioengineering provides students with a broad education built on fundamentals in science, mathematics, and engineering, with the breadth of knowledge and problem solving established in chemical engineering applied through a bioengineering focus. Chemical engineering and bioengineering have long been closely related, working to understand human diseases, developing new therapies and drug delivery systems, and producing new medicines through cell culture techniques. This specific combined major allows for chemical engineering expertise in advanced materials and chemical processes, with the additional specialized bioengineering mastery of the biological constraints intrinsic to supporting and designing systems to aid and repair living systems.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

**Chemical Engineering**

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4

CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	2
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3 semester hours from the following course count toward the engineering requirement:

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	3
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<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Bioengineering**

Code	Title	Hours
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**Core Bioengineering Courses**

BIOE 2355	Quantitative Physiology for Bioengineers	4
BIOE 3210	Bioelectricity	4

**Cell and Tissue Engineering Courses**

BIOE 5410	Molecular Bioengineering	4
BIOE 5420	Cellular Engineering	4
BIOE 5430	Principles and Applications of Tissue Engineering	4

**Bioengineering Capstone**

BIOE 4790	Capstone Design 1	4
BIOE 4792	Capstone Design 2	4

**Supporting Courses: Mathematics/Science**

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
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**Required Mathematics/Science**

BIOL 1111	General Biology 1	4
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
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**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Professional Development**

Code	Title	Hours
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GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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1 semester hour from the following course counts toward the professional development requirement:

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	1
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<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Writing Requirements**

Code	Title	Hours
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A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
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Complete 8 semester hours of academic, nonremedial, nonrepetitive courses. 8

**Integrative Courses**

Code	Title	Hours
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These courses are already required above and also fulfill the integrative requirement.

CHME 4315	Chemical Engineering Experimental Design 2	4
CHME 4510	Chemical Engineering Kinetics	4

**Major GPA Requirement**

2.000 minimum GPA required in CHME courses

2.000 minimum GPA required in all BIOE courses

**Program Requirement**

135 total semester hours required

**Plan of Study****Four Years, One Co-op in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 BIOL 1111 (ND)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 GE 1502 (ER)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2355	4 CHEM 2313	4 Vacation	Vacation	
CHEM 2311 (AD, WI)	4 CHEM 2314	1		
CHEM 2312	1 CHME 2310	4		
CHME 2308	4 CHME 2320	4		
MATH 2341	4 General elective	4		
	17	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 3210	4 BIOE 5410	4 BIOE 4790 (EI, CE, WI)	4 Co-op	
CHME 3312	4 BIOE 5420	4 General elective	4	
CHME 3322	4 CHME 3315 (AD)	4		
ENGW 3302, 3307, or 3315 (WD)	4 CHME 3316	0		
	CHME 4510	4		
	ENCP 2000	1		
	16	17	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	BIOE 4792 (EI, CE, WI)	4
	BIOE 5430	4
	CHME 4315 (AD, WI)	4
	CHME 4316	0
	CHME 4512	4

ENCP 3000	1
0	17

Total Hours: 135

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 BIOL 1111 (ND)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 GE 1502 (ER)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2355	4 CHEM 2313	4 Vacation	Co-op	
CHEM 2311 (AD, WI)	4 CHEM 2314	1		
CHEM 2312	1 CHME 2310	4		
CHME 2308	4 CHME 2320	4		
MATH 2341	4 ENCP 2000	1		
	General elective	4		
	17	18	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	BIOE 3210	4 Vacation	Co-op	
	CHME 3312	4		
	CHME 3322	4		
	ENGW 3302, 3307, or 3315 (WD)	4		
	0	16	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	BIOE 5410	4 BIOE 4790 (EI, CE, WI)	4 Co-op	
	BIOE 5420	4 General elective	4	
	CHME 3315 (AD)	4		
	CHME 3316	0		
	CHME 4510	4		
	ENCP 3000	1		
	0	17	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	BIOE 4792 (EI, CE, WI)	4
	BIOE 5430	4
	CHME 4315 (AD, WI)	4
	CHME 4316	0
	CHME 4512	4
	0	16

Total Hours: 135

## Chemical Engineering and Computer Science, BSChE

The Bachelor of Science in Chemical Engineering and Computer Science provides expertise in computational modeling and simulation of chemical processes. The curriculum is designed to prepare students to practice in the engineering and control of processes involving chemicals, biotechnology feedstocks, and pharmaceuticals, as well as the fundamentals of program design, software development, and algorithms and data.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

NUPath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4
<b>Chemical Engineering Capstone</b>		

CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3700	Networks and Distributed Systems	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

### Khoury Elective Courses

With advisor approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2000 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

### Supporting Courses: Mathematics/Science

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5



Complete one of the following: 4-5

BIOL 1115	General Biology 1 for Engineers
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>
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**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required in each course:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Integrative Courses**

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
CHME 4512	Chemical Engineering Process Control	4

**Required General Electives**

Code	Title	Hours
Complete 8 semester hours of academic, nonremedial, nonrepetitive courses.		8

**Major GPA Requirement**

Minimum 2.000 GPA required in CHME courses

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

135 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, One Co-op in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	CHME 2308	4	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4	MATH 2321 (FQ)	4		
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General elective	4				
		17		17		8	0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1115 (ND)	4	CHME 2310	4	CS 3200 (FQ, AD)	4	Vacation	0
CHME 2320	4	CS 2510 (ND, AD)	4	CS 3500 and CS 3501 (ND, AD)	5		
CS 1800 (FQ)	4	CS 2511	1				
CS 1802	1	ENCP 2000	1				
CS 2500 (ND, FQ)	4	MATH 2341	4				
CS 2501	1	General elective	4				
		18		18		9	0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 3312	4	CHME 4315 (AD, WI)	4	Vacation	4	Co-op	0
CHME 3322	4	CHME 4316	0				
CS 3000	4	CHME 4510	4				
ENGW 3302, 3307, or 3315 (WD)	4	CHME 4701	4				
		CS 3700	4				
		16		16		0	0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CHME 4512	4				
		CHME 4703 (EI, WI, CE)	4				
		CHME 4705	0				
		CS 4500 (WI)	4				
		ENCP 3000	1				
		Khoury elective	4				
		0		17			

Total Hours: 136

## Five Years, Three Co-ops in Summer 2/Fall

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CHEM 1151 (ND)	4 GE 1502 (ER)	4 CHME 2308	4 Vacation	0	
CHEM 1153	0 MATH 1342 (FQ)	4 MATH 2321 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3			
GE 1000	1 PHYS 1152 (AD)	1			
GE 1501	4 PHYS 1153	1			
MATH 1341 (FQ)	4 General elective	4			
	17	17	8	0	
Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
BIOL 1115 (ND)	4 CHME 2310	4 Vacation	Co-op	0	
CHME 2320	4 CS 2510 (ND, AD)	4			
CS 1800 (FQ)	4 CS 2511	1			
CS 1802	1 ENCP 2000	1			
CS 2500 (ND, FQ)	4 MATH 2341	4			
CS 2501	1 General elective	4			
	18	18	0	0	
Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	CHME 3312	4 CS 3200 (FQ, AD)	4 Co-op	0	
	CHME 3322	4 CS 3500 and CS 3501 (ND, AD)	5		
	CS 3000	4			
	ENGW 3302, 3307, or 3315 (WD)	4			
	0	16	9	0	
Year 4					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	0 CHME 4315 (AD, WI)	4 Vacation	Co-op		
	CHME 4316	0			
	CHME 4510	4			
	CHME 4701	4			
	CS 3700	4			
	ENCP 3000	1			
	0	17	0	0	
Year 5					
Fall	Hours Spring	Hours			
Co-op	CHME 4512 (EI, CE, WI)	4			
	CHME 4703	4			

CHME 4705	0
CS 4500 (WI)	4
Khoury elective	4
0	16

Total Hours: 136

### Chemical Engineering and Environmental Engineering, BSChE

The Bachelor of Science in Chemical Engineering and Environmental Engineering provides expertise in addressing a variety of environmental challenges built on fundamentals in engineering, chemical, biological, and ecological principles. The coursework is designed to prepare students to tackle interconnected challenges in water, energy, air quality, and related fields, through chemical engineering skills in the engineering and control of processes involving chemicals that impact our environment, exploring ways to reduce acid rain and smog; to recycle and reduce wastes; to develop new sources of environmentally clean energy; and to design inherently safe, efficient, and "green" processes.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Chemical Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4

### Chemical Engineering Capstone

CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	2
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3 semester hours from the following course count toward the engineering requirement:

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	3
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<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Environmental Engineering**

Code	Title	Hours
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**Core Environmental Engineering Courses**

CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 2335	Environmental Engineering Chemistry	4
CIVE 3430	Engineering Microbiology and Ecology	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4

**Environmental Engineering Elective Courses**

Complete at least two courses from the following list:

CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	8
CIVE 4777	Climate Hazards and Resilient Cities Abroad	
CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking	
CIVE 5271	Solid and Hazardous Waste Management	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
CIVE 5280	Remote Sensing of the Environment	
CIVE 5281	Coastal Dynamics and Design	
CIVE 5363	Climate Science, Engineering Adaptation, and Policy	
CIVE 5536	Hydrologic and Hydraulic Design	

**Supporting Courses: Mathematics/Science**

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
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**Required Mathematics/Science**

CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
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**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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1 semester hour from the following course counts toward the professional development requirement:

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	1
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<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Writing Requirements**

Code	Title	Hours
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A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
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Complete 8 semester hours of academic, nonremedial, nonrepetitive courses.

**Integrative Course**

Code	Title	Hours
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This course is already required above and also fulfills the integrative requirement:

CHME 2310	Transport Processes 1	4
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**Major GPA Requirement**

2.000 minimum GPA required in CHME courses

2.000 minimum GPA required in all CIVE courses

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Four Years, One Co-op in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 CHME 2308	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 GE 1502 (ER)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHME 2310	4 CHME 3312	4 General elective	4 Vacation	
CHME 2320	4 CIVE 2335	4 General elective	4	
CIVE 2334	4 CIVE 3430	4		
MATH 2341	4 CIVE 3435	4		
	ENCP 2000	1		
	16	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHME 3315 (AD)	4 CHME 4315 (AD, WI)	4 Vacation	Co-op	
CHME 3316	0 CHME 4316	0		
CHME 3322	4 CHME 4510	4		
ENGW 3302, 3307, or 3315 (WD)	4 CHME 4701	4		
CIVE 4534 (WI)	3 CIVE 5300	2		
CIVE 4535	1 CIVE 5301	2		
	16	16	0	0
Year 4				
Fall	Hours Spring	Hours		
Co-op	CHME 4512	4		
	CHME 4703 (EI, CE, WI)	4		
	CHME 4705	0		
	ENCP 3000	1		
	Environmental engineering elective	4		

Environmental engineering elective	4
	0
	17

Total Hours: 133

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 CHME 2308	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 GE 1502 (ER)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHME 2310	4 CHME 3312	4 Vacation	0 Co-op	
CHME 2320	4 CIVE 2335	4		
CIVE 2334	4 CIVE 3430	4		
MATH 2341	4 CIVE 3435	4		
	ENCP 2000	1		
	16	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CHME 3315 (AD)	4 Vacation	Co-op	
	CHME 3316	0		
	CHME 3322	4		
	ENGW 3302, 3307, or 3315 (WD)	4		
	CIVE 4534 (WI)	3		
	CIVE 4535	1		
	0	16	0	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CHME 4315 (AD, WI)	4 General elective	4 Co-op	
	CHME 4316	0 General elective	4	
	CHME 4510	4		
	CHME 4701	4		
	CIVE 5300	2		
	CIVE 5301	2		
	ENCP 3000	1		
	0	17	8	0

## Year 5

Fall	Hours Spring	Hours
Co-op	CHME 4512	4
	CHME 4703 (EI, CE, WI)	4
	CHME 4705	0
	Environmental engineering elective	4
	Environmental engineering elective	4
0		16

Total Hours: 133

## Chemical Engineering and Physics, BSChE

This intercollege combined major serves students who would like to explore their interest in physics while earning the benefit of a Bachelor of Science degree in chemical engineering. Upon completion, the successful student will understand the fundamental physics behind many chemical-based processes, resulting in the ability to design and practice in the field of engineering that deals with the movement of mass, heat transfer, and reactions involved in the processing of various materials.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4

CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
PHYS 3600	Advanced Physics Laboratory	4

### Chemical Engineering Capstone

CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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### Mathematics/Science Requirement

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 5318	Principles of Experimental Physics	4

### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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### Advanced Science Requirement

Code	Title	Hours
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
PHYS 2303	Modern Physics	4
PHYS 4115	Quantum Mechanics	4
Complete one of the following:		5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	

CHEM 2317 Organic Chemistry 2 for Chemistry  
and CHEM 2318 Majors  
and Lab for CHEM 2317

MATH 1341 (FQ)	4	PHYS 1153	1		
	17		17	9	0

## Professional Development

Code	Title	Hours
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### Professional Development

GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1<sup>1</sup>

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2<sup>1</sup>

## Writing Requirements

Code	Title	Hours
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A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Required General Electives

Code	Title	Hours
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Complete 8 SH of academic, nonremedial, nonrepetitive courses. 8

## Major GPA Requirement

2.000 minimum required in CHME courses

## Program Requirement

135 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

## Plan of Study

### Four Years, One Co-op in Summer 2/Fall

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 CHME 2308	4 MATH 2321 (FQ)	4 Vacation	0
CHEM 1153	0 GE 1502 (ER)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	
GE 1501	4 PHYS 1152 (AD)	1		

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 2311	4 CHEM 2313	4 Vacation	0 Vacation	0
CHEM 2312	1 CHEM 2314	1		
CHME 2320	4 CHME 2310	4		
MATH 2341	4 CHME 3322	4		
PHYS 2371 (ND)	3 PHYS 2303 (ND)	4		
PHYS 2372 (EI)	1			
	17	17	0	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHME 3312	4 CHME 4315 (AD, WI)	4 PHYS 3600 (ND, AD, WI)	4 Co-op	0
CHME 3315 (AD)	4 CHME 4316	0 General Elective	4	
CHME 3316	0 CHME 4510	4		
ENGW 3302 or 3315 (WD)	4 CHME 4701	4		
General Elective	4 ENCP 2000	1		
	PHYS 3601 (ND)	4		
	16	17	8	0

#### Year 4

Fall	Hours Spring	Hours
Co-op	0 CHME 4703 (EI, CE, WI)	4
	CHME 4705	0
	ENCP 3000	1
	PHYS 3602 (ND)	4
	PHYS 4115 (ND, FQ)	4
	PHYS 5318 (ND, AD, WI, CE)	4
	0	17

Total Hours: 135

### Five Years, Three Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 CHME 2308	4 MATH 2321 (FQ)	4 Vacation	0
CHEM 1153	0 GE 1502 (ER)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	

## 462 Biochemical Engineering, Minor

GE 1501	4	PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4	PHYS 1153	1		
	17		17	9	0

## Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
CHEM 2311	4	CHEM 2313	4	Vacation	0	Co-op	0	0
CHEM 2312	1	CHEM 2314	1					
CHME 2320	4	CHME 2310	4					
MATH 2341	4	CHME 3322	4					
PHYS 2371 (ND)	3	ENCP 2000	1					
PHYS 2372 (EI)	1	PHYS 2303 (ND)	4					
	17		18		0			0

## Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
Co-op	0	CHME 3312	4	PHYS 3600 (ND, AD, WI)	4	Co-op	0	0
		CHME 3315 (AD)	4	General Elective	4			
		CHME 3316	0					
		ENGW 3302 or 3315 (WD)	4					
		PHYS 3601 (ND)	4					
	0		16		8			0

## Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
Co-op	0	CHME 4315	4	Vacation	0	Co-op	0	0
		CHME 4316	0					
		CHME 4510	4					
		CHME 4701	4					
		ENCP 3000	1					
		PHYS 3602 (ND)	4					
	0		17		0			0

## Year 5

Fall	Hours	Spring	Hours	Hours
Co-op	0	CHME 4703 (EI, CE, WI)	4	
		CHME 4705	0	
		PHYS 4115 (ND, FQ)	4	
		PHYS 5318 (ND, AD, WI, CE)	4	
		General Elective	4	
	0		16	

Total Hours: 135

**Notes:**

Physics courses are offered on the following schedule:

- PHYS 2303 offered every fall, spring and summer 2.
- PHYS 2371/2372 offered every fall.
- PHYS 3600 offered every summer 1 and summer 2.
- Classical Dynamics (PHYS 3601) is offered fall and spring semesters of even years only. Please meet with your Academic Advisor to discuss scheduling options for Year 4 of odd years.
- PHYS 3602 offered every fall and spring.
- PHYS 3603 offered fall (even years) and summer 1 (odd years).
- PHYS 4115 offered every fall and spring.
- PHYS 4305 offered every spring and summer 2 (even years).
- PHYS 4621 offered spring (odd years) and fall (even years).
- PHYS 4623 offered summer 1 and fall (even years).
- PHYS 4651 offered spring and fall (odd years).
- PHYS 4652 offered every spring.
- PHYS 5318 offered every spring.

### Biochemical Engineering, Minor

This minor exposes the student to the fundamentals of chemical engineering. Focus is on the major conservation principles such as the conservation of mass and the conservation of energy, followed by how chemical reactions and processing are governed by these principles.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* Courses taken pass/fail cannot be used to fulfill minor requirements.

### Required Chemical Engineering Courses

Code	Title	Hours
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 5630	Biochemical Engineering	4

### Capstone

Code	Title	Hours
CHME 4703	Capstone Design 2: Chemical Process Design	4

### Supporting Courses: Math and Science

Code	Title	Hours
MATH 1241	Calculus 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
MATH 1242	Calculus 2	4
or MATH 1342	Calculus 2 for Science and Engineering	
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
BIOL 2301	Genetics and Molecular Biology	4
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	5
CHEM 2313 and CHEM 2314 and CHEM 2320	Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313	5
Complete one of the following:		5
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	

## GPA Requirement

2.000 GPA required in the minor

## Civil and Environmental Engineering

Website (<http://www.civ.neu.edu>)

**Jerome F. Hajjar, PhD, PE**

CDM Smith Professor and Chair

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## Overview

As a leader in research and education, the Department of Civil and Environmental Engineering at Northeastern University prepares undergraduate engineers to excel in their chosen careers, including engineering practice, academia, infrastructure management, land-use planning and development, urban and regional planning, public sector leadership, and many others.

Our students have an opportunity to obtain a broad knowledge base in science, engineering, and general studies that allows them flexibility in career development and graduate education. At the same time, our graduates should be responsible and scientifically educated citizens, prepared to contribute personally as well as professionally to an educated, democratic society. Our academic programs provide future professionals with the core skills necessary to practice civil and environmental engineering and to work with other engineers in an interdisciplinary environment.

Experience tells us that civil and environmental engineering graduates will enter almost every field imaginable. The knowledge and skills acquired—understanding science, critical thinking, effective communication, and understanding the social context, among them—form an excellent foundation for a host of careers, as well as for a fulfilling life outside the world of work.

## Mission of the Department

Advancing innovative civil and environmental solutions for society and creating globally oriented engineering leaders by integrating experiential education and use-inspired interdisciplinary research.

## Academic Programs

With a strategic focus in urban engineering, and through a range of teaching and research strengths, anchored by several multidisciplinary, multi-institutional centers and programs, our academic programs are designed to prepare future engineers to address the global, complex, and

ever-evolving engineering challenges of our time by building on current department strengths and expanding into vital areas.

Three overarching themes are emphasized in our programs: environmental health, civil infrastructure security, and sustainable resource engineering. These themes are aligned with the department's premier strengths in simulation (both computational and experimental), smart sensing, data and network science, and urban informatics and are incorporated in the undergraduate programs we offer.

Successful graduates in civil engineering and environmental engineering will have the ability to create, invent, and lead a new generation of professionals and will be able to address key challenges to protect the natural environment and to design and create the built environment for community living, industry, and society development.

Our programs have been designed with a set of electives that permit students to explore or acquire further depth in other fields of interest. Students can use these electives to earn a minor in environmental chemistry, architectural engineering, business, architectural history, music, computer science, or any number of other fields. In the civil engineering field, our programs encompass several disciplines, including transportation planning and engineering; structural engineering; geotechnical engineering; environmental, water resources, and coastal engineering; and construction management. In the environmental engineering field, our programs include developing sustainable resource engineering solutions to environmental health needs with an understanding of institutional and legal frameworks, all related to interconnected challenges in water, energy, air pollution, and waste management, to protect and provide a better quality of life to the human race. For a full list of the department's academic program offerings, please refer to the programs tab.

## Other Programmatic Features

By participating in our cooperative education program, our graduates will have an opportunity to explore what career objectives fit their own skills and interests. The goal of this component of our program is to offer students valuable professional experience and contacts that will help get them started in their professional career, as well as to develop career management skills. The co-op program parallels the academic program in level of responsibility and sophistication.

The department also offers significant research opportunities throughout all fields of civil and environmental engineering, including participating in research centers based in our department and college, as well as new interdisciplinary graduate and professional master's programs.

## Programs

### Bachelor of Science in Civil Engineering (BSCE)

- Civil Engineering (p. 464)
- Civil Engineering and Architectural Studies (p. 62)
- Civil Engineering and Computer Science (p. 324)

### Bachelor of Science in Chemical Engineering (BSChE)

- Chemical Engineering and Environmental Engineering (p. 457)

### Bachelor of Science in Environmental Engineering (BSEnvE)

- Environmental Engineering (p. 476)
- Environmental Engineering and Health Science (p. 480)
- Environmental Engineering and Landscape Architecture (p. 67)



**Minor**

- Architectural Engineering (p. 485)
- Civil Engineering (p. 486)
- Environmental Chemistry (p. 487)

**Accelerated Programs**

See Accelerated Bachelor/Graduate Degree Programs (p. )

**Civil Engineering, BSCE**

Civil engineers play a vital role in human progress and well-being worldwide. Conceptualizing, innovating, designing, and building sustainable infrastructure and environments is fundamental in helping society progress. Modern challenges, including engineering a resilient and sustainable urban infrastructure; establishing clean water and a clean environment; and advancing technologies in computing, sensing, and human health, are all part of the development of society.

Civil engineers design and construct buildings, bridges, tunnels, dams, and river systems. They also plan, design, construct, and manage highways, railroads, canals, and airports; regulate rivers and control floods; and design and build systems for water distribution and environmental protection.

With a broad range of applications, our civil engineering students have the opportunity to explore a range of disciplinary and interdisciplinary tracks, including environmental and water systems, structural engineering, transportation engineering, geotechnical and geoenvironmental engineering, construction management, civil infrastructure security, environmental health, and sustainable resource engineering.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC) and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

**Engineering**

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2320 and CIVE 2321	Structural Analysis and Recitation for CIVE 2320	4
CIVE 2324	Concrete Structure Design	4

or CIVE 3425	Steel Structure Design	
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340	5
GE 3300	Energy Systems: Science, Technology, and Sustainability	4

**Civil Engineering Project Elective**

Complete one of the following: 4

CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 5536	Hydrologic and Hydraulic Design	

**Senior Design Project**

Complete one of the following: 5

CIVE 4765	Senior Design Project—Environmental	
CIVE 4767	Senior Design Project—Structural	
CIVE 4768	Senior Design Project—Transportation	

**Civil Engineering Technical Electives**

Complete three of the following: 11-12

CIVE 2324	Concrete Structure Design	
CIVE 3425	Steel Structure Design	
CIVE 3435	Environmental Pollution Fate and Transport	
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
CIVE 4575	Construction Management	
CIVE 4777	Climate Hazards and Resilient Cities Abroad	
CIVE 4780	Timber and Masonry Structures: Technology and Design Abroad	
CIVE 5221	Construction Project Control and Organization	
CIVE 5231	Alternative Project Delivery Systems in Construction	
CIVE 5260	Environmental Fluid Mechanics	
CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking	
CIVE 5271	Solid and Hazardous Waste Management	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
CIVE 5280	Remote Sensing of the Environment	
CIVE 5281	Coastal Dynamics and Design	
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	
CIVE 5363	Climate Science, Engineering Adaptation, and Policy	
CIVE 5373	Transportation Systems: Analysis and Planning	

CIVE 5376	Traffic Engineering and Sustainable Urban Street Design
CIVE 5520	Structural Systems
CIVE 5522	Structural Systems Modeling
CIVE 5525	Prestressed Concrete Design
CIVE 5536	Hydrologic and Hydraulic Design
CIVE 5699	Special Topics in Civil Engineering
SBSY 5100	Sustainable Design and Technologies in Construction
SBSY 5200	Sustainable Engineering Systems for Buildings
SBSY 5250	Building Performance Simulation
SBSY 5300	Information Systems for Integrated Project Delivery

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>
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1 semester hour from the following course counts toward the engineering requirement: 1

CIVE 3464	Probability and Engineering Economy for Civil Engineering
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**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
Complete one of the following:		5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
<b>Science Elective</b>		
Complete one of the following:		4-5
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	
BIOL 1141	Microbes and Society	
BIOL 1143	Biology and Society	

CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311
CHEM 3410	Environmental Geochemistry
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101
EEMB 1450	Introduction to Marine Biology
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302
ENVR 1120	Oceans and Coasts
ENVR 1200	Dynamic Earth
ENVR 2200	Earth's Changing Cycles
ENVR 2515	Sustainable Development
ENVR 3125	Global Oceanic Change
ENVR 3200	Water Resources
ENVR 3600	Oceanography
ENVR 5201	Geologic Field Seminar
ENVR 5350	Sustainable Energy and Climate Solutions
PHYS 1111	Astronomy
PHYS 1125	Introduction to Network Science: From the Human Cell to Facebook
PHYS 1132	Energy, Environment, and Society
PHYS 1155 and PHYS 1156	Physics for Engineering 2 and Lab for PHYS 1155
PHYS 4623	Medical Physics

**Supplemental Credit**

3 semester hours from the following course count toward the mathematics/science requirement: 3

CIVE 3464	Probability and Engineering Economy for Civil Engineering
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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**Supporting Course**

Code	Title	Hours
<b>Economics</b>		
ECON 1115 or ECON 1116	Principles of Macroeconomics or Principles of Microeconomics	4

**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>
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**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 24SH of academic, nonremedial, nonrepetitive courses.		24

**Major GPA Requirement**

2.000 minimum required in major (CIVE) courses

**Program Requirement**

134 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 CIVE 2221	4 General Elective	4
CHEM 1153	0 MATH 1342 (FQ)	4 CIVE 2222	0 General Elective	4
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3 MATH 2321 (FQ)	4	
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2260	4 CIVE 2320	4 CIVE 2324	4 Co-op	0
CIVE 2261 (AD)	1 CIVE 2321	0 General Elective	4	
CIVE 2334	4 CIVE 2331 or 2340 <i>and</i> 2341	4		
ECON 1115 or 1116 (SI, AD)	4 ENCP 2000	1		
MATH 2341	4 GE 3300	4		
	General Elective	4		
	17	17	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CIVE 2331 or 2340 <i>and</i> 2341	5 ENGW 3302 or 3315 (WD)	4 Co-op	0
	CIVE 3464	4 General Elective	4	
	Civil Project Elective (WI)	4		
	Civil Tech. Elective	3		
	0	16	8	0

Year 4		
Fall	Hours Spring	Hours
Co-op	0 CIVE 4765, 4767, or 4768 (EI, CE, WI)	5
	ENCP 3000	1
	Civil Tech. Elective	4
	Civil Tech. Elective	4
	Science Elective	4
	0	18

Total Hours: 134

**Four Years, Two Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 CIVE 2221	4 General Elective	4
CHEM 1153	0 MATH 1342 (FQ)	4 CIVE 2222	0 General Elective	4
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3 MATH 2321 (FQ)	4	
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2260	4 Co-op	Co-op	General Elective	4
CIVE 2261 (AD)	1		General Elective	4
CIVE 2320	4			
CIVE 2321	0			
CIVE 2334	4			
ENCP 2000	1			
MATH 2341	4			
	18	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2324	4 Co-op	Co-op	CIVE 2340	4
CIVE 2331	4		CIVE 2341	1
ECON 1115 or 1116 (SI, AD)	4		ENGW 3302 or 3315 (WD)	4
GE 3300	4			
	16	0	0	9

**Year 4**

Fall	Hours Spring	Hours
ENCP 3000	1 CIVE 4765, 4767, or 4768 (EI, CE, WI)	5
CIVE 3464	4 Civil Tech. Elective	4
Civil Project Elective (WI)	4 Civil Tech. Elective	4
Civil Tech. Elective	4 General Elective	4
Science Elective	4	
	17	17

Total Hours: 135

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2221	4 CIVE 2260	4 Vacation	0 Co-op	0
CIVE 2222	0 CIVE 2261 (AD)	1		
CIVE 2334	4 CIVE 2320	4		
ECON 1115 or 1116 (AD, SI)	4 CIVE 2321	0		
MATH 2321 (FQ)	4 ENCP 2000	1		
	GE 3300	4		
	MATH 2341	4		
	16	18	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CIVE 2331	4 CIVE 2324	4 Co-op	0
	CIVE 2340	4 General Elective	4	
	CIVE 2341	1		
	Civil Tech. Elective	4		
	Science Elective	4		
	0	17	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CIVE 3464	4 General Elective	4 Co-op	0
	ENCP 3000	1 General Elective	4	
	ENGW 3302 or 3315 (WD)	4		
	Civil Project Elective (WI)	4		
	Civil Tech. Elective	3		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 CIVE 4765, 4767, or 4768 (EI, CE, WI)	5
	Civil Tech. Elective	4
	General Elective	4
	General Elective	4
	0	17

Total Hours: 134

**Five Years, Three Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2221	4 Co-op	0 Co-op	0 Vacation	0

CIVE 2222	0			
CIVE 2260	4			
CIVE 2261 (AD)	1			
CIVE 2334	4			
ENCP 2000	1			
MATH 2321 (FQ)	4			
	18	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2320	4 Co-op	0 Co-op	0 CIVE 2340	4
CIVE 2321	0		CIVE 2341	1
CIVE 2331	4		MATH 2341	4
ECON 1115 or 1116 (AD, SI)	4			
GE 3300	4			
	16	0	0	9

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2324	4 Co-op	0 Co-op	0 General Elective	4
ENCP 3000	1		General Elective	4
ENGW 3302 or 3315 (WD)	4			
Civil Tech. Elective	3			
Science Elective	4			
	16	0	0	8

**Year 5**

Fall	Hours Spring	Hours
CIVE 3464	4 CIVE 4765, 4767, or 4768 (EI, CE, WI)	5
Civil Project Elective (WI)	4 Civil Tech. Elective	4
Civil Tech. Elective	4 General Elective	4
General Elective	4 General Elective	4
	16	17

Total Hours: 134

## Civil Engineering and Architectural Studies, BSCE

Civil engineering and architecture are two important disciplines that deal with the process of creating the built environment to satisfy societal needs. Both professions have critical functions that are essential in the development of society in terms of planning cities and designing more resilient infrastructure and rely on one another to accomplish it. The combination of these two professions creates great synergy as architects focus more on the functional and human aspects of development, while civil engineers concentrate on the structural elements of the design,

ensuring durable structures that perform under normal and extreme loads.

Students successfully completing the program receive a rigorous engineering training education, enabling a high level of engineering knowledge as well as exposure to a broad range of architectural topics and design experiences.

Students also have the opportunity to undertake a co-op experience consistent with the policies and opportunities offered within the College of Engineering.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

For this combined major, Nupath requirements are satisfied in several courses across the program and by required courses in the combined major.

### Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2320 and CIVE 2321	Structural Analysis and Recitation for CIVE 2320	4
CIVE 2324	Concrete Structure Design	4
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340	5
GE 3300	Energy Systems: Science, Technology, and Sustainability	4

### Civil Engineering Project Elective

Complete one of the following:		4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 5536	Hydrologic and Hydraulic Design	

### Senior Design Project

CIVE 4767	Senior Design Project—Structural	5
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### Civil Engineering Technical Electives

Complete one of the following:		4
CIVE 3425	Steel Structure Design	

CIVE 5522	Structural Systems Modeling	
<b>Supplemental Credit</b>		
1 semester hour from the following course counts toward the engineering requirement:		1
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

### Architecture Requirements

Code	Title	Hours
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
ARCH 2130	Site, Space, and Program	6
ARCH 2140	Urban Institutions	6
ARCH 2340 and ARCH 2341	Modern Architecture and Recitation for ARCH 2340	4
ARCH 3210 and ARCH 3211	Environmental Systems and Recitation for ARCH 3210	4

### Architectural Electives

Complete two of the following:		8
ARCH 3370	Advanced Topics in Architectural History	
ARCH 3351	Architecture Topics Abroad: Theory	
ARCH 3352	Architecture Topics Abroad: Drawing	
ARCH 3450	Advanced Architectural Communication	
ARCH 4850	Urban and Architectural History Abroad	
ARCH 5115	Option Studio	
ARCH 5220	Integrated Building Systems	
ARCH 5310	Design Tactics and Operations	

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
Complete one of the following:		5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	

PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
<b>Science Elective</b>		
Complete one of the following:		4-5
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	
BIOL 1141	Microbes and Society	
BIOL 1143	Biology and Society	
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	
CHEM 3410	Environmental Geochemistry	
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	
EEMB 1450	Introduction to Marine Biology	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 2515	Sustainable Development	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	
ENVR 5350	Sustainable Energy and Climate Solutions	
PHYS 1111	Astronomy	
PHYS 1125	Introduction to Network Science: From the Human Cell to Facebook	
PHYS 1132	Energy, Environment, and Society	
PHYS 1155 and PHYS 1156	Physics for Engineering 2 and Lab for PHYS 1155	
PHYS 4623	Medical Physics	

### Supplemental Credit

3 semester hours from the following course count toward the mathematics/science requirement:		3
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

### Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1	<sup>1</sup>
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2	<sup>1</sup>
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### Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Integrative Courses

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
CIVE 4767	Senior Design Project—Structural	

### Engineering GPA Requirement

Minimum 2.000 GPA required in all Engineering courses

### Architecture GPA Requirement

Minimum 2.000 GPA required in all Architecture courses

### Program Requirements

141 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

Note:

- Students who wish to be considered for the two-year Master of Architecture Program at Northeastern **SHOULD** take ARCH 3450 as an elective and **SHOULD NOT** take ARCH 5115 or ARCH 5220 as architectural electives.
- Students who wish to be considered for the two-year Master of Architecture Program at Northeastern **MUST** have satisfied the Structural Systems (ARCH 5230) requirement. This requirement is achieved in this combined major by taking the following three courses, as follows:
  - CIVE 2221 Statics and Solid Mechanics (including recitation CIVE 2222)
  - CIVE 2320 Structural Analysis (including recitation CIVE 2321)
  - And at least one design course from the following:
    - CIVE 2324 Concrete Structure Design
    - CIVE 3425 Steel Structure Design

### Plan of Study

#### Four Years, 1 Co-op in Summer 2/Fall

Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 ARCH 1110 (EI)	4 MATH 2321 (FQ)	4 Vacation	

CHEM 1153	0 ARCH 1120 (ND, EI)	6 PHYS 1151 (ND)	3	
ENGW 1111 (WF)	4 GE 1502 (ER)	4 PHYS 1152 (AD)	1	
GE 1000	1 MATH 1342 (FQ)	4 PHYS 1153	1	
GE 1501	4			
MATH 1341 (FQ)	4			
	17	18	9	0

Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARCH 1310 (IC, DD)	4 ARCH 2340 (IC, SI, WI)	4 CIVE 2324	4 Co-op	
ARCH 1311	0 ARCH 2341	0 GE 3300	4	
ARCH 2130	6 CIVE 2260	4		
CIVE 2221	4 CIVE 2261 (AD)	1		
CIVE 2222	0 CIVE 2320	4		
MATH 2341	4 CIVE 2321	0		
	CIVE 2334	4		
	ENCP 2000	1		
	18	18	8	0

Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ARCH 2140	6 Vacation	Vacation	
	ARCH 3210 (ND, AD)	4		
	ARCH 3211	0		
	CIVE 2331	4		
	CIVE 2340	4		
	CIVE 2341	1		
	0	19	0	0

Year 4

Fall	Hours Spring	Hours
CIVE 3464	4 CIVE 4767 (EI, WI, CE)	5
ENCP 3000	1 Architectural Elective	4
ENGW 3302 or 3315 (WD)	4 Architectural Elective	4
Civil Project Elective (WI)	4 Science Elective	4
Civil Technical Elective (CIVE 3425 or CIVE 5522)	4	
	17	17

Total Hours: 141

## Five Years, 3 Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 ARCH 1110 (EI)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 ARCH 1120 (ND, EI)	6 PHYS 1151 (ND)	3	
ENGW 1111 (WF)	4 GE 1502 (ER)	4 PHYS 1152 (AD)	1	
GE 1000	1 MATH 1342 (FQ)	4 PHYS 1153	1	
GE 1501	4			
MATH 1341 (FQ)	4			
	17	18	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARCH 1310 (IC, DD)	4 CIVE 2260	4 Vacation	Co-op	
ARCH 1311	0 CIVE 2261 (AD)	1		
ARCH 2130	6 CIVE 2320	4		
CIVE 2221	4 CIVE 2321	0		
CIVE 2222	0 CIVE 2334	4		
MATH 2341	4 ENCP 2000	1		
	GE 3300	4		
	18	18	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ARCH 2340 (IC, SI, WI)	4 CIVE 2324	4 Co-op	
	ARCH 2341	0 ENGW 3302 or 3315 (WD)	4	
	CIVE 2331	4		
	CIVE 2340	4		
	CIVE 2341	1		
	Civil Technical Elective (CIVE 3425 or CIVE 5522)	4		
	0	17	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ARCH 2140	6 Vacation	Co-op	
	ARCH 3210 (ND, AD)	4		
	ARCH 3211	0		
	CIVE 3464	4		
	ENCP 3000	1		
	Civil Project Elective (WI)	4		
	0	19	0	0

Year 5		
Fall	Hours Spring	Hours
Co-op	CIVE 4767 (EI, WI, CE)	5
	Architectural Elective	4
	Architectural Elective	4
	Science Elective	4
	0	17

Total Hours: 141

## Civil Engineering and Computer Science, BSCE

The Bachelor of Science in Civil Engineering and Computer Science provides expertise in computational modeling and simulation of civil and environmental processes and systems. Students will be prepared for practice in the engineering and control of processes and systems vital for the sustainable development and management of civil and environmental infrastructure, as well as the fundamentals of program design, software development, and algorithms and data.

Computational and simulations-based approaches in engineering research and design practices have increased substantially in recent years in response to the rapidly increasing availability of data from remote and in-situ sensors as well as networked systems. Students who graduate with this combined major degree will have the breadth and depth of understanding and abilities to contribute to innovative and sustainable solutions to support global civil and environmental infrastructure demands.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC) and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with their general elective.

### Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2320 and CIVE 2321	Structural Analysis and Recitation for CIVE 2320	4



CIVE 2324	Concrete Structure Design	4
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340	5
GE 3300	Energy Systems: Science, Technology, and Sustainability	4

**Civil Engineering Project Elective**

Complete one of the following: 4

CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 5536	Hydrologic and Hydraulic Design	

**Senior Design Elective**

Complete one of the following: 5

CIVE 4765	Senior Design Project—Environmental	
CIVE 4767	Senior Design Project—Structural	
CIVE 4768	Senior Design Project—Transportation	

**Supplemental Credit**

1 semester hour from the following course counts toward the engineering requirement: 1

CIVE 3464	Probability and Engineering Economy for Civil Engineering	
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2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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**Computer Science Requirements**

Code	Title	Hours
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 3000 and CS 3001	Algorithms and Data and Recitation for CS 3000	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3700	Networks and Distributed Systems	4
CS 4500	Software Development	4

**Computer Science Elective**

Complete 4 semester hours of the following: 4

CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

**Supporting Courses: Mathematics/Science**

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

**Science Elective**

Complete one of the following science electives: 4

PHYS 1125	Introduction to Network Science: From the Human Cell to Facebook	
PHYS 1132	Energy, Environment, and Society	
ENVR 2515	Sustainable Development	

**Supplemental Credit**

3 semester hours from the following course count toward the mathematics/science requirement: 3

CIVE 3464	Probability and Engineering Economy for Civil Engineering	
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
	Complete 4 semester hours of academic, nonremedial, nonrepetitive courses.	4

**Integrative Courses**

Code	Title	Hours
	Students will complete one of these courses as part of their required courses above.	
CIVE 4765	Senior Design Project—Environmental	5
CIVE 4767	Senior Design Project—Structural	5
CIVE 4768	Senior Design Project—Transportation	5

**Engineering GPA Requirement**

Minimum 2.000 GPA required in all engineering courses

**KHOURY GPA REQUIREMENT**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirements**

138 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, One Co-op in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151	4	GE 1502 (ER)	4	CS 1800 (FQ)	4	Vacation	4
CHEM 1153	0	MATH 1342 (FQ)	4	CS 1802	4	1	1
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3	CS 2500 (FQ, ND)	4	4	4
GE 1000	1	PHYS 1152 (AD)	1	CS 2501	1	1	1
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General elective (IC, DD)	4				
	17		17		10		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2221	4	CIVE 2260	4	Vacation	4	CIVE 2340	4
CIVE 2222	0	CIVE 2261 (AD)	1			CIVE 2341	1
CIVE 2334	4	CIVE 2320	4			MATH 2341	4
CS 2510 (AD, ND)	4	CIVE 2321	0				
CS 2511	1	CIVE 2331	4				
ENCP 2000	1	CIVE 3464	4				
MATH 2321 (FQ)	4						
	18		17		0		9

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2324	4	Co-op	4	Co-op	4	Vacation	4

CS 3000	4			
CS 3001	0			
CS 3200 (AD, FQ)	4			
Civil project elective	4			
	16	0	0	0
Year 4				
Fall	Hours	Spring	Hours	Summer
CS 3500 and CS 3501 (AD, ND)	5	CS 4500 (WI)	4	4
CS 3700	4	GE 3300	4	4
ENCP 3000	1	Senior design elective (EI, WI, CE)	5	5
ENGW 3302 or 3315 (WD)	4	Computer science elective	4	4
Science elective (SI)	4			
	18		17	

Total Hours: 139

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151	4	GE 1502 (ER)	4	CS 1800 (FQ)	4	Vacation	4
CHEM 1153	0	MATH 1342 (FQ)	4	CS 1802	4	1	1
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3	CS 2500 (FQ, ND)	4	4	4
GE 1000	1	PHYS 1152 (AD)	1	CS 2501	1	1	1
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General elective (IC, DD)	4				
	17		17		10		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2221	4	Co-op	4	Co-op	4	CIVE 2340	4
CIVE 2222	0					CIVE 2341	1
CIVE 2260	4					MATH 2341	4
CIVE 2261 (AD)	1						
CIVE 2334	4						
ENCP 2000	1						
MATH 2321 (FQ)	4						
	18		0		0		9

Year 3			
Fall	Hours	Spring	Hours
CIVE 2320	4	Co-op	4
		Co-op	4

CIVE 2321	0		
CIVE 2331	4		
CIVE 3464	4		
CS 2510 (AD, ND)	4		
CS 2511	1		
	17	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2324	4 Co-op	0 Co-op	0 Vacation	
CS 3000	4			
CS 3001	0			
CS 3200 (AD, FQ)	4			
Civil project elective	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
CS 3500 and CS 3501 (AD, ND)	5 CS 4500 (WI)	4
CS 3700	4 GE 3300	4
ENCP 3000	1 Senior design elective (EI, WI, CE)	5
ENGW 3302 or 3315 (WD)	4 Computer science elective	4
Science elective (SI)	4	
	18	17

Total Hours: 139

## Chemical Engineering and Environmental Engineering, BSChE

The Bachelor of Science in Chemical Engineering and Environmental Engineering provides expertise in addressing a variety of environmental challenges built on fundamentals in engineering, chemical, biological, and ecological principles. The coursework is designed to prepare students to tackle interconnected challenges in water, energy, air quality, and related fields, through chemical engineering skills in the engineering and control of processes involving chemicals that impact our environment, exploring ways to reduce acid rain and smog; to recycle and reduce wastes; to develop new sources of environmentally clean energy; and to design inherently safe, efficient, and "green" processes.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

**Chemical Engineering**

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4
<b>Chemical Engineering Capstone</b>		
CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>
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<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Environmental Engineering**

Code	Title	Hours
<b>Core Environmental Engineering Courses</b>		
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 2335	Environmental Engineering Chemistry	4
CIVE 3430	Engineering Microbiology and Ecology	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4

**Environmental Engineering Elective Courses**

Complete at least two courses from the following list: 8

CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	8
CIVE 4777	Climate Hazards and Resilient Cities Abroad	
CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking	
CIVE 5271	Solid and Hazardous Waste Management	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
CIVE 5280	Remote Sensing of the Environment	
CIVE 5281	Coastal Dynamics and Design	
CIVE 5363	Climate Science, Engineering Adaptation, and Policy	
CIVE 5536	Hydrologic and Hydraulic Design	

### Supporting Courses: Mathematics/Science

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501 Cornerstone of Engineering 1 <sup>1</sup>

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Professional Development

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1 <sup>1</sup>

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2 <sup>1</sup>

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 8 semester hours of academic, nonremedial, nonrepetitive courses.		8

### Integrative Course

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement:		
CHME 2310	Transport Processes 1	4

### Major GPA Requirement

2.000 minimum GPA required in CHME courses

2.000 minimum GPA required in all CIVE courses

### Program Requirement

133 total semester hours required

### Plan of Study

#### Four Years, One Co-op in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 CHME 2308	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 GE 1502 (ER)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHME 2310	4 CHME 3312	4 General elective	4 Vacation	
CHME 2320	4 CIVE 2335	4 General elective	4	

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CIVE 2334	4	CIVE 3430	4
MATH 2341	4	CIVE 3435	4
		ENCP 2000	1
		16	17
		8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHME 3315 (AD)	4 CHME 4315 (AD, WI)	4 Vacation	Co-op	
CHME 3316	0 CHME 4316	0		
CHME 3322	4 CHME 4510	4		
ENGW 3302, 3307, or 3315 (WD)	4 CHME 4701	4		
CIVE 4534 (WI)	3 CIVE 5300	2		
CIVE 4535	1 CIVE 5301	2		
		16	16	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	CHME 4512	4
	CHME 4703 (EI, CE, WI)	4
	CHME 4705	0
	ENCP 3000	1
	Environmental engineering elective	4
	Environmenta engineering elective	4
		0
		17

Total Hours: 133

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 CHME 2308	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 GE 1502 (ER)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
		17	17	9
				0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHME 2310	4 CHME 3312	4 Vacation	0 Co-op	
CHME 2320	4 CIVE 2335	4		
CIVE 2334	4 CIVE 3430	4		
MATH 2341	4 CIVE 3435	4		

ENCP 2000	1		
16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CHME 3315 (AD)	4 Vacation	Co-op	
	CHME 3316	0		
	CHME 3322	4		
	ENGW 3302, 3307, or 3315 (WD)	4		
	CIVE 4534 (WI)	3		
	CIVE 4535	1		
		0	16	0
				0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CHME 4315 (AD, WI)	4 General elective	4 Co-op	
	CHME 4316	0 General elective	4	
	CHME 4510	4		
	CHME 4701	4		
	CIVE 5300	2		
	CIVE 5301	2		
	ENCP 3000	1		
		0	17	8
				0

**Year 5**

Fall	Hours Spring	Hours
Co-op	CHME 4512	4
	CHME 4703 (EI, CE, WI)	4
	CHME 4705	0
	Environmenta engineering elective	4
	Environmental engineering elective	4
		0
		16

Total Hours: 133

**Environmental Engineering, BSEnvE**

Throughout the world, environmental engineers play a key role in defining the future of sustainable cities and communities. Creating innovations and designing systems that ensure clean and healthy environments are some of the greatest collective challenges of our time. Revolutionary strategies and designs are needed to create symbiosis between our natural and manmade environments.

Using new and advanced technologies, environmental engineers must address the world's growing challenges, including engineering sustainable strategies coupled with the development of devices and tools to better predict and address environmental needs to provide clean

environments and planning green infrastructure in conjunction with the natural environment for a changing planet.

With a solid foundation in engineering, chemical, biological, and ecological principles, Northeastern's environmental engineering students learn how to tackle interconnected challenges as they relate to water, energy, air quality, and related fields. Understanding these complex interactions, particularly as they impact our built and natural environments, is embodied in our program through a holistic educational approach.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 4765	Senior Design Project—Environmental	5
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4
GE 3300	Energy Systems: Science, Technology, and Sustainability	4
<b>Environmental Engineering Technical Electives</b>		
Complete 11-12 semester hours from the following:		11-12
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
CIVE 4575	Construction Management	
CIVE 4777	Climate Hazards and Resilient Cities Abroad	
CIVE 5260	Environmental Fluid Mechanics	

CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking
CIVE 5271	Solid and Hazardous Waste Management
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure
CIVE 5280	Remote Sensing of the Environment
CIVE 5281	Coastal Dynamics and Design
CIVE 5363	Climate Science, Engineering Adaptation, and Policy
CIVE 5536	Hydrologic and Hydraulic Design

### Supplemental Credit

1 semester hour from the following course counts toward the engineering requirement:		1
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 2335	Environmental Engineering Chemistry	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 3430	Engineering Microbiology and Ecology	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
<b>Science Elective (Earth)</b>		
Complete one of the following:		4-5
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	

### Supplemental Credit

3 semester hours from the following course count toward the mathematics/science requirement:	3
CIVE 3464 Probability and Engineering Economy for Civil Engineering	
1 semester hour from the following course counts toward the mathematics/science requirement:	1
CIVE 2335 Environmental Engineering Chemistry	
1 semester hour from the following course counts toward the mathematics/science requirement:	1
CIVE 3430 Engineering Microbiology and Ecology	
1 semester hour from the following course counts toward the mathematics/science requirement:	1
GE 1501 Cornerstone of Engineering 1 <sup>1</sup>	

### Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

#### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement:	1
GE 1501 Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:	1
GE 1502 Cornerstone of Engineering 2 <sup>1</sup>	

### Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 24 SH of academic, nonremedial, nonrepetitive courses.		24

### Major GPA Requirement

2.000 minimum required in major (CIVE) courses

### Program Requirement

133 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Plan of Study

#### FOUR YEARS, TWO CO-OPS IN SUMMER 2 / FALL

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CHEM 1151 (ND)	4 GE 1502 (ER)	4 CIVE 2221	4 General Elective	4	

CHEM 1153	0 MATH 1342 (FQ)	4 CIVE 2222	0 General Elective	4	
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3 MATH 2321 (FQ)	4		
GE 1000	1 PHYS 1152 (AD)	1			
GE 1501	4 PHYS 1153	1			
MATH 1341 (FQ)	4 General Elective	4			
		17	17	8	8

Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CIVE 2260	4 CIVE 2331	4 General Elective	4 Co-op	0	
CIVE 2261 (AD)	1 CIVE 3435	4 General Elective	4		
CIVE 2334	4 ENCP 2000	1			
CIVE 2335	4 GE 3300	4			
MATH 2341	4 Science Elective (Earth)	4			
		17	17	8	0

Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	0 CIVE 3430	4 ENGW 3302 or 3315 (WD)	4 Co-op	0	
	CIVE 4534 (WI)	3 General Elective	4		
	CIVE 4535	1			
	Civil Tech. Elective	4			
	Civil Tech. Elective	4			
		0	16	8	0

Year 4					
Fall	Hours Spring	Hours			
Co-op	0 CIVE 3464	4			
	CIVE 4765 (EI, WI, CE)	5			
	CIVE 5300	2			
	CIVE 5301	2			
	ENCP 3000	1			
	Civil Tech. Elective	3			
		0	17		

Total Hours: 133

#### FOUR YEARS, TWO CO-OPS IN SUMMER 1 / SPRING

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CHEM 1151 (ND)	4 GE 1502 (ER)	4 CIVE 2221	4 General Elective	4	
CHEM 1153	0 MATH 1342 (FQ)	4 CIVE 2222	0 General Elective	4	
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3 MATH 2321 (FQ)	4		

GE 1000	1	PHYS 1152 (AD)	1		
GE 1501	4	PHYS 1153	1		
MATH 1341 (FQ)	4	General Elective	4		
	17		17	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2260	4 Co-op	Co-op	General Elective	4
CIVE 2261 (AD)	1		General Elective	4
CIVE 2334	4			
CIVE 2335	4			
ENCP 2000	1			
MATH 2341	4			
	18	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2331	4 Co-op	Co-op	ENGW 3302 or 3315 (WD)	4
CIVE 3435	4		General Elective	4
GE 3300	4			
Science Elective (Earth)	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours
CIVE 3430	4 CIVE 3464	4
CIVE 4534 (WI)	3 CIVE 4765 (EI, WI, CE)	5
CIVE 4535	1 CIVE 5300	2
Civil Tech. Elective	4 CIVE 5301	2
Civil Tech. Elective	4 ENCP 3000	1
	Civil Tech. Elective	3
	16	17

Total Hours: 133

**FIVE YEARS, THREE CO-OPS IN SUMMER 2 / FALL**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
GE 1000	1 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
ENGW 1111 (WF)	4 PHYS 1153	1		

MATH 1341 (FQ)	4	General Elective	4		
	17		17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2221	4 CIVE 2331	4 Vacation	0 Co-op	0
CIVE 2222	0 CIVE 2335	4		
CIVE 2260	4 ENCP 2000	1		
CIVE 2261 (AD)	1 GE 3300	4		
CIVE 2334	4 MATH 2341	4		
MATH 2321 (FQ)	4			
	17	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CIVE 3430	4 General Elective	4 Co-op	0
		CIVE 3435	4 General Elective	4
		Civil Tech. Elective	4	
		Science Elective (Earth)	4	
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CIVE 3464	4 General Elective	4 Co-op	0
		CIVE 4534 (WI)	3 General Elective	4
		CIVE 4535	1	
		ENCP 3000	1	
		ENGW 3302 or 3315 (WD)	4	
		Civil Tech. Elective	4	
	0	17	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 CIVE 4765 (EI, WI, CE)	5
	CIVE 5300	2
	CIVE 5301	2
	Civil Tech. Elective	3
	General Elective	4
	0	16

Total Hours: 133



**FIVE YEARS, THREE CO-OPS IN SUMMER 1 / SPRING****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2221	4 Co-op	Co-op	Vacation	
CIVE 2222	0			
CIVE 2260	4			
CIVE 2261 (AD)	1			
CIVE 2334	4			
ENCP 2000	1			
MATH 2321 (FQ)	4			
	18	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2331	4 Co-op	Co-op	General Elective	4
CIVE 2335	4		General Elective	4
GE 3300	4			
MATH 2341	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 3430	4 Co-op	Co-op	General Elective	4
CIVE 3435	4		General Elective	4
Civil Tech. Elective	4			
Science Elective (Earth)	4			
	16	0	0	8

**Year 5**

Fall	Hours Spring	Hours
CIVE 3464	4 CIVE 4765 (EI, WI, CE)	5
CIVE 4534 (WI)	3 CIVE 5300	2
CIVE 4535	1 CIVE 5301	2

ENCP 3000	1 Civil Tech. Elective	3
ENGW 3302 or 3315 (WD)	4 General Elective	4
Civil Tech. Elective	4	
	17	16

Total Hours: 133

**Environmental Engineering and Health Science, BSEnVE**

This intercollege combined major is designed for students who would like to explore their interest in the health sciences while earning the benefit of a Bachelor of Science degree in environmental engineering. The combined major reflects the respective departmental thrusts in environmental health and sustainable resource engineering to create awareness about the complex relationship between the environment and human health, prepare professionals in this growing area capable of providing engineering solutions to current and emerging topics related to environmental engineering and health sciences, and maintain healthy environmental systems by applying and developing techniques to reduce exposure to health hazards. This program combines the content of two majors to allow students to learn the breadth and depth of the convergence between public health and environmental engineering.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Engineering Requirement**

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 4765	Senior Design Project—Environmental	5
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4
GE 3300	Energy Systems: Science, Technology, and Sustainability	4

**Supplemental Credit**

1 semester hour from the following course counts toward the engineering requirement:	1
CIVE 3464 Probability and Engineering Economy for Civil Engineering	
3 semester hours from the following course count toward the engineering requirement:	3
CIVE 2335 Environmental Engineering Chemistry	
3 semester hours from the following course count toward the engineering requirement:	3
CIVE 3430 Engineering Microbiology and Ecology	
2 semester hours from the following course count toward the engineering requirement:	2
GE 1501 Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:	3
GE 1502 Cornerstone of Engineering 2 <sup>1</sup>	

**Health Sciences Major Requirement**

Code	Title	Hours
HLTH 5450	Healthcare Research (Principles of Epidemiology in Medicine and Public Health)	4
or PHTH 4202	Principles of Epidemiology in Medicine and Public Health	
PHTH 1260	The American Healthcare System	4
or PHTH 1261	Comparative Healthcare Systems	
PHTH 2210	Foundations of Biostatistics	4
PHTH 2350	Community and Public Health	4
or PHTH 2351	Community and Public Health - Global	
PHTH 2414	Environmental Health	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
PHTH 5214	Environmental Health	3

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.<sup>2</sup>

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

**Science Elective (Earth)**

Complete one of the following: 4-5

ENVR 1120	Oceans and Coasts
ENVR 1200	Dynamic Earth
ENVR 2200	Earth's Changing Cycles
ENVR 3125	Global Oceanic Change
ENVR 3200	Water Resources
ENVR 3600	Oceanography
ENVR 5201	Geologic Field Seminar

**Supplemental Credit**

3 semester hours from the following course count toward the mathematics/science requirement:	3
CIVE 3464 Probability and Engineering Economy for Civil Engineering	
1 semester hour from the following course counts toward the mathematics/science requirement:	1
CIVE 2335 Environmental Engineering Chemistry	
1 semester hour from the following course counts toward the mathematics/science requirement:	1
CIVE 3430 Engineering Microbiology and Ecology	
1 semester hour from the following course counts toward the mathematics/science requirement:	1
GE 1501 Cornerstone of Engineering 1 <sup>1</sup>	

**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:	1
GE 1501 Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:	1
GE 1502 Cornerstone of Engineering 2 <sup>1</sup>	

**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Integrative Course**

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
CIVE 4765	Senior Design Project—Environmental	

**Engineering GPA Requirement**

A minimum 2.000 GPA is required in major (CIVE) courses

### Health Sciences Major Requirement

A minimum grade of C or higher is required for all HLTH and PPTH courses

### Program Requirement

133 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

<sup>2</sup> Mathematics/Science Requirement: CHEM 1151, MATH 1341, and PHYS 1151 require a grade of C- or higher

### Plan of Study

#### FOUR YEARS, 1 CO-OP SUMMER 2/FALL

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 PPTH 1260 (SI)	4	
ENGW 1111 (WF)	4 PPTH 2210 (FQ, AD)	4		
GE 1000	1 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	8	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2221	4 CIVE 2331	4 MATH 2341	4 Co-op	
CIVE 2222	0 CIVE 2335	4 PPTH 2350 (SI)	4	
CIVE 2260	4 CIVE 3430	4		
CIVE 2261 (AD)	1 ENCP 2000	1		
CIVE 2334	4 PPTH 2414	4		
PPTH 2515	4			
	17	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CIVE 3435	4 Vacation	Vacation	
	GE 3300	4		
	HLTH 5450 or PPTH 4202 (ND, WI)	4		
	PPTH 4120 (IC, DD)	4		
	0	16	0	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 3464	4 CIVE 4765 (EI, WI, CE)	5		
CIVE 4534 (WI)	3 CIVE 5300	2		

CIVE 4535	1 CIVE 5301	2	
ENCP 3000	1 PPTH 5214	3	
ENGW 3302 or 3315 (WD)	4 Science Elective (Earth)	4	
PPTH 4540 (WI)	4		
	17	16	

Total Hours: 133

#### FIVE YEARS, 3 CO-OPS SUMMER 2/FALL

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 PPTH 1260 (SI)	4	
ENGW 1111 (WF)	4 PPTH 2210 (FQ, AD)	4		
GE 1000	1 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	8	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2221	4 CIVE 2331	4 MATH 2341	4 Co-op	
CIVE 2222	0 CIVE 2335	4 PPTH 2350 (SI)	4	
CIVE 2260	4 CIVE 3430	4		
CIVE 2261 (AD)	1 ENCP 2000	1		
CIVE 2334	4 PPTH 2414	4		
PPTH 2515	4			
	17	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CIVE 3435	4 Vacation	Co-op	
	GE 3300	4		
	HLTH 5450 or PPTH 4202 (ND, WI)	4		
	PPTH 4540 (WI)	4		
	0	16	0	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CIVE 3464	4 Vacation	Co-op	
	CIVE 4534 (WI)	3		
	CIVE 4535	1		
	ENCP 3000	1		

ENGW 3302 or 3315 (WD)	4		
PHTH 4120 (IC, DD)	4		
	0	17	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	CIVE 4765 (EI, WI, CE)	5
	CIVE 5300	2
	CIVE 5301	2
	PHTH 5214	3
	Science Elective (Earth)	4
	0	16

Total Hours: 133

## Environmental Engineering and Landscape Architecture, BSEnVE

Environmental engineering and landscape architecture are two important disciplines that deal with the complex interaction between the natural and the built environment. Both professions have critical functions that are essential in the development of society in terms of planning and designing more sustainable cities. The combination of these two professions creates great synergy and seeks to expose engineering students to the conceptual and practical content of landscape planning. Successful graduates from this degree are prepared to imagine and create projects that can be translated into reality providing solutions to address the world's growing challenges by designing clean and sustainable environments and green infrastructure.

Students completing the combined major Bachelor of Science in Environmental Engineering and Landscape Architecture receive a rigorous engineering training education, enabling a high level of engineering knowledge as well as exposure to a broad range of landscape architectural topics and design experiences.

Students will also have the opportunity to undertake a co-op experience consistent with the policies and opportunities offered within the College of Engineering.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

For this combined major, Nupath requirements are satisfied in several courses across the program and by required courses in the combined major.

## Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4
GE 3300	Energy Systems: Science, Technology, and Sustainability	4

### Senior Design Project

CIVE 4765	Senior Design Project—Environmental	5
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### Supplemental Credit

1 semester hour from the following course counts toward the engineering requirement:	1
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CIVE 3464	Probability and Engineering Economy for Civil Engineering	
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3 semester hours from the following course count toward the engineering requirement:	3
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CIVE 2335	Environmental Engineering Chemistry	
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3 semester hours from the following course count toward the engineering requirement:	3
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CIVE 3430	Engineering Microbiology and Ecology	
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2 semester hours from the following course count toward the engineering requirement:	2
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GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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3 semester hours from the following course count toward the engineering requirement:	3
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GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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## Landscape Architecture Requirements

Code	Title	Hours
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
ARCH 2340 and ARCH 2341	Modern Architecture and Recitation for ARCH 2340	4
LARC 2230	Introduction to Sustainable Site Planning and Design	4
LARC 2240	Sustainable Site Construction and Detailing	4
LARC 2430	Plants, People, and Landscape Change	4
LARC 2440	Planting Design	4
LARC 5420	Professional Practice in Landscape Architecture	4
or LARC 2340	Cities, Landscape, and Contemporary Culture	

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

Complete one of the following: 5

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	

#### Science Elective (Earth)

Complete one of the following: 4-5

ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	

#### Supplemental Credit

3 semester hours from the following course count toward the mathematics/science requirement: 3

CIVE 3464	Probability and Engineering Economy for Civil Engineering	
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

CIVE 2335	Environmental Engineering Chemistry	
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

CIVE 3430	Engineering Microbiology and Ecology	
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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### Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

#### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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### Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Integrative Courses

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
CIVE 4765	Senior Design Project—Environmental	

### Engineering GPA Requirement

Minimum 2.000 GPA required in all major courses

### Landscape Architecture GPA Requirement

Minimum 2.500 GPA required in all major courses

### Program Requirements

136 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Plan of Study

#### Four Years, 1 Co-op in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ARCH 1110 (EI)	4	MATH 2321 (FQ)	4	Vacation	
CHEM 1153	0	ARCH 1120 (EI, ND)	6	PHYS 1151 (ND)	3		
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1152 (AD)	1		
GE 1000	1	MATH 1342 (FQ)	4	PHYS 1153	1		
GE 1501	4						
MATH 1341 (FQ)	4						
	17		18		9		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2334	4	ARCH 1310 (IC, DD)	4	CIVE 2221	4	Co-op	
LARC 2230 (ND)	4	ARCH 1311	0	CIVE 2222	0		
LARC 2430 (ND)	4	CIVE 2260	4	GE 3300	4		
MATH 2341	4	CIVE 2261 (AD)	1				
		CIVE 2335	4				

CIVE 3430	4			
ENCP 2000	1			
	16	18	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ARCH 2340 (IC, SI, WI)	4 Vacation	Vacation	
	ARCH 2341	0		
	CIVE 2331	4		
	LARC 2240	4		
	LARC 2440	4		
	0	16	0	0

**Year 4**

Fall	Hours Spring	Hours
CIVE 3435	4 CIVE 4765 (EI, CE, WI)	5
CIVE 3464	4 CIVE 5300	2
CIVE 4534 (WI)	3 CIVE 5301	2
CIVE 4535	1 LARC 5420 or 2340 (IC, SI, WI)	4
ENCP 3000	1 Science Elective (Earth)	4
ENGW 3302 or 3315 (WD)	4	
	17	17

Total Hours: 136

**Five Years, 3 Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 ARCH 1110 (EI)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 ARCH 1120 (EI, ND)	6 PHYS 1151 (ND)	3	
ENGW 1111 (WF)	4 GE 1502 (ER)	4 PHYS 1152 (AD)	1	
GE 1000	1 MATH 1342 (FQ)	4 PHYS 1153	1	
GE 1501	4			
MATH 1341 (FQ)	4			
	17	18	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2334	4 ARCH 1310 (IC, DD)	4 CIVE 2221	4 Co-op	
LARC 2230 (ND)	4 ARCH 1311	0 CIVE 2222	0	
LARC 2430 (ND)	4 CIVE 2260	4 GE 3300	4	
MATH 2341	4 CIVE 2261 (AD)	1		
	CIVE 2335	4		

CIVE 3430	4			
ENCP 2000	1			
	16	18	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CIVE 2331	4 Vacation	Co-op	
	CIVE 3435	4		
	LARC 2440	4		
	Science Elective (Earth)	4		
	0	16	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ARCH 2340 (IC, SI, WI)	4 Vacation	Co-op	
	ARCH 2341	0		
	CIVE 4534 (WI)	3		
	CIVE 4535	1		
	ENCP 3000	1		
	ENGW 3302 or 3315 (WD)	4		
	LARC 2240	4		
	0	17	0	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	CIVE 3464	4
	CIVE 4765 (EI, CE, WI)	5
	CIVE 5300	2
	CIVE 5301	2
	LARC 5420 or 2340 (IC, SI, WI)	4
	0	17

Total Hours: 136

**Architectural Engineering, Minor**

Architectural engineering is a field of engineering that encompasses elements of civil engineering, mechanical engineering, architecture, and related fields to plan, design, and create buildings within the urban environment. It includes the architectural and structural design, mechanical systems design, computational controls and sensing, and sustainable engineering strategies.

The Department of Civil and Environmental Engineering recognizes the importance of interdisciplinary work and of exposing students to the great richness in a classroom of diverse students from multiple majors bringing their own perspectives. The prospect of engineering students in architecture classes and vice versa stands to benefit all the students, whether or not they are enrolled in the minor.

The minor in architectural engineering opens opportunities for students across the university who are interested in a unique and multidisciplinary approach to the built environment. For engineering students, this minor

offers an opportunity to work in the built environment and to better understand architecture, while for architecture students this is an opportunity to acquire the technical knowledge of a course of study in an engineering minor.

A total of 20 semester hours (SH) are required to complete this minor. Students will be required to complete 8 SH of required courses and 12 SH of approved elective courses from several colleges and departments at the university. Students interested in this minor must contact the civil engineering academic advisor in order to declare the minor.

This minor in architectural engineering is designed for any major and is open to any undergraduate student at the university.

Students may double count no more than two courses with any major or graduate degree requirement, other than general electives.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs and recitations courses where specified.

### Required Courses

Code	Title	Hours
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
ARCH 3210 and ARCH 3211	Environmental Systems and Recitation for ARCH 3210	4

### Electives

#### ARCHITECTURE ELECTIVES

Code	Title	Hours
Complete one of the following:		4
ARCH 2240	Architectonic Systems	
ARCH 2330 and ARCH 2331	Architecture and the City in the Nineteenth Century and Recitation for ARCH 2330	
ARCH 2340 and ARCH 2341	Modern Architecture and Recitation for ARCH 2340	
ARCH 5220	Integrated Building Systems	
LARC 2230	Introduction to Sustainable Site Planning and Design	
LARC 2240	Sustainable Site Construction and Detailing	

#### ENGINEERING ELECTIVES

Code	Title	Hours
Complete one or two of the following:		8
CIVE 2320 and CIVE 2321	Structural Analysis and Recitation for CIVE 2320	
CIVE 2324	Concrete Structure Design	
CIVE 3425	Steel Structure Design	
CIVE 5281	Coastal Dynamics and Design	
CIVE 5363	Climate Science, Engineering Adaptation, and Policy	
CIVE 5520	Structural Systems	
CIVE 5522	Structural Systems Modeling	
CIVE 5699	Special Topics in Civil Engineering (Vibration-based Structural Health Monitoring)	
SBSY 5100	Sustainable Design and Technologies in Construction	

SBSY 5200	Sustainable Engineering Systems for Buildings
SBSY 5250	Building Performance Simulation
SBSY 5300	Information Systems for Integrated Project Delivery

If only one course was taken above, complete one course from the following:

GE 3300	Energy Systems: Science, Technology, and Sustainability
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340
CIVE 4542	Foundation Engineering and Design
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure

### GPA Requirement

2.000 GPA required in the minor

### Civil Engineering, Minor

The minor in civil engineering opens opportunities for students across the university who are interested in gaining knowledge in urban engineering through the core disciplines within the Department of Civil and Environmental Engineering.

A total of 16 semester hours are required to complete this minor. Students interested in this minor must contact the civil and environmental engineering academic advisor in order to declare the minor. This minor is not open to civil engineering or environmental engineering majors.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs and recitations courses where specified.

### Required Courses

Code	Title	Hours
Choose four courses from the following list:		16
CIVE 2221	Statics and Solid Mechanics	
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	
CIVE 2320	Structural Analysis	
CIVE 2324	Concrete Structure Design	
CIVE 2331	Fluid Mechanics and Hydraulics	
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	
CIVE 2335	Environmental Engineering Chemistry	
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340	
CIVE 3425	Steel Structure Design	
CIVE 3430	Engineering Microbiology and Ecology	
CIVE 3435	Environmental Pollution Fate and Transport	
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
CIVE 4534	Water Treatment Systems Design	
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	

CIVE 4542	Foundation Engineering and Design
CIVE 4554	Highway Design
CIVE 4566	Design for Sustainable Transportation: Netherlands
CIVE 4575	Construction Management
CIVE 4777	Climate Hazards and Resilient Cities Abroad
CIVE 4780	Timber and Masonry Structures: Technology and Design Abroad
CIVE 5271	Solid and Hazardous Waste Management
CIVE 5221 and CIVE 5231	Construction Project Control and Organization and Alternative Project Delivery Systems in Construction
CIVE 5260	Environmental Fluid Mechanics
CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure
CIVE 5280	Remote Sensing of the Environment
CIVE 5281	Coastal Dynamics and Design
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300
CIVE 5363	Climate Science, Engineering Adaptation, and Policy
CIVE 5373	Transportation Systems: Analysis and Planning
CIVE 5376	Traffic Engineering and Sustainable Urban Street Design
CIVE 5520	Structural Systems
CIVE 5522	Structural Systems Modeling
CIVE 5536	Hydrologic and Hydraulic Design
CIVE 5699	Special Topics in Civil Engineering (Vibration-based Structural Health Monitoring)
SBSY 5100	Sustainable Design and Technologies in Construction
SBSY 5200	Sustainable Engineering Systems for Buildings
SBSY 5250	Building Performance Simulation
SBSY 5300	Information Systems for Integrated Project Delivery

## GPA Requirement

2.000 GPA required in the minor

## Environmental Chemistry, Minor

The minor in environmental chemistry offers an opportunity for students of any background interested in environmental sciences to better understand the chemistry of the environment. Students completing the minor in environmental chemistry have an opportunity to learn about the chemical processes of natural systems and environmental pollutants, while earning a credential that highlights their interest and expertise. This can be a useful course of study whether their primary degree and career will be in one of the traditional chemical, environmental, or engineering

programs, or another allied field. No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

## Required Courses

Code	Title	Hours
<b>Environmental Chemistry Core</b>		
Complete one of the following:		4
CIVE 2335	Environmental Engineering Chemistry	
ENVR 3410	Environmental Geochemistry	
<b>Chemistry Core</b>		
Complete one of the following:		5
CHEM 2321 and CHEM 2322 and CHEM 2323	Analytical Chemistry and Lab for CHEM 2321 and Recitation for CHEM 2321	
CHEM 3331 and CHEM 3332	Bioanalytical Chemistry and Lab for CHEM 3331	
<b>Research Experience</b>		
Complete one of the following:		4
CHEM 4750	Senior Research	
CHEM 4901	Undergraduate Research	
CHEM 4992	Directed Study	
CIVE 4991	Research	
CIVE 4992	Directed Study	
ENVR 4900	Earth and Environmental Science Capstone	
or ENVR 4997	Senior Thesis	
ENVR 4992	Directed Study	
<b>Electives</b>		
Complete two of the following:		8-9
CIVE 2335	Environmental Engineering Chemistry (If not used to satisfy Environmental Chemistry Core)	
CIVE 3435	Environmental Pollution Fate and Transport	
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	
ENVR 3125	Global Oceanic Change	
ENVR 3410	Environmental Geochemistry (If not used to satisfy Environmental Chemistry Core)	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
ENVR 4504	Environmental Pollution	
ENVR 4505	Wetlands	
ENVR 5190	Soil Science	



## GPA Requirement

Minimum 2.000 GPA required in all major courses

## Credit Requirement

Minimum of 21 hours required

## Electrical and Computer Engineering

Website (<http://www.ece.neu.edu>)

### Srinivas Tadigadapa, PhD

Professor and Chair

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Electrical and computer engineering (ECE) is a discipline that prepares graduates to solve problems across a diverse array of industries. Coursework is drawn from a curriculum that includes cutting-edge ECE technologies: embedded systems and internet of things, robotics and cyber-human systems, networking (mobile/wireless as well as the internet of the future), and big data analytics and machine learning. Northeastern's historic strengths in ECE include communications and digital signal processing, power and control systems, power electronics, RF/microwave magnetic materials, device technologies, computer engineering, networking, and robotics. The Department of Electrical and Computer Engineering is deeply committed to training and educating the next generation of electrical and computer engineers through Northeastern's experiential learning model and comprehensive pedagogy. BS, MS, and PhD degrees are offered in both electrical and computer engineering.

## Overview of Programs Offered

Please see the programs tab (p. 488) for a list of the department's academic programs.

Successful engineers need to organize and adapt information to solve problems. They also must work effectively in teams and communicate well. Therefore, the goal of the electrical engineering and computer engineering programs is to help students develop these skills and provide the appropriate technical background for a successful career.

The curricula are continuously assessed to ensure that graduates can achieve these goals and go on to succeed as professional electrical or computer engineers. The Bachelor of Science programs allow students sufficient flexibility within the standard eight academic semesters to earn a minor in nearly any department in the university. Typical minors might include physics, math, computer science, or business, but students might also organize their course of study to earn a minor in economics, English, or music.

The academic program is supported by extensive laboratory facilities for study and experimentation in computing, circuit analysis, electronics, digital systems, microwaves, control systems, semiconductor processing, very large-scale integration (VLSI) design, and digital signal processing. Students have access to state-of-the-art computing facilities, including numerous Linux and Windows-based workstations. Two introductory electrical and computer engineering courses meet in integrated lab-classes where students and professors, assisted by undergraduate and graduate teaching assistants, work together on both theoretical and practical aspects of a wide range of signal processing and computing systems.

## Mission of the Department

The primary educational missions of the Department of Electrical and Computer Engineering are to educate undergraduate students so they have the opportunity to obtain successful careers in electrical and computer engineering and related disciplines and pursue advanced study, such as graduate study in engineering or related disciplines, and to educate graduate students so they can make meaningful contributions to the research and industrial communities.

## Other Programmatic Features

More than 90 percent of department undergraduates take advantage of the cooperative education program. During the cooperative work phase of the program, the students' levels of responsibility grow as they gain theoretical and technical knowledge through academic work. A sophomore might begin cooperative work experience as an engineering assistant and progress by the senior year to a position with responsibilities similar to those of entry-level engineers.

The department also offers significant research opportunities throughout all fields of electrical and computer engineering, including participating in research centers based in our department and college.

A senior-year design course caps the education by drawing on everything learned previously. Teams of students propose, design, and build a functioning electrical or computer engineering system—just as they might in actual practice.

## Programs

### Bachelor of Science in Computer Engineering (BSCmpE)

- Computer Engineering (p. 488)
- Computer Engineering and Physics (p. 492)
- Computer Engineering and Computer Science (p. 327)

### Bachelor of Science in Electrical Engineering (BSEE)

- Electrical Engineering (p. 500)
- Electrical Engineering and Physics (p. 504)
- Electrical Engineering and Music with Concentration in Music Technology (p. 217)

### Combined Major (BSEE or BSCmpE)

- Electrical and Computer Engineering (p. 510)

## Minors

- Biomedical Engineering (p. 513)
- Computer Engineering (p. 514)
- Computational Data Analytics (p. 514)
- Electrical Engineering (p. 515)
- Robotics (p. 515)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Computer Engineering, BSCmpE

The use of computer technology is exploding, driven by applications in wireless communications, multimedia, portable devices, and internet computing. At the core of these technological advances are computer engineers who research, design, and develop hardware and software. With a degree in computer engineering you might develop a full-featured multimedia phone, design the next-generation microprocessor, program

computer-guided cameras to inspect nanomanufacturing facilities, or start your own software company.

The computer engineering major acquires a strong foundation in engineering principles and the physical sciences in addition to a powerful mix of theory and practice in hardware and software design. The core of the computer engineering curriculum comprises courses in computer organization and architecture, computer networks, computer-aided design, programming languages, optimization theory, and software design.

The BSCmpE degree requires a sequence of core courses, technical electives, general electives, and electives in the arts and humanities and social sciences.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements and, if these are not fulfilled in engineering courses, should use general electives to do so.

## Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2140	Computing Fundamentals for Engineers	4
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Computer Engineering Fundamentals</b>		
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
EECE 2560	Fundamentals of Engineering Algorithms	4
<b>Electrical Engineering Fundamentals</b>		
If more than one electrical engineering fundamentals course is taken, it can count as a technical elective.		
Complete one of the following:		4-5
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	
EECE 2520	Fundamentals of Linear Systems	
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	
<b>Computer Engineering Capstone Courses</b>		

EECE 4791	Electrical and Computer Engineering Capstone 1	1
EECE 4792	Electrical and Computer Engineering Capstone 2	4

### EECE Technical Electives

Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8 semester hours will be allowed to satisfy the requirement of technical electives. An additional 4 semester hours will be allowed as a general elective. At most, one of these courses (4 semester hours) can be taken in a semester.

Though students may register for EECE 2750 more than once, only 4 semester hours will be allowed to satisfy the requirements of technical electives. An additional 4 semester hours will be allowed as a general elective.

Complete four of the following:		16
EECE 2412 to EECE 2530		
EECE 2750	Enabling Engineering	
EECE 3324 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5115 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	

Two CS/CY/IS courses from the following approved list may be taken toward the EECE technical elective requirement:

CS 3200	Database Design	
CS 3500	Object-Oriented Design	
CS 3540 to CS 3800		
CS 4100 to CS 4770		
CS 4850	Building Game Engines	
CY 2550	Foundations of Cybersecurity	
IS 4200 to IS 4700		

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	2
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

## Supporting Courses: Mathematics/Science Requirement

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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**Professional Development**

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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1 semester hour from the following course counts toward the professional development requirement:

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	1
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**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28 semester hours of academic, nonremedial, nonrepetitive courses.		28

**Major GPA Requirement**

2.000 minimum GPA required in EECE courses

**Program Requirement**

133 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 General elective	4 General elective	4
CHEM 1153	0 MATH 1342 (FQ)	4 General elective	4	

ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General elective	4		
		17	17	8
				4

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 CS 1800 (FQ)	4 MATH 3081 (AD)	4 Co-op	0
EECE 2160	4 CS 1802	1 General elective	4	
MATH 2341	4 EECE 2150 (AD)	5		
PHYS 1155 (ND)	3 ENCP 2000	1		
PHYS 1156 (AD)	1 CE fundamentals	4		
PHYS 1157	1 CE fundamentals	5		
		17	20	8
				0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENCP 3000	1 EECE 4791 (EI, CE, WI)	1 Co-op	0
	CE fundamentals	4 ENGW 3302 or 3315 (WD)	4	
	EE fundamentals	4 EECE technical elective	4	
	EECE technical elective	4		
	General elective	4		
		0	17	9
				0

Year 4				
Fall	Hours Spring	Hours		
Co-op	0 EECE 4792 (EI, CE, WI)	4		
	EECE technical elective	4		
	EECE technical elective	4		
	General elective	4		
		0	16	

Total Hours: 133

**Four Years, Two Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 General elective	4 General elective	4

CHEM 1153	0 MATH 1342 (FQ)	4 General elective	4
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3	
GE 1000	1 PHYS 1152 (AD)	1	
GE 1501	4 PHYS 1153	1	
MATH 1341 (FQ)	4 General elective	4	
		17	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 Co-op	0 Co-op	0 MATH 3081 (AD)	4
EECE 2160	4		General elective	4
ENCP 2000	1			
MATH 2341	4			
PHYS 1155 (ND)	3			
PHYS 1156 (AD)	1			
PHYS 1157	1			
		18	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 (FQ)	4 Co-op	0 Co-op	0 EECE 4791 (EI, CE, WI)	1
CS 1802	1		ENGW 3302 or 3315 (WD)	4
EECE 2150 (AD)	5		EECE technical elective	4
ENCP 3000	1			
CE fundamentals	4			
General elective	4			
		19	0	9

**Year 4**

Fall	Hours Spring	Hours
CE fundamentals	4 EECE 4792 (EI, CE, WI)	4
CE fundamentals	5 EECE technical elective	4
EE fundamentals	4 EECE technical elective	4
EECE technical elective	4 General elective	4
		17

Total Hours: 133

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General elective	4		
		17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 CS 1800 (FQ)	4 Vacation	0 Co-op	0
EECE 2160	4 CS 1802	1		
MATH 2341	4 EECE 2150 (AD)	5		
PHYS 1155 (ND)	3 ENCP 2000	1		
PHYS 1156 (AD)	1 CE fundamentals	4		
PHYS 1157	1 General elective	4		
		17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CE fundamentals	5 ENGW 3302 or 3315 (WD)	4 Co-op	0
	CE fundamentals	4 General elective	4	
	EE fundamentals	4		
	General elective	4		
		0	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENCP 3000	1 EECE 4791 (EI, WI, CE)	1 Co-op	0
	MATH 3081 (AD)	4 EECE technical elective	4	
	EECE technical elective	4		
	EECE technical elective	4		
	General elective	4		
		0	5	0

## Year 5

Fall	Hours Spring	Hours
Co-op	0 EECE 4792 (EI, WI, CE)	4
	EECE technical elective	4
	General elective	4
	General elective	4
	0	16

Total Hours: 133

## Five Years, Three Co-ops in Spring/Summer 1

## Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General elective	4		
	17	17	0	0

## Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 Co-op	Co-op	Vacation	
EECE 2160	4			
ENCP 2000	1			
MATH 2341	4			
PHYS 1155 (ND)	3			
PHYS 1156 (AD)	1			
PHYS 1157	1			
	18	0	0	0

## Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 (FQ)	4 Co-op	Co-op	ENGW 3302 or 3315 (WD)	4
CS 1802	1		General elective	4
EECE 2150 (AD)	5			
CE fundamentals	4			
General elective	4			
	18	0	0	8

## Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 3000	1 Co-op	Co-op	EECE 4791 (EI, WI, CE)	1
CE fundamentals	4		EECE technical elective	4
CE fundamentals	5			
EE fundamentals	4			
General elective	4			
	18	0	0	5

## Year 5

Fall	Hours Spring	Hours
EECE 4792 (EI, WI, CE)	4 EECE technical elective	4
MATH 3081 (AD)	4 EECE technical elective	4
EECE technical elective	4 General elective	4
General elective	4 General elective	4
	16	16

Total Hours: 133

## NOTES

- Computing Fundamentals for Engineers (EECE 2140) can be taken in year 1 spring instead of a general elective by students who are interested in the course in preparation for co-ops involving programming and computing hardware.
- The capstone design courses are taken as follows: (EECE 4791 – summer 1 and EECE 4792 – spring) OR (EECE 4791 – summer 2 and EECE 4792 – fall).

## Computer Engineering and Physics, BSCmpE

This intercollege combined major serves students who would like to explore their interest in physics while earning the benefit of an accredited Bachelor of Science degree in engineering. The dual major combines a major in physics from the Department of Physics in the College of Arts and Sciences with the Bachelor of Science in Computer Engineering degree from the Department of Electrical and Computer Engineering.

Because of the large body of shared knowledge between computer engineering and physics, an integrated dual major between these two disciplines is a logical course of study and can be accomplished within a student's usual five-year program (including three co-op placements) without requiring course overloading in any semester. A student graduating from this program will have studied both the physical fundamentals and computer systems.

Students interested in this program should contact the Department of Electrical and Computer Engineering or the Department of Physics as early as possible, preferably prior to registering for freshman courses.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements through general electives.

## Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2140	Computing Fundamentals for Engineers	4
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Computer Engineering Fundamentals</b>		
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
EECE 2560	Fundamentals of Engineering Algorithms	4
<b>Electrical Engineering Fundamentals</b>		
If more than one electrical engineering fundamentals course is taken, it can count as a technical elective.		
Complete one of the following:		4
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	
EECE 2520	Fundamentals of Linear Systems	
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	
<b>Computer Engineering Capstone Courses</b>		
EECE 4791	Electrical and Computer Engineering Capstone 1	1
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>Technical Electives</b>		
Students can register for EECE 4991 / EECE 4992 / EECE 4993 more than once. For these courses combined, a maximum of 8 semester hours will be allowed to satisfy the requirement of technical electives. An additional 4 semester hours will be allowed as a general elective. At most, one of these courses (4 semester hours) can be taken in a semester.		
Though students may register for EECE 2750 more than once, only 4 semester hours will be allowed to satisfy the requirements of technical electives. An additional 4 semester hours will be allowed as a general elective.		

Complete two of the following: 8

EECE 2412 to EECE 2530	
EECE 2750	Enabling Engineering
EECE 3324 to EECE 4698	
EECE 4991	Research
EECE 4992	Directed Study
EECE 4993	Independent Study
EECE 5115 to EECE 5698	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage

One CS/CY/IS course from the following approved list may be taken toward the EECE technical elective requirement:

CS 3200	Database Design
CS 3500	Object-Oriented Design
CS 3540 to CS 3800	
CS 4100 to CS 4770	
CS 4850	Building Game Engines
CY 2550	Foundations of Cybersecurity
IS 4200 to IS 4700	

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

## Mathematics/Science

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
Complete one of the following:		5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
Complete one of the following:		5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	

PHYS 2303	Modern Physics	4
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

Advanced Physics Elective		
Complete one of the following:		
MATH 4606	Mathematical and Computational Methods for Physics	4
PHYS 3600 to PHYS 7999		

Supplemental Credit		
1 semester hour from the following course counts toward the mathematics/science requirement:		
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1

### Professional Development

Code	Title	Hours
Required Professional Development		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

Additional Required Courses		
1 semester hour from the following course counts toward the professional development requirement:		
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
1 semester hour from the following course counts toward the professional development requirement:		
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	1

### Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 8 semester hours of academic, nonremedial, nonrepetitive courses.		
		8

### Integrative Requirement

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
EECE 4791	Electrical and Computer Engineering Capstone 1	1

### Major GPA Requirement

2.000 minimum GPA required in EECE courses

### Program Requirement

133 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

## Plan of Study

### Four Years, One Co-op in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ENGW 1111 (WF)	4	MATH 2341	4	Vacation	4
CHEM 1153	0	GE 1502 (ER)	4				
GE 1000	1	MATH 1342 (FQ)	4				
GE 1501	4	PHYS 1165 or 1155 (ND)	4				
MATH 1341 (FQ)	4	PHYS 1166 or 1156 (AD)	1				
PHYS 1161 or 1151 (ND)	4	PHYS 1167 or 1157	0				
PHYS 1162 or 1152 (AD)	1						
PHYS 1163 or 1153	0						
		18		17		4	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2140	4	CS 1800 (FQ)	4	Vacation	4	Vacation	4
EECE 2160	4	CS 1802	1				
ENCP 2000	1	EECE 2150 (AD)	5				
MATH 2321 (FQ)	4	PHYS 4305 (ND)	4				
PHYS 2303 (ND)	4	CE fundamentals	4				
		17		18		0	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 3602 (ND)	4	Co-op	4	Co-op	4	EECE 4791 (EI, WI, CE)	1
CE fundamentals	5					ENGW 3302 or 3315 (WD)	4
CE fundamentals	4					PHYS 3600 (ND, AD, WI)	4
General elective	4						
		17		0		0	9

Year 4			
Fall	Hours	Spring	Hours
EECE 4792 (EI, WI, CE)	4	EE fundamentals	4
ENCP 3000	1	EECE technical elective	4
MATH 3081 (AD)	4	General elective	4
PHYS 4115 (ND, FQ)	4	PHYS advanced elective	4

EECE technical elective	4			
	17	16		

Total Hours: 133

### Five Years, Three Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ENGW 1111 (WF)	4	Vacation	0	Vacation	0
CHEM 1153	0	GE 1502 (ER)	4				
GE 1000	1	MATH 1342 (FQ)	4				
GE 1501	4	PHYS 1165 or 1155 (ND)	4				
MATH 1341 (FQ)	4	PHYS 1166 or 1156 (AD)	1				
PHYS 1161 or 1151 (ND)	4	PHYS 1167 or 1157	0				
PHYS 1162 or 1152 (AD)	1						
PHYS 1163 or 1153	0						
	18		17		0		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2140	4	CS 1800 (FQ)	4	Vacation	0	Co-op	0
MATH 2321 (FQ)	4	CS 1802	1				
MATH 2341	4	EECE 2150 (AD)	5				
PHYS 2303 (ND)	4	EECE 2160	4				
		ENCP 3000	1				
		PHYS 3602 (ND)	4				
	16		19		0		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHYS 4115 (ND, FQ)	4	PHYS 3600 (ND, AD, WI)	4	Co-op	0
		CE fundamentals	5				
		CE fundamentals	4				
		CE fundamentals	4				
	0		17		4		0

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENCP 3000	1	EECE 4791 (EI, WI, CE)	1	Co-op	0
		MATH 3081 (AD)	4	ENGW 3302 or 3315 (WD)	4		

PHYS 4305 (ND)	4	EECE technical elective	4
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EE fundamentals 4

General elective 4

0 17 9 0

#### Year 5

Fall	Hours	Spring	Hours
Co-op	0	EECE 4792 (EI, WI, CE)	4
		EECE technical elective	4
		General elective	4
		PHYS advanced elective	4
	0		16

Total Hours: 133

#### Notes:

The capstone design courses are taken as follows: (Electrical and Computer Engineering Capstone 1 (EECE 4791)—summer 1 and Electrical and Computer Engineering Capstone 2 (EECE 4792)—spring) OR (Electrical and Computer Engineering Capstone 1 (EECE 4791)—summer 2 and Electrical and Computer Engineering Capstone 2 (EECE 4792)—fall).

Physics courses are offered on the following schedule:

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

### Computer Engineering and Computer Science, BScmpE

This intercollege dual major serves students who are interested in both computer hardware and software, combining an accredited Bachelor of Science degree in engineering with the added benefits of depth in software principles found in a Bachelor of Science degree in computer science. This program provides a well-rounded computing education that includes engineering design principles, computational thinking, proper program design, and a solid background in mathematics and science. The degree is fully accredited as a Bachelor of Science in Computer Engineering and adds the computer science depth.



Because of the large body of shared knowledge between computer engineering and computer science, an integrated dual major between these two disciplines is a logical course of study and can be accomplished within a student's usual five-year program (including three co-op placements) without requiring course overloading in any semester. A student graduating from this program will have a solid foundation in both computer hardware and software principles, and should be prepared for a wide range of career paths in the computing field or any related field that relies on the application of engineering or computing principles.

Students interested in this program should contact the Department of Electrical and Computer Engineering or the Department of Computer and Information Science as early as possible, preferably prior to registering for freshman courses.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2140	Computing Fundamentals for Engineers	4
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Computer Engineering Fundamentals</b>		
CS 3000	Algorithms and Data	4
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
<b>Electrical Engineering Fundamentals</b>		
Complete one of the following:		4
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	
EECE 2520	Fundamentals of Linear Systems	
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	
<b>Computer Engineering Capstone Courses</b>		
EECE 4791	Electrical and Computer Engineering Capstone 1	1
EECE 4792	Electrical and Computer Engineering Capstone 2	4

## EECE Technical Electives

Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH will be allowed to satisfy the requirement of technical electives. An additional 4SH will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.

Though students may register for EECE 2750 more than once, only 4SH will be allowed to satisfy the requirements of technical electives. An additional 4SH will be allowed as a general elective.

Complete two of the following:		8
EECE 2412 to EECE 2530		
EECE 2750	Enabling Engineering	
EECE 3324 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5115 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	

## Khoury Elective Courses 8

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010		8
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

## Supplemental Credit

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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## Computer Science Requirements

Code	Title	Hours
<b>Computer Science Introductory Courses</b>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
<b>Computer Science Upper-Level Courses</b>		
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3650	Computer Systems	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

## Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
<b>Supplemental Credit</b>		
1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

### Professional Development

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1
<b>Additional Required Courses</b>		
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

### Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 8 SH of academic, nonremedial, nonrepetitive courses.		8

### Integrative Courses

Code	Title	Hours
The following courses are already required above and also fulfill the integrative requirement.		

CS 1800	Discrete Structures
EECE 4791	Electrical and Computer Engineering Capstone 1
EECE 4792	Electrical and Computer Engineering Capstone 2
MATH 1341	Calculus 1 for Science and Engineering
MATH 1342	Calculus 2 for Science and Engineering
MATH 3081	Probability and Statistics
PHYS 1151 and PHYS 1152	Physics for Engineering 1 and Lab for PHYS 1151

### Major GPA Requirement

2.000 minimum GPA in EECE courses

2.000 minimum GPA required in all CS, CY, DS, and IS courses

### Program Requirement

140 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	CS 2500 (ND, FQ)	4	MATH 2341	4	General Elective	4
CHEM 1153	0	CS 2501	1	PHYS 1155 (ND)	3	General Elective	4
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1156 (AD)	1		
GE 1000	1	MATH 1342 (FQ)	4	PHYS 1157	1		
GE 1501	4	PHYS 1151 (ND)	3				
MATH 1341 (FQ)	4	PHYS 1152 (AD)	1				
		PHYS 1153	1				
		17			18		
					9		
						8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 (FQ)	4	CS 2800	4	CS 3000	4	Co-op	0
CS 1802	1	CS 2801	1	Khoury Elective	4		
CS 2510 (ND, AD)	4	EECE 2160	4				
CS 2511	1	EECE 2540	4				
EECE 2140	4	ENCP 2000	1				
EECE 2150 (AD)	5	MATH 3081 (AD)	4				
		19			18		
					8		
						0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 3650	4	CS 3500 and CS 3501 (ND, AD)	5	Co-op	0

ENCP 3000	1	EECE 4791 (EI, WI, CE)	1
EECE 2322	4	EECE Technical Elective	4
EECE 2323	1		
ENGW 3302 or 3315 (WD)	4		
EE Fundamentals	4		
0	18	10	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	0 CS 4500 or 4530 (WI)	4
	EECE 4792 (EI, WI, CE)	4
	EECE Technical Elective	4
	Khoury Elective	4
0	16	

Total Hours: 141

### Four Years, Two Co-ops in Spring/Summer 1

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 CS 2500 (ND, FQ)	4 MATH 2341	4 General Elective	4
CHEM 1153	0 CS 2501	1 PHYS 1155 (ND)	3 General Elective	4
ENGW 1111 (WF)	4 GE 1502 (ER)	4 PHYS 1156 (AD)	1	
GE 1000	1 MATH 1342 (FQ)	4 PHYS 1157	1	
GE 1501	4 PHYS 1151 (ND)	3		
MATH 1341 (FQ)	4 PHYS 1152 (AD)	1		
	PHYS 1153	1		
17	18	9	8	

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 (FQ)	4 Co-op	0 Co-op	0 CS 3000	4
CS 1802	1		Khoury Elective	4
CS 2510 (ND, AD)	4			
CS 2511	1			
EECE 2140	4			
EECE 2150 (AD)	5			
ENCP 2000	1			
20	0	0	8	

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 2800	4 Co-op	0 Co-op	0 EECE 4791 (EI, WI, CE)	1
CS 2801	1		Khoury Elective	4
EECE 2160	4		EECE Technical Elective	4
ENCP 3000	1			
MATH 3081 (AD)	4			
EECE 2540	4			
18	0	0	9	

**Year 4**

Fall	Hours Spring	Hours
EECE 2322	4 CS 4500 or 4530 (WI)	4
EECE 2323	1 ENGW 3302 or 3315 (WD)	4
EECE 4792 (EI, WI, CE)	4 EECE Technical Elective	4
CS 3500 and CS 3501	5 CS 3650	4
EE Fundamentals	4	
18	16	

Total Hours: 141

### Five Years, Three Co-ops in Summer 2/Fall

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
17	17	0	0	

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 (FQ)	4 CS 2510 (ND, AD)	4 Vacation	0 Co-op	0
CS 1802	1 CS 2511	1		
CS 2500 (ND, FQ)	4 CS 2800	4		
CS 2501	1 CS 2801	1		
EECE 2140	4 EECE 2160	4		
MATH 2341	4 ENCP 2000	1		
	PHYS 1155 (ND)	3		

PHYS 1156 (AD)	1			
PHYS 1157	1			
	18	20	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 3650	4 CS 3500 and CS 3501 (ND, AD)	5 Co-op	0

EECE 2150 (AD)	5	ENGW 3302 or 3315 (WD)	4	
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EECE 2323	1			
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EECE 2322	4			
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EECE 2540	4			
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	0	18	9	0
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**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENCP 3000	1 CS 3000	4 Co-op	0

MATH 3081 (AD)	4	EECE 4791 (EI, WI, CE)	1	
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EE Fundamentals	4	General Elective	4	
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Khoury Elective	4			
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Khoury Elective	4			
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	0	17	9	0
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**Year 5**

Fall	Hours Spring	Hours
Co-op	0 CS 4500 or 4530 (WI)	4

EECE 4792 (EI, WI, CE)	4	
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EECE Technical Elective	4	
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EECE Technical Elective	4	
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	0	16
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	0	16
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Total Hours: 141

**Five Years, Three Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0

CHEM 1153	0 MATH 1342 (FQ)	4		
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ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
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GE 1000	1 PHYS 1152 (AD)	1		
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GE 1501	4 PHYS 1153	1		
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MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 (FQ)	4 Co-op	0 Co-op	0 Vacation	0

CS 1802	1			
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CS 2500 (ND, FQ)	4			
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CS 2501	1			
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EECE 2140	4			
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ENCP 2000	1			
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MATH 2341	4			
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	19	0	0	0
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**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 2510 (ND, AD)	4 Co-op	0 Co-op	0 ENGW 3302 or 3315 (WD)	4

CS 2511	1		MATH 3081 (AD)	4
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CS 2800	4			
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CS 2801	1			
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EECE 2160	4			
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PHYS 1155 (ND)	3			
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PHYS 1156 (AD)	1			
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PHYS 1157	1			
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	19	0	0	8
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**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501 (ND, AD)	5 Co-op	0 Co-op	0 CS 3000	4

CS 3650	4		EECE 4791 (EI, WI, CE)	1
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EECE 2150 (AD)	5		EECE Technical Elective	4
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EECE 2540	4			
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ENCP 3000	1			
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	19	0	0	9
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**Year 5**

Fall	Hours Spring	Hours
EECE 2322	4 CS 4500 or 4530 (WI)	4

EECE 2323	1 EE Fundamental:	4
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EECE 4792 (EI, WI, CE)	4 EECE Technical Elective	4
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Khoury Elective	4 General Elective	4
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Khoury 4  
Elective

17

16

Total Hours: 141

## Notes

- Computing Fundamentals for Engineers (EECE 2140) can be taken in Year 1 Spring during the five year plan instead of a General Elective by students who are interested in the course in preparation for co-ops involving programming and computing hardware.
- The Capstone Design Courses are taken as follows: (Electrical and Computer Engineering Capstone 1 (EECE 4791) - Summer 1 and Electrical and Computer Engineering Capstone 2 (EECE 4792) - Spring) OR (Electrical and Computer Engineering Capstone 1 (EECE 4791) - Summer 2 and Electrical and Computer Engineering Capstone 2 (EECE 4792) - Fall).

## Electrical Engineering, BSEE

The components of the Information Age—global communication systems; computers and computer chips, and the software that runs them; as well as pacemakers, magnetic resonance imaging, and interplanetary space missions—are possible because of the efforts of electrical engineers. Today, electrical engineers are developing concepts and working to translate these ideas into the next generation of products, from computers and safe, energy-efficient vehicles, to radar that can detect unexploded land mines from the air, to microrobots that diagnose disease from inside the body.

Many electrical engineers work in the traditional areas of communications, computation, and control and components required to realize such systems. They are involved in design and product development, testing and quality control, sales and marketing, and manufacturing. Others use their problem-solving skills in diverse areas such as bioengineering, healthcare, electronic music, meteorology, and experimental psychology. Some graduates draw on their electrical engineering backgrounds to launch successful careers as physicians, financial analysts, attorneys, and entrepreneurs.

The BSEE degree requires a sequence of core courses and advanced study in one or more technical elective areas: electronic circuits and devices; signals and systems; fields, waves, and optics; power engineering; or computer engineering. General electives and electives in the arts and humanities and social sciences are also required.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

NUPath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by

required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2140	Computing Fundamentals for Engineers	4
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Electrical Engineering Fundamentals</b>		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	5
EECE 2520	Fundamentals of Linear Systems	4
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	5
<b>Computer Engineering Fundamentals</b>		
If more than one computer engineering fundamentals course is taken, it can count as a technical elective.		
Complete one of the following:		4-5
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2560	Fundamentals of Engineering Algorithms	
<b>Electrical Engineering Capstone Courses</b>		
EECE 4791	Electrical and Computer Engineering Capstone 1	1
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>Electrical Engineering Technical Electives</b>		
Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH will be allowed to satisfy the requirement of technical electives. An additional 4SH will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.		
Though students may register for EECE 2750 more than once, only 4SH will be allowed to satisfy the requirements of technical electives. An additional 4SH will be allowed as a general elective.		
Complete four of the following:		16
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540 to EECE 2750		
EECE 3324 to EECE 3410		
EECE 4512 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5115 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	

## Supplemental Credit

2 semester hours from the following course count toward the engineering requirement: 2

EECE 3468 Noise and Stochastic Processes

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501 Cornerstone of Engineering 1 <sup>1</sup>

3 semester hours from the following course count toward the engineering requirement: 3

GE 1502 Cornerstone of Engineering 2 <sup>1</sup>

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

#### Supplemental Credit

2 semester hours from the following course count toward the mathematics/science requirement: 2

EECE 3468 Noise and Stochastic Processes

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501 Cornerstone of Engineering 1 <sup>1</sup>

### Professional Development

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

#### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1 <sup>1</sup>

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2 <sup>1</sup>

### Writing Requirements

Code	Title	Hours
ENGW 1111	First-Year Writing	4

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 28 SH of academic, nonremedial, nonrepetitive courses.		28

### Major GPA Requirement

Minimum 2.000 GPA required in EECE courses

### Program Requirement

133 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

##### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 General Elective	4 General Elective	4
CHEM 1153	0 MATH 1342 (FQ)	4 General Elective	4	
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
17		17	8	4

##### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 EECE 2160	4 General Elective	4 Co-op	0
EECE 2150 (AD)	5 ENCP 2000	1 General Elective	4	
MATH 2341	4 MATH 2321 (FQ)	4		
PHYS 1155 (ND)	3 EE Fundamentals:	5		
PHYS 1156 (AD)	1 EE Fundamentals	4		
PHYS 1157	1			
18		18	8	0

##### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 EECE 3468	4 EECE 4791 (EI, CE, WI)	1 Co-op	0
	ENCP 3000	1 ENGW 3302 or 3315 (WD)	4	
	CE Fundamentals	4 EECE Technical Elective	4	

EE Fundamentals	5		
EECE Technical Elective	4		
	0	18	9

**Year 4**

Fall	Hours Spring	Hours
Co-op	0 EECE 4792 (EI, CE, WI)	4
	EECE Technical Elective	4
	EECE Technical Elective	4
	General Elective	4
	0	16

Total Hours: 133

**Four Years, Two Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 General Elective	4 General Elective	4
CHEM 1153	0 MATH 1342 (FQ)	4 General Elective	4	
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	8	4

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 Co-op	0 Co-op	0 General Elective	4
EECE 2150 (AD)	5		General Elective	4
ENCP 2000	1			
MATH 2341	4			
PHYS 1155 (ND)	3			
PHYS 1156 (AD)	1			
PHYS 1157	1			
	19	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2160	4 Co-op	0 Co-op	0 EECE 4791 (EI, CE, WI)	1
ENCP 3000	1		ENGW 3302 or 3315 (WD)	4

MATH 2321 (FQ)	4		EECE Technical Elective	4
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EE Fundamentals	4		
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EE Fundamentals	5		
	18	0	0

**Year 4**

Fall	Hours Spring	Hours
EECE 3468	4 EECE 4792 (EI, CE, WI)	4
CE Fundamentals	4 EECE Technical Elective	4
EE Fundamentals	5 EECE Technical Elective	4
EECE Technical Elective	4 General Elective	4
	17	16

Total Hours: 133

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 EECE 2160	4 Vacation	0 Co-op	0
EECE 2150 (AD)	5 ENCP 2000	1		
MATH 2341	4 MATH 2321 (FQ)	4		
PHYS 1155 (ND)	3 EE Fundamentals	4		
PHYS 1156 (AD)	1 General Elective	4		
PHYS 1157	1			
	18	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CE Fundamentals	4 ENGW 3302 or 3315 (WD)	4 Co-op	0

EE Fundamentals	5	General Elective	4	
EE Fundamentals	5			
General Elective	4			
	0	18	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 EECE 3468	4 EECE 4791 (EI, WI, CE)	1 Co-op	0
	ENCP 3000	1 EECE Technical Elective	4	
	EECE Technical Elective	4		
	General Elective	4		
	General Elective	4		
	0	17	5	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 EECE 4792 (EI, WI, CE)	4
	EECE Technical Elective	4
	EECE Technical Elective	4
	General Elective	4
	0	16

Total Hours: 133

**Five Years, Three Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 Co-op	0 Co-op	0 Vacation	0
EECE 2150 (AD)	5			

ENCP 2000	1			
MATH 2341	4			
PHYS 1155 (ND)	3			
PHYS 1156 (AD)	1			
PHYS 1157	1			
	19	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2160	4 Co-op	0 Co-op	0 ENGW 3302 or 3315 (WD)	4
MATH 2321 (FQ)	4		General Elective	4
EE Fundamentals	4			
General Elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 3000	1 Co-op	0 Co-op	0 EECE 4791 (EI, WI, CE)	1
CE Fundamentals	4		EECE Technical Elective	4
EE Fundamentals	5			
EE Fundamentals	5			
General Elective	4			
	19	0	0	5

**Year 5**

Fall	Hours Spring	Hours
EECE 3468	4 EECE Technical Elective	4
EECE 4792 (EI, WI, CE)	4 EECE Technical Elective	4
EECE Technical Elective	4 General Elective	4
General Elective	4 General Elective	4
	16	16

Total Hours: 133

**Notes**

- EECE 2140 can be taken in Year 1 Spring instead of a General Elective by students who are interested in the course in preparation for co-ops involving programming and computing hardware.
- The Capstone Design Courses are taken as follows: (EECE4791 - Summer 1 and EECE4792 - Spring) OR (EECE4791 - Summer 2 and EECE4792 - Fall).



## Electrical Engineering and Physics, BSEE

This intercollege combined major serves students who would like to explore their interest in physics while earning the benefit of an accredited Bachelor of Science degree in engineering. The major combines a major in physics from the Department of Physics in the College of Science with the Bachelor of Science in Electrical Engineering degree from the Department of Electrical and Computer Engineering.

Because of the large body of shared knowledge between electrical engineering and physics, a combined major between these two disciplines is a logical course of study and can be accomplished within a student's usual five-year program (including three co-op placements) without requiring course overloading in any semester. A student graduating from this program will have studied both the physical fundamentals and the applications of electronic devices and systems. The program is a particularly appropriate course of study for students who wish to pursue a career in solid-state devices, microelectromechanical systems, or nanotechnology.

Students interested in this program should contact the Department of Electrical and Computer Engineering or the Department of Physics as early as possible, preferably prior to registering for freshman courses.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2140	Computing Fundamentals for Engineers	4
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Electrical Engineering Fundamentals</b>		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	5
EECE 2520	Fundamentals of Linear Systems	4
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	5
<b>Computer Engineering Fundamentals</b>		
If more than one computer engineering fundamentals course is taken, it can count as a technical elective.		
Complete one of the following:		4-5

EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2560	Fundamentals of Engineering Algorithms	
<b>Electrical Engineering Capstone Courses</b>		
EECE 4791	Electrical and Computer Engineering Capstone 1	1
EECE 4792	Electrical and Computer Engineering Capstone 2	4

### EECE Technical Electives

Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8 semester hours will be allowed to satisfy the requirement of technical electives. An additional 4 semester hours will be allowed as a general elective. At most, one of these courses (4 semester hours) can be taken in a semester.

Though students may register for EECE 2750 more than once, only 4 semester hours will be allowed to satisfy the requirements of technical electives. An additional 4 semester hours will be allowed as a general elective.

Complete two of the following: 8-9

EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540 to EECE 2750		
EECE 3324 to EECE 3410		
EECE 4512 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5115 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:		2
EECE 3468	Noise and Stochastic Processes	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

### Mathematics/Science

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
Complete one of the following:		5

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
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PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
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Complete one of the following: 5

PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
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PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	
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PHYS 2303	Modern Physics	4
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PHYS 3600	Advanced Physics Laboratory	4
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PHYS 3602	Electricity and Magnetism 1	4
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PHYS 4115	Quantum Mechanics	4
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PHYS 4305	Thermodynamics and Statistical Mechanics	4
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#### Advanced Physics Elective

Complete one of the following: 4

MATH 4606	Mathematical and Computational Methods for Physics	
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PHYS 3600 to PHYS 7999

#### Supplemental Credit

2 semester hours from the following course count toward the  
mathematics/science requirement: 2

EECE 3468	Noise and Stochastic Processes	
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1 semester hour from the following course counts toward the  
mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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### Professional Development

Code	Title	Hours
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#### Required Professional Development

GE 1000	Introduction to the Study of Engineering	1
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ENCP 2000	Introduction to Engineering Co-op Education	1
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ENCP 3000	Professional Issues in Engineering	1
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#### Additional Required Courses

1 semester hour from the following course counts toward the  
professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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1 semester hour from the following course counts toward the  
professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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### Writing Requirements

Code	Title	Hours
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A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
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ENGW 3302	Advanced Writing in the Technical Professions	4
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or ENGW 3315 Interdisciplinary Advanced Writing in the  
Disciplines

### Required General Electives

Code	Title	Hours
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Complete 12 semester hours of academic, nonremedial,  
nonrepetitive courses. 12

### Major GPA Requirement

2.000 minimum GPA required in EECE courses

### Program Requirement

133 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in  
approved situations.

### Plan of Study

#### Four Years, One Co-op in Spring/Summer 1

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ENGW 1111 (WF)	4	MATH 2341	4	Vacation	0
CHEM 1153	0	GE 1502 (ER)	4				
GE 1000	1	MATH 1342 (FQ)	4				
GE 1501	4	PHYS 1165 or 1155 (ND)	4				
MATH 1341 (FQ)	4	PHYS 1166 or 1156 (AD)	1				
PHYS 1161 or 1151 (ND)	4	PHYS 1167 or 1157	0				
PHYS 1162 or 1152 (AD)	1						
PHYS 1163 or 1153	0						
	18		17		4		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2140	4	EECE 2160	4	Vacation	0	Vacation	0
EECE 2150 (AD)	5	PHYS 4305 (ND)	4				
MATH 2321 (FQ)	4	EE fundamentals	5				
PHYS 2303 (ND)	4	EE fundamentals	5				
	17		18		0		0

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 2000	1	Co-op	0	Co-op	0	EECE 4791 (EI, WI, CE)	1
ENGW 3302 or 3315 (WD)	4					PHYS 3600 (ND, AD, WI)	4
PHYS 3602 (ND)	4					General elective	4
EE fundamentals	4						

CE fundamentals	4				
	17	0	0		9

**Year 4**

Fall	Hours Spring	Hours
EECE 3468	4 EECE technical elective	4
EECE 4792 (EI, WI, CE)	4 EECE technical elective	4
ENCP 3000	1 General elective	4
PHYS 4115 (ND, FQ)	4 PHYS advanced elective	4
General elective	4	
	17	16

Total Hours: 133

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111 (WF)	4 CHEM 1151 (ND)	4 Vacation	0 Vacation	0
GE 1000	1 CHEM 1153	0		
GE 1501	4 GE 1502 (ER)	4		
MATH 1341 (FQ)	4 MATH 1342 (FQ)	4		
PHYS 1161 or 1151 (ND)	4 PHYS 1165 or 1155 (ND)	4		
PHYS 1162 or 1152 (AD)	1 PHYS 1166 or 1156 (AD)	1		
PHYS 1163 or 1153	0 PHYS 1167 or 1157	0		
	18	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 EECE 2150 (AD)	5 Vacation	0 Co-op	0
MATH 2321 (FQ)	4 EECE 2160	4		
MATH 2341	4 ENCP 2000	1		
PHYS 2303 (ND)	4 PHYS 3602 (ND)	4		
	General elective	4		
	16	18	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3302 or 3315 (WD)	4 PHYS 3600 (ND, AD, WI)	4 Co-op	0
	PHYS 4115 (ND, FQ)	4 General elective	4	
	EE fundamentals	4		

EE fundamentals	5			
	0	17	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 EECE 3468	4 EECE 4791 (EI, WI, CE)	1 Co-op	0
	ENCP 3000	1 EECE technical elective	4	
	PHYS 4305 (ND)	4 General elective	4	
	CE fundamentals	4		
	EE fundamentals	5		
	0	18	9	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 EECE 4792 (EI, WI, CE)	4
	EECE technical elective	4
	PHYS advanced elective	4
	0	12

Total Hours: 133

**Notes**

The capstone design courses are taken as follows: (EECE 4791—summer 1 and EECE 4792—spring) OR (EECE 4791—summer 2 and EECE 4792—fall).

Physics courses are offered on the following schedule:

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

**Electrical Engineering and Music with concentration in Music Technology, BSEE**

This intercollege combined major is designed for students who would like to explore their interest in music technology while earning the benefit of a Bachelor of Science degree in electrical engineering. The music industry relies heavily on electronic technology in the production (e.g.,

studio and recording technology), storage (e.g., musical instruments, stage technology), and distribution (e.g., audio file formats, encoding) of music. The program is designed to give students a firm foundation in digital and analog audio electronics and learn the breadth and depth of the convergence between electrical engineering and music technology.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Societies and Institutions (SI) and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering Requirements

Code	Title	Hours
<b>Required Courses</b>		
EECE 2140	Computing Fundamentals for Engineers	4
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Electrical Engineering Fundamentals</b>		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	5
EECE 2520	Fundamentals of Linear Systems	4
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	5
<b>Computer Engineering Fundamentals</b>		
Complete one of the following. If more than one computer engineering fundamentals course is taken, it may count as a technical elective:		4-5
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2560	Fundamentals of Engineering Algorithms	
<b>Electrical Engineering Capstone Courses</b>		
EECE 4791	Electrical and Computer Engineering Capstone 1	1
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>Technical Electives</b>		

Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH will be allowed to satisfy the requirement of technical electives. An additional 4SH will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.

Though students may register for EECE 2750 more than once, only 4SH will be allowed to satisfy the requirements of technical electives. An additional 4SH will be allowed as a general elective.

Complete two of the following. If EECE 5697 is taken, students are required to complete a music elective. 8

EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322
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EECE 2540	Fundamentals of Networks
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EECE 2750	Enabling Engineering
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EECE 3324	Computer Architecture and Organization
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EECE 3410	Electronic Design
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EECE 4512	Healthcare Technologies: Sensors, Systems, and Analysis
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EECE 4991	Research
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EECE 4992	Directed Study
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EECE 4993	Independent Study
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EECE 5115 to EECE 5698	
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ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage
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## Supplemental Credit

2 semester hours from the following course count toward the engineering requirement: 2

EECE 3468	Noise and Stochastic Processes
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2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>
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## Music Requirements

Code	Title	Hours
<b>Music Theory</b>		
Complete one of the following pairs:		8
MUSC 1119 and MUSC 1201	Fundamentals of Western Music Theory and Music Theory 1	
MUSC 1201 and MUSC 1202	Music Theory 1 and Music Theory 2	
MUSC 1202 and MUSC 3541	Music Theory 2 and Music Analysis Seminar	
<b>Required Context Course</b>		
MUSC 1001	Music in Everyday Life	4
<b>Music in Context</b>		
Complete one of the following:		4
MUSC 2101	Black Popular Music	
MUSC 2107	Introduction to Opera	
MUSC 2130	Music of Asia	

MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2311	Topics in American Music	
MUSC 2312	Historical Traditions: Classical	
MUSC 2313	Topics in World Music	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 2380	The World of Choral Music	
MUSC 3352	Sounding Human	
MUSC 3353	Music and the Racial Imagination	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 3351	Music and Social Justice	
MUSI 3360	Global Music Industries in Context	
MUSI 5900	Ethnography in Creative Industries	

**Acoustics or Music Elective**

Complete one of the following. If EECE 5697 is taken, students are required to complete a music elective. 4

MUSC 2350	Acoustics and Psychoacoustics of Music	
MUSC 2000 to MUSC 5999		

**Music Technology**

MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4

**Music Technology Electives**

Complete two of the following. Other appropriate MUST courses will be considered by petition to fulfill this category. 8

MUSC 4510	Music and the Brain Research	
MUST 3540	Special Topics in Music Technology	
MUST 3601	Digital Audio Signal Processing	
MUST 3602	Electronics for Music	
MUST 3603	Embedded Audio Programming	
MUST 4610	Composition for Electronic Instruments	

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
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2 semester hours from the following course count toward this requirement: 2

EECE 3468	Noise and Stochastic Processes
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**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>
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**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 4 SH of academic, nonremedial, nonrepetitive courses.		4

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Major GPA Requirement**

Minimum 2.000 GPA required in EECE courses

**Music Technology Major Grade Requirement**

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

**Program Requirement**

137 total semester hours required

## Plan of Study Four Years, One Co-Op in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 MATH 2341	4 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MUST 1220 (AD)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 EECE 2160	4 Vacation	0 Co-op	0
EECE 2150 (AD)	5 ENCP 2000	1		
MATH 2321 (FQ)	4 MUSC 1001 (EI, IC)	4		
MUST 2431 (FQ, AD)	4 EE Fundamentals	4		
	EE Fundamentals	5		
	17	18	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENCP 3000	1 Vacation	0 EECE 3468	4
	ENGW 3302 or 3315 (WD)	4	EECE 4791 (EI, WI, CE)	1
	CE Fundamentals	4	General Elective	4
	EE Fundamentals	5		
	EECE Technical Elective	4		
	0	18	0	9

Year 4		
Fall	Hours Spring	Hours
EECE 4792 (EI, WI, CE)	4 EECE Technical Elective	4
Music Technology Elective	4 Music in Context	4
Music Technology Elective	4 Music Elective	4

Music Theory Course	4 Music Theory Course	4
		16
		16

Total Hours: 137

## Five Years, Three Co-Ops in Spring / Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 MUST 1220 (AD)	4		
GE 1000	1 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 Co-op	Co-op	Vacation	
ENCP 2000	1			
MATH 2341	4			
MUST 2431 (FQ, AD)	4			
PHYS 1155 (ND)	3			
PHYS 1156 (AD)	1			
PHYS 1157	1			
	18	0	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2150 (AD)	5 Co-op	Co-op	ENGW 3302 or 3315 (WD)	4
EECE 2160	4		General Elective	4
MATH 2321 (FQ)	4			
MUSC 1001 (EI, IC)	4			
	17	0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 3000	1 Co-op	Co-op	EECE 3468	4
CE Fundamentals	4		EECE 4791 (EI, CE, WI)	1
EE Fundamentals	4		ECE Technical Elective	4
EE Fundamentals	5			

Music Theory Course	4			
	18	0	0	9
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
EECE 4792 (EI, CE, WI)	4	ECE Technical Elective	4	
EE Fundamentals	5	Music in Context	4	
Music Technology Elective	4	Music Elective	4	
Music Technology Elective	4	Music Theory Course	4	
	17		16	

Total Hours: 137

#### Notes:

- The Capstone Design Courses are taken as follows: (Electrical and Computer Engineering Capstone 1 (EECE 4791) - Summer 1 and Electrical and Computer Engineering Capstone 2 (EECE 4792) - Spring) OR (Electrical and Computer Engineering Capstone 1 (EECE 4791) - Summer 2 and Electrical and Computer Engineering Capstone 2 (EECE 4792) - Fall).

### Electrical and Computer Engineering, BSEE or BSCmpE

Students may choose to major in both electrical and computer engineering by following the combined-major program leading to a Bachelor of Science in Electrical Engineering or Bachelor of Science in Computer Engineering. Students take the required courses for both majors along with technical electives distributed among the areas of computer engineering; fields, waves, and optics; signals and systems; power engineering; and electronic circuits and devices. Additional NUpath requirements must be fulfilled using general electives.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2140	Computing Fundamentals for Engineers	4
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Electrical Engineering Fundamentals</b>		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	5
EECE 2520	Fundamentals of Linear Systems	4
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	5
<b>Computer Engineering Fundamentals</b>		
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
EECE 2560	Fundamentals of Engineering Algorithms	4
<b>Electrical and Computer Engineering Capstone Courses</b>		
EECE 4791	Electrical and Computer Engineering Capstone 1	1
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>EECE Technical Electives</b>		
Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH will be allowed to satisfy the requirement of technical electives. An additional 4SH will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.		
Though students may register for EECE 2750 more than once, only 4SH will be allowed to satisfy the requirements of technical electives. An additional 4SH will be allowed as a general elective.		
Complete four of the following:		16
EECE 2750	Enabling Engineering	
EECE 3324 to EECE 3410		
EECE 4512 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5115 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
Two CS/CY/IS courses from the following approved list may be taken toward the EECE technical elective requirement.		
CS 3200	Database Design	
CS 3500	Object-Oriented Design	
CS 3540 to CS 3800		
CS 4100 to CS 4770		
CS 4850	Building Game Engines	
CY 2550	Foundations of Cybersecurity	
IS 4200 to IS 4700		
<b>Supplemental Credit</b>		

2 semester hours from the following course count toward the engineering requirement:

EECE 3468	Noise and Stochastic Processes	2
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2 semester hours from the following course count toward the engineering requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	2
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3 semester hours from the following course count toward the engineering requirement:

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	3
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### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
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#### Required Mathematics/Science

CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
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CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
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MATH 1341	Calculus 1 for Science and Engineering	4
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MATH 1342	Calculus 2 for Science and Engineering	4
-----------	--	---

MATH 2321	Calculus 3 for Science and Engineering	4
-----------	--	---

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
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PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
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PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
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#### Supplemental Credit

2 semester hours from the following course count toward the mathematics/science requirement:

EECE 3468	Noise and Stochastic Processes	2
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1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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### Professional Development

Code	Title	Hours
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#### Required Professional Development

GE 1000	Introduction to the Study of Engineering	1
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ENCP 2000	Introduction to Engineering Co-op Education	1
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ENCP 3000	Professional Issues in Engineering	1
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#### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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1 semester hour from the following course counts toward the professional development requirement:

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	1
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### Writing Requirements

Code	Title	Hours
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A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
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ENGW 3302	Advanced Writing in the Technical Professions	4
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or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

### Required General Electives

Code	Title	Hours
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Complete 16 SH of academic, nonremedial, nonrepetitive courses. 16

### Program Requirement

135 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

### Plan of Study

#### Four Years, One Co-op in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 MATH 2341	4 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
		17	17	4
				0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 CS 1800 (FQ)	4 Vacation	Co-op	
EECE 2150 or 2160 (AD)	5 CS 1802	1		
MATH 2321 (FQ)	4 EECE 2160 or 2150	4		
PHYS 1155 (ND)	3 ENCP 2000	1		
PHYS 1156 (AD)	1 EE or CE Fundamentals	4		
PHYS 1157	1 General Elective	4		
		18	18	0
				0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ENCP 3000	1 EECE 4791 (EI, WI, CE)	1 Vacation	
	EE or CE Fundamental:	5 ENGW 3302 or 3315 (WD)	4	



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EE or CE Fundamentals	5 EECE Technical Elective	4	
EE or CE Fundamentals	5		
General Elective	4		
0	20	9	0

**Year 4**

Fall	Hours Spring	Hours
EECE 3468	4 EECE 4792 (EI, WI, CE)	4
EE or CE Fundamentals	4 EECE Technical Elective	4
EE or CE Fundamentals	4 EECE Technical Elective	4
EECE Technical Elective	4 General Elective	4
16	16	

Total Hours: 135

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
17	17	0	0	

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 CS 1800 (FQ)	4 Vacation	Co-op	
EECE 2150 or 2160 (AD)	5 CS 1802	1		
MATH 2341	4 EECE 2160 or 2150	4		
PHYS 1155 (ND)	3 ENCP 2000	1		
PHYS 1156 (AD)	1 MATH 2321 (FQ)	4		
PHYS 1157	1 EE or CE Fundamentals	4		
18	18	0	0	

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	EE or CE Fundamentals	4 ENGW 3302 or 3315 (WD)	4 Co-op	

EE or CE Fundamentals	4 General Elective	4	
EE or CE Fundamentals	5		
EE or CE Fundamentals	5		
0	18	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	EECE 3468	4 EECE 4791 (EI, CE, WI)	1 Co-op	
	ENCP 3000	1 EECE Technical Elective	4	
	EE or CE Fundamentals	5		
	EECE Technical Elective	4		
	EECE Technical Elective	4		
0	18	5	0	

**Year 5**

Fall	Hours Spring	Hours
Co-op	EECE 4792 (EI, WI, CE)	4
	EECE Technical Elective	4
	General Elective	4
	General Elective	4
0	16	

Total Hours: 135

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
17	17	0	0	

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 Co-op	Co-op	Vacation	
EECE 2150 or 2160 (AD)	5			

ENCP 2000	1			
MATH 2341	4			
PHYS 1155 (ND)	3			
PHYS 1156 (AD)	1			
PHYS 1157	1			
	19	0	0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 (FQ)	4	Co-op		Co-op		ENGW 3302 or 3315 (WD)	4
CS 1802	1					General Elective	4
EECE 2160 or 2150	4						
MATH 2321 (FQ)	4						
EE or CE Fundamentals	4						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 3000	1	Co-op		Co-op		EECE 4791 (EI, CE, WI)	1
EE or CE Fundamentals	4					EECE Technical Elective	4
EE or CE Fundamentals	4						
EE or CE Fundamentals	5						
EE or CE Fundamentals	5						
	19		0		0		5

**Year 5**

Fall	Hours	Spring	Hours
EECE 3468	4	EECE Technical Elective	4
EECE 4792 (EI, CE, WI)	4	EECE Technical Elective	4
EE or CE Fundamentals	5	General Elective	4
EECE Technical Elective	4	General Elective	4
	17		16

Total Hours: 135

**Notes**

- Computing Fundamentals for Engineers (EECE 2140) can be taken in Year 1 Spring instead of a General Elective by students who are interested in the course in preparation for co-ops involving programming and computing hardware.
- The Capstone Design Courses are taken as follows: (Electrical and Computer Engineering Capstone 1 (EECE 4791) - Summer 1

and Electrical and Computer Engineering Capstone 2 (EECE 4792) - Spring) OR (Electrical and Computer Engineering Capstone 1 (EECE 4791) - Summer 2 and Electrical and Computer Engineering Capstone 2 (EECE 4792) - Fall).

**Biomedical Engineering, Minor**

Medical imaging and biomedical electronics are important areas of biomedical engineering that are within the province of electrical engineering. The minor in biomedical engineering is open to all students in the university with the prerequisite calculus and physics background. The minor is particularly designed for majors in electrical or computer engineering, biology, health science fields, or other engineering departments who would like a background in relevant aspects of biology and electrical engineering, with the opportunity to complete an interdisciplinary biomedical engineering capstone design project. Course work in anatomy and physiology and other health science topics is combined with technical engineering courses related to biomedical imaging and instrumentation.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students need to complete the program requirements with at least three courses that are not part of their major required course work.

**Required Biology**

Code	Title	Hours
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	5
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5

**Required Engineering**

The course you select may also count toward your major.

Code	Title	Hours
Complete one of the following:		4
EECE 4512	Healthcare Technologies: Sensors, Systems, and Analysis	
EECE 5698	Special Topics in Electrical and Computer Engineering	
EECE 4993	Independent Study (must have a biomedical-engineering focus)	

**Required Capstone-Design Courses**

Complete the following two courses on a biologically oriented project:

Code	Title	Hours
EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4

**Elective Courses**

One course must be outside your home department. Neither course can be used toward your major.

Code	Title	Hours
Complete two of the following:		8-10
<b>Biology</b>		
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	
BIOL 2299	Inquiries in Biological Sciences	
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	
BIOL 3405	Neurobiology	
BIOL 5581	Biological Imaging	
<b>Chemical Engineering</b>		
CHME 5630	Biochemical Engineering	
CHME 5699	Special Topics in Chemical Engineering	
<b>Civil/Industrial Engineering</b>		
CIVE 7251	Environmental Biological Processes	
<b>Electrical/Computer Engineering</b>		
EECE 4512	Healthcare Technologies: Sensors, Systems, and Analysis	
EECE 4649	Biomedical Imaging	
EECE 5698	Special Topics in Electrical and Computer Engineering	
EECE 4993	Independent Study	
<b>Mechanical/Industrial Engineering</b>		
ME 5665	Musculoskeletal Biomechanics	
IE 4522	Human-Machine Systems	
<b>Physics</b>		
PHYS 4621	Biological Physics 1	
PHYS 4623	Medical Physics	
PHYS 4651	Medical Physics Seminar 1	
PHYS 4652	Medical Physics Seminar 2	
<b>Psychology</b>		
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	

### GPA Requirement

2.000 GPA required in the minor

### Computer Engineering, Minor

A minor in computer engineering is particularly designed for the student who would like a coherent background in the theory and laboratory practice of computer engineering. This minor is not open to students in the Department of Electrical and Computer Engineering.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

This minor is not open to students in the Department of Electrical and Computer Engineering.

Complete a total of four courses for the minor.

Students need to complete the program requirements with at least three courses that are not part of their major required coursework.

### Required Core Course

Code	Title	Hours
EECE 2160	Embedded Design: Enabling Robotics	4

### Required Fundamental Courses

Code	Title	Hours
Complete two of the following:		8-9
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2560	Fundamentals of Engineering Algorithms	

### Computer Engineering Technical Elective

Fundamentals not taken to satisfy the above requirement may be used as a technical elective.

Code	Title	Hours
Complete one of the following:		4-5
EECE 4993	Independent Study	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
EECE 2322 to EECE2750		
EECE3324 to EECE 4698		
EECE 5576 to EECE 5698		

### GPA Requirement

2.000 GPA required in the minor

### Computational Data Analytics, Minor

This minor, offered by the Department of Electrical and Computer Engineering in the College of Engineering, seeks to provide a coherent technical foundation in the fundamentals and application of data analytics. The minor addresses the growing demand in industry to be able to apply background in probability/statistics, calculus, engineering problem solving, computing, and analytical principles/tools to identify patterns and trends, find clusters and outliers, and characterize/summarize the mountain of data being generated in our world. This program leverages faculty expertise in electrical and computer engineering and includes courses from across the College of Engineering, College of Science, and the Khoury College of Computer Sciences

Students need to complete the program requirements with at least three courses that are not part of their major required course work.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* Students need to complete the program requirements with at least three courses that are not part of their major required coursework.

## Required Courses

Code	Title	Hours
EECE 5644	Introduction to Machine Learning and Pattern Recognition	4
EECE 5642	Data Visualization	4
Complete one of the following:		4
CS 2510	Fundamentals of Computer Science 2 (Khoury Majors and Combined Majors Only)	
EECE 2160	Embedded Design: Enabling Robotics (EECE Majors Only)	
EECE 2300	Computational Methods for Data Analytics (Non EECE/Khoury Majors Only)	

## Probability and Statistics

Code	Title	Hours
Complete one of the following:		4
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
EECE 3468	Noise and Stochastic Processes	
GE 2361	Mathematical Methods for Engineers	
IE 3412	Engineering Probability and Statistics	
MATH 2280	Statistics and Software	
MATH 3081	Probability and Statistics	

## Elective

Code	Title	Hours
Complete one of the following:		4
EECE 2560	Fundamentals of Engineering Algorithms	
EECE 2520	Fundamentals of Linear Systems	
EECE 4542	Advanced Engineering Algorithms	
EECE 4694	Numerical Methods and Computer Applications	
EECE 5639	Computer Vision	
CS 3000	Algorithms and Data	
CS 3200	Database Design	
CS 4240	Large-Scale Parallel Data Processing	
CS 5200	Database Management Systems	
IE 4515	Operations Research	
IE 5640	Data Mining for Engineering Applications	
IS 4200	Information Retrieval	
MATH 4525	Applied Analysis	

## GPA Requirement

2.000 GPA required in the minor

### Electrical Engineering, Minor

A minor in electrical engineering is particularly designed for majors in math, science, computer science, or other engineering departments who would like a coherent background in the theory and laboratory practice of electrical engineering. This minor is not open to students in the Department of Electrical and Computer Engineering.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

This minor is not open to students in the Department of Electrical and Computer Engineering because of overlap with the majors.

Complete a total of four courses for the minor.

Students need to complete the program requirements with at least three courses that are not part of their major required coursework.

## Required Core Course

Code	Title	Hours
Complete one of the following:		5
EECE 2150	Circuits and Signals: Biomedical Applications	
EECE 2210 and EECE 2211	Electrical Engineering and Lab for EECE 2210	

## Fundamental Core Courses

Code	Title	Hours
Complete two of the following:		9-10
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	
EECE 2520	Fundamentals of Linear Systems	
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	

## Electrical Engineering Technical Electives

Code	Title	Hours
Fundamentals not taken to satisfy the above requirement may be used as a technical elective.		
Complete one of the following:		4
EECE 4993	Independent Study	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
EECE 2322 to EECE 2750		
EECE 3324 to EECE 4698		
EECE 5576 to EECE 5698		

## GPA Requirement

2.000 GPA required in the minor

### Robotics, Minor

The minor in robotics is open to all students in the university. The minor is designed for the student who would like a coherent background in the theory and practice of robotics.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students need to complete the program requirements with at least three courses that are not part of their major required coursework.

## Required Courses

Code	Title	Hours
ME 3460	Robot Dynamics and Control	4
Complete one of the following:		4
EECE 2210 and EECE 2211	Electrical Engineering and Lab for EECE 2210	
EECE 2160	Embedded Design: Enabling Robotics	

## Electives

Code	Title	Hours
Complete three of the following:		12
CS 4100	Artificial Intelligence	
CS 4610	Robotic Science and Systems	
EECE 4630	Robotics	
EECE 5550	Mobile Robotics	
EECE 5552	Assistive Robotics	
EECE 5554	Robotics Sensing and Navigation	
EECE 5639	Computer Vision	
EECE 5644	Introduction to Machine Learning and Pattern Recognition	
EECE 5580	Classical Control Systems	
IE 4522	Human-Machine Systems	
ME 5245	Mechatronic Systems	
ME 5250	Robot Mechanics and Control	

## GPA Requirement

2.000 GPA required in the minor

## Mechanical and Industrial Engineering

Website (<http://www.mie.neu.edu>)

**Marilyn L. Minus, PhD**  
Professor and Chair

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The Department of Mechanical and Industrial Engineering offers comprehensive undergraduate programs in both mechanical engineering and industrial engineering, equipping students with the fundamentals in science, mathematics, and engineering. The programs are optimally blended with theory, computation, and laboratory-level practice, as well as with real-world experience through cooperative education programs aligned with Northeastern University's mission in experiential learning. Graduates are positioned to excel in careers in broad areas of engineering as well as in academia.

## Mission of the Department

The mission of the Department of Mechanical and Industrial Engineering is to educate students for professional and technical excellence; to perform research to advance the science and practice of engineering; to engage in service activities that advance the department, the university, and the profession; and to instill in ourselves and our students habits and attitudes that promote ethical behavior, professional responsibility, and careers that advance the well-being of society.

## Mechanical Engineering

Mechanical engineers design, develop, and support the manufacture of machinery and devices to transmit power or to convert energy from thermal to mechanical form in order to power the modern world and its machines. Traditionally, mechanical engineers have designed and tested devices, such as heating and air-conditioning systems, machine tools, internal-combustion engines, and steam power plants. Today they also play primary roles in the development of new technologies in a variety of fields—energy conversion, solar energy utilization, environmental control, prosthetics, transportation, manufacturing, robotics, and new-materials development.

Mechanical engineers use computers to formulate preliminary and final designs of systems or devices, to perform calculations that predict the behavior of the design, and to collect and analyze performance data from system testing or operation. Mechanical engineering has been heavily influenced by recent advances in computer hardware and software.

The curriculum in mechanical engineering focuses on four areas: applied mechanics, thermofluids engineering, materials science, and mechatronics. Applied mechanics is the study of the motion and deformation of structural elements acted on by forces in devices that range from rotating industrial dynamos to dentists' drills. Thermofluids engineering deals with the motion of fluids and the transfer of energy, as in the cooling of electronic components or the design of gas turbine engines. Materials science is concerned with the relationship between the structure and properties of materials and with the control of structure, through processing, to achieve desired properties. Practical applications are in the development of composite materials, metallurgical process industries, and advanced functional materials. Mechatronics is critical to any engineered system in which sensors and actuators of several types communicate and function.

Courses in each area form the foundation for advanced analytical and creative design courses that culminate in a two-semester capstone design project. Faculty encourage students throughout the curriculum to use computer-aided design tools and high-performance computer workstations.

## Industrial Engineering

Industrial engineers design and analyze systems that include people, equipment, and materials and their interactions and performance in the workplace. An industrial engineer collects this information and evaluates alternatives to make decisions that best advance the goals of the enterprise. Industrial engineers work in manufacturing firms, hospitals, banks, public utilities, transportation, government agencies, insurance companies, and construction firms. Among the projects they undertake are design and implementation of a computer-integrated supply chain or manufacturing system, facilities planning for a variety of industries, design of a robotics system in a manufacturing environment, long-range corporate planning, development and implementation of a quality-control system, simulation analyses to improve processes and make operational decisions, design of healthcare operations to enhance patient safety and improve efficiency, productivity, and development of computer systems for information control.

The program in industrial engineering offers students a base of traditional engineering courses, such as work design, human-machine systems, probability, statistics, and engineering economy, while emphasizing such contemporary areas as simulation modeling, engineering database systems, quality assurance, logistics and supply chain management, operations research, and facilities planning. Students

integrate the knowledge acquired in these courses in a two-semester capstone design project.

### Other Programmatic Features

More than 90 percent of the department's undergraduate students take advantage of the cooperative education program. Cooperative education assignments increase in responsibility and technical challenge as students progress through the program. Entry-level co-op positions in **mechanical engineering** may be in manufacturing, quality assurance and testing, or involve 3D CAD modeling, while more advanced-level positions will allow students to gain experience in the design process, including advanced 3D modeling, design for manufacturability, prototyping, and systems engineering. Students in the **industrial engineering** discipline may utilize co-op to concentrate on one industry segment and build an increasingly technical skill set with each experience or explore the breadth of career opportunities over the course of several co-op rotations such as healthcare process improvement, supply chain logistics, business analytics, manufacturing operations, and more.

The department also offers significant research opportunities throughout all fields of mechanical and industrial engineering, including participating in research centers based in our department and college.

Our students have an opportunity to obtain a broad knowledge base in science, engineering, and general studies that allows them flexibility in career development and graduate education. At the same time, our graduates should be responsible and scientifically educated citizens, prepared to contribute personally as well as professionally to an educated, democratic society.

### Programs

#### Bachelor of Science in Industrial Engineering (BSIE)

- Industrial Engineering (p. 517)

#### Bachelor of Science in Mechanical Engineering (BSME)

- Mechanical Engineering (p. 521)
- Mechanical Engineering and Design (p. 119)
- Mechanical Engineering and History (p. 529)
- Mechanical Engineering and Physics (p. 532)

### Minors

- Aerospace (p. 534)
- Biomechanical Engineering (p. 535)
- Healthcare System Operation (p. 535)s (p. 535)
- Industrial Engineering (p. 535)
- Mechanical Engineering (p. 536)
- Robotics (p. 515)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Industrial Engineering, BSIE

Industrial engineering involves the design and analysis of systems that include people, equipment, and materials and their interactions and performance in the workplace. An industrial engineer collects this information and evaluates alternatives to make decisions that best advance the goals of the enterprise.

The program in industrial engineering offers students a base of traditional engineering courses, such as work design, human-machine

systems, probability, statistics, and engineering economy, while emphasizing such contemporary areas as simulation modeling, engineering database systems, quality assurance, logistics and supply chain management, operations research, and facilities planning. Students integrate the knowledge acquired in these courses in a two-semester capstone design project.

Industrial engineers work in manufacturing firms, hospitals, banks, public utilities, transportation, government agencies, insurance companies, and construction firms. Among the projects they undertake are design and implementation of a computer-integrated supply chain or manufacturing system; facilities planning for a variety of industries; design of a robotics system in a manufacturing environment; long-range corporate planning; development and implementation of a quality-control system; simulation analyses to improve processes and make operational decisions; design of healthcare operations to enhance patient safety; and improve efficiency, productivity, and development of computer systems for information control.

More than 90 percent of department undergraduate students take advantage of the cooperative education program. Cooperative education assignments generally increase in level of responsibility as students gain theoretical and technical knowledge through their academic work. A sophomore might begin as a computer/data analyst evaluating the performance of a manufacturing system and progress to designing manufacturing engineering workstations by the senior year.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
IE 2310 and IE 2311	Introduction to Industrial Engineering and Recitation for IE 2310	4
IE 3425 and IE 3426	Engineering Database Systems and Recitation for IE 3425	4
IE 4510	Simulation Modeling and Analysis	4
IE 4516	Quality Assurance	4
IE 4522 and IE 4523	Human-Machine Systems and Lab for IE 4522	5
IE 4525	Logistics and Supply Chain Management	4

IE 4530 and IE 4531	Manufacturing Systems and Techniques and Lab for IE 4530	5
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**Industrial Engineering Capstone**

MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5

**Engineering Electives**

Complete 8 semester hours of technical electives in the following subject areas:

CHME, CIVE, EECE, EMGT, ENSY, IE, ME, and MEIE

**Supplemental Credit**

1 semester hour from the following course counts toward the engineering requirement:

IE 3412 Engineering Probability and Statistics  
or MATH 3081 Probability and Statistics

3 semester hours from the following course count toward the engineering requirement:

IE 4512 Engineering Economy

2 semester hours from the following course count toward the engineering requirement:

IE 4515 Operations Research

2 semester hours from the following course count toward the engineering requirement:

IE 4520 Stochastic Modeling

2 semester hours from the following course count toward the engineering requirement:

GE 1501 Cornerstone of Engineering 1 <sup>1</sup>

3 semester hours from the following course count toward the engineering requirement:

GE 1502 Cornerstone of Engineering 2 <sup>1</sup>

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

**Science Elective**

Complete one of the following:

BIOL 1111  
and BIOL 1112 General Biology 1  
and Lab for BIOL 1111

BIOL 1115  
and BIOL 1116 General Biology 1 for Engineers  
and Lab for BIOL 1115

BIOL 2217  
and BIOL 2218 Integrated Anatomy and Physiology 1  
and Lab for BIOL 2217

CHEM 1214  
and CHEM 1215  
and CHEM 1216 General Chemistry 2  
and Lab for CHEM 1214  
and Recitation for CHEM 1214 (and Lab  
for CHEM 1214)

CHEM 2311  
and CHEM 2312  
and CHEM 2319 Organic Chemistry 1  
and Lab for CHEM 2311  
and Recitation for CHEM 2311

PHYS 1155  
and PHYS 1156  
and PHYS 1157 Physics for Engineering 2  
and Lab for PHYS 1155  
and Interactive Learning Seminar for  
PHYS 1155

PHYS 1161  
and PHYS 1162  
and PHYS 1163 Physics 1  
and Lab for PHYS 1161  
and Recitation for PHYS 1161

**Supplemental Credit**

3 semester hours from the following course count toward the mathematics/science requirement:

IE 3412 Engineering Probability and Statistics  
or MATH 3081 Probability and Statistics

1 semester hour from the following course counts toward the mathematics/science requirement:

IE 4512 Engineering Economy

2 semester hours from the following course count toward the mathematics/science requirement:

IE 4515 Operations Research

2 semester hours from the following course count toward the mathematics/science requirement:

IE 4520 Stochastic Modeling

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1501 Cornerstone of Engineering 1 <sup>1</sup>

**Professional Development**

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:

GE 1501 Cornerstone of Engineering 1 <sup>1</sup>

1 semester hour from the following course counts toward the professional development requirement:

GE 1502 Cornerstone of Engineering 2 <sup>1</sup>

**Writing Requirements**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
	Complete 28 SH of academic, nonremedial, nonrepetitive courses.	28

**Program Requirement**

137 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 MATH 2321 (FQ)	4 General Elective	4
CHEM 1153	0 MATH 1342 (FQ)	4 General Elective	4 General Elective	4
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
IE 2310 (WI)	4 ENCP 2000	1 General Elective	4 Co-op	
IE 2311	0 ENGW 3302 or 3315 (WD)	4 General Elective	4	
IE 3425	4 IE 3412 or MATH 3081 (AD)	4		
IE 3426	0 IE 4512	4		
MATH 2341	4 Technical Elective	4		
Science Elective	5			
	17	17	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	IE 4510	4 MEIE 4701 (EI, WI, CE)	1 Co-op	
	IE 4515	4 General Elective	4	
	IE 4516	4 Technical Elective	4	
	IE 4530	4		
	IE 4531	1		
	0	17	9	0

Year 4		
Fall	Hours Spring	Hours
Co-op	ENCP 3000	1
	IE 4520	4

IE 4522	4
IE 4523	1
IE 4525	4
MEIE 4702 (EI, WI, CE)	5
0	19

Total Hours: 137

**Four Years, Two Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 MATH 2321 (FQ)	4 General Elective	4
CHEM 1153	0 MATH 1342 (FQ)	4 General Elective	4 General Elective	4
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 2000	1 Co-op	Co-op	MATH 3081 (AD)	4
IE 2310 (WI)	4		General Elective	4
IE 2311	0			
IE 3425	4			
IE 3426	0			
MATH 2341	4			
Science Elective	5			
	18	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3302 or 3315 (WD)	4 Co-op	Co-op	General Elective	4
IE 4510	4		General Elective	4
IE 4515	4			
IE 4530	4			
IE 4531	1			
	17	0	0	8

Year 4		
Fall	Hours Spring	Hours
ENCP 3000	1 IE 4520	4
IE 4512	4 IE 4522	4
IE 4516	4 IE 4523	1
IE 4525	4 MEIE 4702 (EI, WI, CE)	5
MEIE 4701 (EI, WI, CE)	1 Technical Elective	4



Technical Elective	4	
	18	18

Total Hours: 137

### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
IE 2310 (WI)	4 ENCP 2000	1 Vacation	0 Co-op	0
IE 2311	0 IE 3412 or MATH 3081 (AD)	4		
IE 3425	4 IE 4512	4		
IE 3426	0 MATH 2341	4		
MATH 2321 (FQ)	4 General Elective	4		
Science Elective	5			
	17	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3302 or 3315 (WD)	4 General Elective	4 Co-op	0
	IE 4510	4 General Elective	4	
	IE 4515	4		
	IE 4516	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENCP 3000	1 MEIE 4701 (EI, CE, WI)	1 Co-op	0
	IE 4520	4 General Elective	4	
	IE 4525	4 General Elective	4	
	IE 4530	4		
	IE 4531	1		
	Technical Elective	4		
	0	18	9	0

Year 5		
Fall	Hours Spring	Hours
Co-op	0 IE 4522	4
	IE 4523	1
	MEIE 4702 (EI, WI, CE)	5
	General Elective	4
	Technical Elective	4
	0	18

Total Hours: 137

### Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 2000	1 Co-op	0 Co-op	0 Vacation	0
IE 2310 (WI)	4			
IE 2311	0			
IE 3425	4			
IE 3426	0			
MATH 2321 (FQ)	4			
Science Elective	5			
	18	0	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3302 or 3315 (WD)	4 Co-op	0 Co-op	0 General Elective	4
IE 3412 or MATH 3081 (AD)	4		General Elective	4
IE 4512	4			
MATH 2341	4			
	16	0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 3000	1 Co-op	0 Co-op	0 General Elective	4

IE 4510	4	General Elective	4
IE 4515	4		
IE 4516	4		
IE 4530	4		
IE 4531	1		
	18	0	0
			8

**Year 5**

Fall	Hours	Spring	Hours
IE 4520	4	IE 4522	4
IE 4525	4	IE 4523	1
MEIE 4701 (EI, WI, CE)	1	MEIE 4702 (EI, WI, CE)	5
General Elective	4	General Elective	4
Technical Elective	4	Technical Elective	4
	17		18

Total Hours: 137

## Mechanical Engineering, BSME

Mechanical engineering involves the design, development, and manufacture of machinery and devices to transmit power or to convert energy from thermal to mechanical form in order to power the modern world and its machines. Its current practice has been heavily influenced by recent advances in computer hardware and software.

Mechanical engineers use computers to formulate preliminary and final designs of systems or devices, to perform calculations that predict the behavior of the design, and to collect and analyze performance data from system testing or operation.

Traditionally, mechanical engineers have designed and tested devices, such as heating and air-conditioning systems, machine tools, internal-combustion engines, and steam power plants. Today they also play primary roles in the development of new technologies in a variety of fields—energy conversion, solar energy utilization, environmental control, prosthetics, transportation, manufacturing, and new-materials development.

The curriculum in mechanical engineering focuses on four areas: applied mechanics, thermofluids engineering, materials science, and controls. Applied mechanics is the study of the motion and deformation of structural elements acted on by forces in devices that range from rotating industrial dynamos to dentists' drills. Thermofluids engineering deals with the motion of fluids and the transfer of energy, as in the cooling of electronic components or the design of gas turbine engines. Materials science is concerned with the relationship between the structure and properties of materials and with the control of structure, through processing, to achieve desired properties. Practical applications are in the development of composite materials, metallurgical process industries, and advanced functional materials. Controls are critical to any engineered system in which sensors and actuators of several types communicate and function.

Courses in each area form the foundation for advanced analytical and creative design courses that culminate in a two-semester capstone design project. Faculty encourages students throughout the curriculum

to use computer-aided design tools and high-performance computer workstations.

More than 90 percent of department undergraduate students take advantage of the cooperative education program. Cooperative education assignments increase in responsibility and technical challenge as students progress through the program. Initial positions may involve computer-intensive CAD/CAM assignments or programming tasks, while more advanced jobs will place students in charge of design, quality-control systems, and performance testing of equipment.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
EECE 2210 and EECE 2211	Electrical Engineering and Lab for EECE 2210	5
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475 or ME 3480	Fluid Mechanics International Applications of Fluid Mechanics	4
ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5
ME 4508	Mechanical Engineering Computation and Design	4
ME 4550	Mechanical Engineering Design	4
ME 4555	System Analysis and Control	4
ME 4570	Thermal Systems Analysis and Design	4
<b>Mechanical Engineering Capstone</b>		
MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5

### Mechanical and Industrial Engineering Technical Elective

Complete one technical elective in one of the following subject areas: 4  
ME, IE, MEIE, EMGT, ENSY, or ENGR

**Supplemental Credit**

2 semester hours from the following course counts toward the engineering requirement: 2

GE 1501 Cornerstone of Engineering 1 <sup>1</sup>

3 semester hours from the following course counts toward the engineering requirement: 3

GE 1502 Cornerstone of Engineering 2 <sup>1</sup>

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
<b>Science/Math Elective</b>		
Complete one of the following:		4-5
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	
CHEM 1214 and CHEM 1215	General Chemistry 2 and Lab for CHEM 1214	
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	
MATH 3081	Probability and Statistics	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
PHYS 2303	Modern Physics	
PHYS 3601	Classical Dynamics	
PHYS 3602	Electricity and Magnetism 1	
<b>Supplemental Credit</b>		
1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

**Professional Development**

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1
<b>Additional Required Courses</b>		
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required in each course:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 24 SH of academic, nonremedial, nonrepetitive courses.		24

**Program Requirement**

140 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 MATH 2321 (FQ)	4 General Elective	4
CHEM 1153	0 PHYS 1151 (ND)	3 ME 2350	4 General Elective	4
ENGW 1111 (WF)	4 PHYS 1152 (AD)	1		
GE 1000	1 PHYS 1153	1		
GE 1501	4 MATH 1342 (FQ)	4		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3302 or 3315 (WD)	4 ENCP 2000	1 ME 3475 or 3480	4 Co-op	
MATH 2341	4 ME 2340 (WI)	4 General Elective	4	

ME 2355	4	ME 2341	1
ME 2356	1	ME 2380	4
PHYS 1155 (ND)	3	ME 2381	0
PHYS 1156 (AD)	1	ME 3455	4
PHYS 1157	1	ME 3456	1
		General Elective	4
	18	19	8
			0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	EECE 2210	4 ME 4550	4 Co-op	
	EECE 2211	1 MEIE 4701 (EI, WI, CE)	1	
	ENCP 3000	1 General Elective	4	
	ME 4505 (AD)	4		
	ME 4506	1		
	ME 4555	4		
	ME 4570	4		
	0	19	9	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	ME 4508	4
	MEIE 4702 (EI, WI, CE)	5
	MIE Technical Elective	4
	Science/Math Elective	4
	0	17

Total Hours: 140

**Four Years, Two Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 ME 2350	4 General Elective	4
CHEM 1153	0 PHYS 1151 (ND)	3 MATH 2321 (FQ)	4 General Elective	4
ENGW 1111 (WF)	4 PHYS 1152 (AD)	1		
GE 1000	1 PHYS 1153	1		
GE 1501	4 MATH 1342 (FQ)	4		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2341	4 Co-op	Co-op	ME 3475 or 3480	4

ME 2355	4	General Elective	4
ME 2356	1		
ME 2380	4		
ME 2381	0		
PHYS 1155 (ND)	3		
PHYS 1156 (AD)	1		
PHYS 1157	1		
	18	0	0
			8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 2000	1 Co-op	Co-op	ME 4550	4
ENGW 3302 or 3315 (WF)	4		MEIE 4701 (EI, WI, CE)	1
ME 3455	4		General Elective	4
ME 3456	1			
ME 4505 (AD)	4			
ME 4506	1			
ME 4570	4			
	19	0	0	9

**Year 4**

Fall	Hours Spring	Hours
EECE 2210	4 ME 2340 (WI)	4
EECE 2211	1 ME 2341	1
ENCP 3000	1 ME 4508	4
ME 4555	4 MIE Technical Elective	4
MEIE 4702 (EI, WI, CE)	5 Science/Math Elective	4
General Elective	4	
	19	17

Total Hours: 140

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321 (FQ)	4 ENCP 2000	1 Vacation	0 Co-op	0
ME 2350	4 MATH 2341	4		
PHYS 1155 (ND)	3 ME 2355	4		
PHYS 1156 (AD)	1 ME 2356	1		
PHYS 1157	1 ME 2380	4		
General Elective	4 ME 2381	0		
	General Elective	4		
				0
				17

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3302 or 3315 (WD)	4 ME 3475 or 3480	4 Co-op	0
	ME 2340 (WI)	4 General Elective	4	
	ME 2341	1		
	ME 3455	4		
	ME 3456	1		
	ME 4508	4		
				0
				18

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENCP 3000	1 ME 4550	4 Co-op	0
	ME 4505 (AD)	4 MEIE 4701 (EI, WI, CE)	1	
	ME 4506	1 General Elective	4	
	ME 4555	4		
	ME 4570	4		
	Math/ Science Elective	4		
				0
				18

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 EECE 2210	4
	EECE 2211	1
	MEIE 4702 (EI, WI, CE)	5
	General Elective	4
	MIE Technical Elective	4
		0
		18

Total Hours: 140

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
				0
				17

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 2000	1 Co-op	0 Co-op	0 Vacation	0
MATH 2321 (FQ)	4			
ME 2350	4			
PHYS 1155 (ND)	3			
PHYS 1156 (AD)	1			
PHYS 1157	1			
General Elective	4			
				0
				18

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2341	4 Co-op	0 Co-op	0 ENGW 3302 or 3315 (WD)	4
ME 2340 (WI)	4		ME 3475 or 3480	4
ME 2341	1			
ME 2355	4			
ME 2356	1			
ME 2380	4			
ME 2381	0			
				8
				18

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ME 3455	4 Co-op	0 Co-op	0 ME 4550	4
ME 3456	1		MEIE 4701 (EI, WI, CE)	1
ME 4505 (AD)	4		General Elective	4
ME 4506	1			
ME 4508	4			
ME 4570	4			
				9
				18

**Year 5**

Fall	Hours	Spring	Hours
EECE 2210	4	General Elective	4
EECE 2211	1	General Elective	4
ENCP 3000	1	Math/ Science Elective	4
ME 4555	4	MIE Technical Elective	4
MEIE 4702 (EI, WI, CE)	5		
General Elective	4		
	19		16

Total Hours: 140

## Mechanical Engineering and Design, BSME

The combined major in mechanical engineering and design is designed to educate students in topics of both disciplines and the interface between them. Mechanical engineering involves the design, development, and manufacture of machinery and devices to transmit power or to convert energy from thermal to mechanical form in order to power the modern world and its machines. Its current practice has been heavily influenced by recent advances in computer hardware and software. Today, engineers also play a primary role in the development of new technologies in a variety of fields—energy conversion, solar energy utilization, environmental control, prosthetics, transportation, manufacturing, and new-materials development. Design is the discipline that shapes human experiences in specific situations to improve quality. Designers pose important questions about—and provide significant answers to how we live. Designers are needed when we don't know what is needed as well as when we think we do. Students in this program will combine the disciplines in order to address complex problems with human-centered solutions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required courses. Students are responsible for satisfying these requirements with electives.

## Engineering Requirements

Code	Title	Hours
<b>Required Engineering</b>		
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475 or ME 3480	Fluid Mechanics International Applications of Fluid Mechanics	4
ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5
<b>Senior Capstone Design Project</b>		
MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5
<b>Technical Electives</b>		
Complete two of the following (at least one must be ME 4550 or ME 4570)		8
ME 4508	Mechanical Engineering Computation and Design	
ME 4550	Mechanical Engineering Design	
ME 4555	System Analysis and Control	
ME 4570	Thermal Systems Analysis and Design	
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
<b>Design Requirements</b>		
Code	Title	Hours
ARTF 1122	Color and Composition (with optional ARTF 1123)	
<b>Complete one of the following:</b>		<b>4</b>
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
<b>Design Requirements</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
<b>Design Options</b>		
Complete one of the following design options:		8
<i>Interactive Design Option</i>		

ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)
ARTG 3700	Interaction Design 2: Mobile

*Graphic and Information Design Option*

ARTG 2252	Graphic Design 1
ARTG 3450	Graphic Design 2

*Experience Design Option*

ARTG 3462	Experience Design 1
ARTG 3463	Experience Design 2

**Art + Design History Elective 4**

Complete any ARTH course. Recommend selecting an ARTH course that fulfills both NUpath IC and SI.

**Design Elective 8**

Complete two ARTG courses (at least one at 3000-level or higher) as long as prerequisites have been met.

**Art + Design Elective 4**

Complete any one ARTG, ARTE, ARTD, ARTH, ARTS course as long as prerequisites have been met.

**Supporting Courses: Mathematics/Science**

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
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**Required Mathematics/Science**

CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1501 Cornerstone of Engineering 1<sup>1</sup>

**Professional Development**

Code	Title	Hours
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**Professional Development**

GE 1000 or ARTF 1000	Introduction to the Study of Engineering or Art and Design at Northeastern	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:

GE 1501 Cornerstone of Engineering 1<sup>1</sup>

1 semester hour from the following course counts toward the professional development requirement:

GE 1502 Cornerstone of Engineering 2<sup>1</sup>

**Writing Requirements**

Code	Title	Hours
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A grade of C or higher is required in each course:

ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
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Complete 4 semester hours of academic, nonremedial, nonrepetitive courses. Recommend selecting a course to fulfill NUpath DD.

**Integrative Courses**

Code	Title	Hours
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This course is already required above and also fulfills the integrative requirement.

MEIE 4702 Capstone Design 2

**Major GPA Requirement**

2.000 minimum GPA required in IE, ME, and MEIE courses

**Program Requirement**

139 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****4 Years, One Co-op in Summer 2/Fall****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or GE 1000	1	ARTF 1122 (EI)	4	Vacation	0	Vacation	0
CHEM 1151 (ND)	4	GE 1502 (ER)	4				
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
	17		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 1250 (EI)	4	ENCP 2000	1	ARTG 2250 (EI)	4	Vacation	0
MATH 2321 (FQ)	4	MATH 2341	4	ME 3475 or 3480	4		
ME 2350	4	ME 2355	4				

PHYS 1155 (ND)	3	ME 2356	1		
PHYS 1156 (AD)	1	ME 2380	4		
PHYS 1157	1	ME 2381	0		
		Art + Design Fundamental	4		
	17		18	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ENGW 3302 or 3315 (WD)	4	ME 3455	4 MEIE 4701 (EI, WI, CE)	1 Co-op	0
ME 2340 (WI)	4	ME 3456	1 Art + Design Elective	4	
ME 2341	1	ME 4505 (AD)	4 Engineering Tech Elective	4	
Art + Design History Elective	4	ME 4506	1		
Design Option	4	Design Option	4		
		Engineering Tech Elective	4		
	17		18	9	0

**Year 4**

Fall	Hours Spring	Hours	
Co-op	0	ENCP 3000	1
		MEIE 4702 (EI, WI, CE)	5
		General Elective (NUPath DD)	4
		Design Elective	4
		Design Elective	4
	0		18

Total Hours: 139

**4 Years, One Co-op in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ARTF 1000 or GE 1000	1	ARTF 1122 (EI)	4 Vacation	0 Vacation	0
CHEM 1151 (ND)	4	GE 1502 (ER)	4		
CHEM 1153	0	MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3		
GE 1501	4	PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4	PHYS 1153	1		
	17		17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours		
ARTG 1250 (EI)	4	MATH 2341	4 Vacation	0	ENGW 3302 or 3315 (WD)	4
ENCP 2000	1	ME 2340 (WI)	4		ME 3475 or 3480	4
MATH 2321 (FQ)	4	ME 2341	1			
ME 2350	4	ME 2355	4			
PHYS 1155 (ND)	3	ME 2356	1			
PHYS 1156 (AD)	1	ME 2380	4			
PHYS 1157	1	ME 2381	0			
	18		18	0		8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours			
ME 3455	4	Co-op	0	Co-op	0	MEIE 4701 (EI, WI, CE)	1
ME 3456	1					Art + Design Elective	4
ME 4505 (AD)	4					Engineering Tech Elective	4
ME 4506	1						
ARTG 2250 (EI)	4						
Design Option	4						
	18		0	0			9

**Year 4**

Fall	Hours Spring	Hours	
ENCP 3000	1	Art + Design Elective	4
MEIE 4702 (EI, WI, CE)	5	Design Elective	4
Art + Design History Elective	4	Design Elective	4
Design Option	4	Engineering Tech Elective	4
General Elective (NUPath DD)	4		
	18		16

Total Hours: 139

**5 Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ARTF 1000 or GE 1000	1	ARTF 1122 (EI)	4 Vacation	0 Vacation	0
CHEM 1151 (ND)	4	GE 1502 (ER)	4		
CHEM 1153	0	MATH 1342 (FQ)	4		



ENGW 1111 (WF)	4	PHYS 1151 (ND)	3		
GE 1501	4	PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4	PHYS 1153	1		
	17		17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321 (FQ)	4 ENCP 2000	1 Vacation	0 Co-op	0
ME 2350	4 MATH 2341	4		
PHYS 1155 (ND)	3 ME 2340 (WI)	4		
PHYS 1156 (AD)	1 ME 2341	1		
PHYS 1157	1 ME 2380	4		
ARTG 1250	4 ME 2381	0		
	Art + Design Fundamental	4		
	17	18	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ARTG 2250 (EI)	4 ME 3475 or 3480	4 Co-op	0
	ENGW 3302 or 3315 (WD)	4 Design Elective	4	
	ME 2355	4		
	ME 2356	1		
	Design Option	4		
	0	17	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENCP 3000	1 MEIE 4701 (EI, WI, CE)	1 Co-op	0
	ME 3455	4 Art + Design Elective	4	
	ME 3456	1 Engineering Tech Elective	4	
	ME 4505 (AD)	4		
	ME 4506	1		
	Art + Design History Elective	4		
	Design Option	4		
	0	19	9	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 MEIE 4702 (EI, WI, CE)	5
	Design Elective	4

Engineering Tech Elective

General Elective (NUPath DD)

0 17

Total Hours: 139

**5 Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTF 1000 or GE 1000	1 ARTF 1122 (EI)	4 Vacation	0 Vacation	0
CHEM 1151 (ND)	4 GE 1502 (ER)	4		
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ARTG 1250 (EI)	4 Co-op	0 Co-op	0 ARTG 2250 (EI)	4
ENCP 2000	1		ME 3475 or 3480	4
MATH 2321 (FQ)	4			
ME 2350	4			
PHYS 1155 (ND)	3			
PHYS 1156 (AD)	1			
PHYS 1157	1			
	18	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2341	4 Co-op	0 Co-op	0 Vacation	0
ME 2355	4			
ME 2356	1			
ME 2380	4			
ME 2381	0			
Design Option	4			
	17	0	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 3000	1 Co-op	0 Co-op	0 MEIE 4701 (EI, WI, CE)	1
ME 2340 (WI)	4		Art + Design Fundamental	4

ME 2341	1	General Elective (NUPath DD)	4
ME 3455	4		
ME 3456	1		
ME 4505 (AD)	4		
ME 4506	1		
Design Option	4		
	20	0	0
			9

Year 5			
Fall	Hours Spring	Hours	
MEIE 4702 (EI, WI, CE)	5 ENGW 3302 or 3315 (WD)	4	
Art + Design History Elective	4 Art + Design Elective	4	
Design Elective	4 Design Option	4	
Engineering Tech Elective	4 Engineering Tech Elective	4	
	17	16	

Total Hours: 139

### Mechanical Engineering and History, BSME

The combined history and mechanical engineering major is designed to help students develop skills across different intellectual domains. A solid grounding in history helps students better understand the political, cultural, and economic context in which technologies are developed and deployed. Indeed, history offers a myriad of case studies that highlight both the transformative potential and the unintended consequences of new technologies and technological processes. By studying different phases of the past and different societies in the past, students will gain a broad perspective that gives them the range and flexibility required in many work situations. History also provides a terrain for moral contemplation. Greater sensitivity to historical context also helps students see beyond commonly accepted narratives valorizing individual entrepreneurs and appreciate the different ways in which innovation, disruption, official support, and even contingency give rise to new technologies. Finally, by writing effective papers and engaging in productive discussions at the heart of history courses, students also cultivate skills in critical analysis and persuasive communication that could be employed in any future careers.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

NUPath requirement Interpreting Culture (IC) is not explicitly satisfied by required courses. Students are responsible for satisfying this requirement with electives.

### Engineering Requirements

Code	Title	Hours
<b>Required Engineering</b>		
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475 or ME 3480	Fluid Mechanics International Applications of Fluid Mechanics	4
ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5

### Senior Capstone Design Project

MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5

### Technical Electives

Complete two of the following:		8
ME 4508	Mechanical Engineering Computation and Design	
ME 4550	Mechanical Engineering Design	
ME 4555	System Analysis and Control	
ME 4570	Thermal Systems Analysis and Design	

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

### History Requirements

Code	Title	Hours
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
HIST 2220	History of Technology	4

### Research Methods

HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1

### Introductory History

Complete one course from HIST 1001 to HIST 1999 (excluding HIST 1200/1201).		4
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### Pre-1800 History Elective

Complete one of the following:		4
HIST 1187	Introduction to Latin American History	

HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 2000	Native American Resistance: Past and Present	
HIST 2311	Colonialism/Imperialism	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	

**Intermediate History**

Complete four HIST courses numbered 2000 or above (except HIST 2301/2302). 16

**Advanced History**

Complete one HIST course at the 3000 level or above. 4

**Supporting Courses: Mathematics/Science**

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501 Cornerstone of Engineering 1<sup>1</sup>

**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1<sup>1</sup>

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2<sup>1</sup>

**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required in each course:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Integrative Courses**

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
HIST 2220	History of Technology	

**Required General Elective**

Code	Title	Hours
Complete 4 semester hours of academic, nonremedial, nonrepetitive courses. 4		

**Major GPA Requirement**

Minimum 2.000 GPA required in ME courses

Minimum 2.000 GPA required in all HIST courses

**Program Requirement**

141 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, One Co-op in Spring/Summer 1**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0
CHEM 1153	0	HIST 1200	1		
ENGW 1111 (WF)	4	HIST 1201	4		
GE 1000	1	MATH 1342 (FQ)	4		
GE 1501	4	PHYS 1151 (ND)	3		
MATH 1341 (FQ)	4	PHYS 1152 (AD)	1		
		PHYS 1153	1		
	17		18		0
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
ENCP 2000	1	HIST 2301	4	Vacation	0
MATH 2321 (FQ)	4	HIST 2302 (WD)	1		
ME 2340 (WI)	4	MATH 2341	4		
ME 2341	1	ME 2355	4		
				Introductory history course	4

ME 2350	4	ME 2380	4
PHYS 1155 (ND)	3	ME 2381	0
PHYS 1156 (AD)	1	ME 2356	1
PHYS 1157	1		
	19	18	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 2220 (SI, DD)	4 Co-op	Co-op	MEIE 4701 (EI, CE, WI)	1
ME 3455	4		ME technical elective	4
ME 3456	1		Intermediate history course	4

ME 4505 (AD)	4			
ME 4506	1			
Pre-1800 history elective	4			
	18	0	0	9

**Year 4**

Fall	Hours Spring	Hours
ENCP 3000	1 Advanced history course	4
ENGW 3302 or 3315 (WD)	4 General elective	4
MEIE 4702 (EI, CE, WI)	5 Intermediate history course	4
Intermediate history course	4 ME technical elective	4
Intermediate history course	4	
	18	16

Total Hours: 141

**Five Years, Three Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 HIST 1200	1		
ENGW 1111 (WF)	4 HIST 1201	4		
GE 1000	1 MATH 1342 (FQ)	4		
GE 1501	4 PHYS 1151 (ND)	3		
MATH 1341 (FQ)	4 PHYS 1152 (AD)	1		
	PHYS 1153	1		
	17	18	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 2000	1 Co-op	0 Co-op	0 Vacation	0
MATH 2321 (FQ)	4			
ME 2350	4			
PHYS 1155 (ND)	3			
PHYS 1156 (AD)	1			
PHYS 1157	1			
HIST 2301	4			
HIST 2302 (WD)	1			
	19	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2341	4 Co-op	Co-op	ME 2380	4
ME 2340 (WI)	4		ME 2381	0
ME 2341	1		Intermediate history course	4
ME 2355	4			
ME 2356	1			
Introductory history course	4			
	18	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 3000	1 Co-op	Co-op	ME 3475 or 3480	4
HIST 2220 (SI, DD)	4		MEIE 4701 (EI, CE, WI)	1
ME 3455	4		General elective	4
ME 3456	1			
ME 4505 (AD)	4			
ME 4506	1			
Pre-1800 history elective	4			
	19	0	0	9

**Year 5**

Fall	Hours Spring	Hours
ENGW 3302 or 3315 (WD)	4 Advanced history course	4
MEIE 4702 (EI, CE, WI)	5 Intermediate history course	4
Intermediate history course	4 ME technical elective	4

Intermediate history course	4 ME technical elective	4
		17
		16

Total Hours: 141

## Mechanical Engineering and Physics, BSME

This undergraduate program takes advantage of the physical similarities between mechanical engineering and physics, providing students with the opportunity to pursue studies that explore both topics. The program culminates with mechanical engineering capstone design.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475	Fluid Mechanics	4
or ME 3480	International Applications of Fluid Mechanics	
ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5
ME 4508	Mechanical Engineering Computation and Design	4
ME 4550	Mechanical Engineering Design	4
ME 4555	System Analysis and Control	4
ME 4570	Thermal Systems Analysis and Design	4
<b>Mechanical Engineering Capstone</b>		
MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5
<b>Supplemental Credit</b>		

2 semester hours from the following course counts toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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3 semester hours from the following course counts toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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### Mathematics/Science Requirement

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	5
PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	5
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 5318	Principles of Experimental Physics	4

### Advanced Physics Elective

Complete one 4 semester hour course from the below list:		4
PHYS 4606	Mathematical and Computational Methods for Physics	
PHYS 4621	Biological Physics 1	
PHYS 4623	Medical Physics	
PHYS 4651	Medical Physics Seminar 1	
PHYS 4652	Medical Physics Seminar 2	
PHYS 5111	Astrophysics and Cosmology	
PHYS 5113	Particle Physics	
PHYS 5116	Complex Networks and Applications	
PHYS 5260	Introduction to Nanoscience and Nanotechnology	

### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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### Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1<sup>1</sup>

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2<sup>1</sup>

## Writing Requirements

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Required General Electives

Code	Title	Hours
Complete 8SH of academic, nonremedial, nonrepetitive courses.		
		8

## Integrative Requirement

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
PHYS 5318	Principles of Experimental Physics	

## Major GPA Requirement

2.000 minimum GPA required in IE, ME, and MEIE courses

## Program Requirement

139 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

## Plan of Study

### Four Years, One Co-op in Summer 2 / Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 ENGW 1111 (WF)	4 Vacation	0 Vacation	0
CHEM 1153	0 GE 1502 (ER)	4		
GE 1000	1 MATH 1342 (FQ)	4		
GE 1501	4 PHYS 1165 (ND)	4		
MATH 1341 (FQ)	4 PHYS 1166 (AD)	1		
PHYS 1161 (ND)	4 PHYS 1167	0		
PHYS 1162 (AD)	1			
	18	17	0	0

### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321 (FQ)	4 ENCP 2000	1 ME 3475 or 3480	4 Vacation	
ME 2340 (WI)	4 MATH 2341	4 PHYS 3600 (ND, AD, WI)	4	
ME 2341	1 ME 2355	4		
ME 2350	4 ME 2356	1		
PHYS 2303 (ND)	4 ME 2380	4		
	ME 2381	0		
	PHYS 3601 (ND)	4		
	17	18	8	0

### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3302 or 3315 (WD)	4 ME 3455	4 ME 4550	4 Co-op	0
ME 4505 (AD)	4 ME 3456	1 MEIE 4701 (EI, CE, WI)	1	
ME 4506	1 ME 4508	4 General Elective	4	
PHYS 2371 (ND)	3 ME 4570	4		
PHYS 2372 (EI)	1 PHYS 3602 (ND)	4		
General Elective	4			
	17	17	9	0

### Year 4

Fall	Hours Spring	Hours
Co-op	0 ENCP 3000	1
	ME 4555	4
	MEIE 4702 (EI, CE, WI)	5
	PHYS 5318 (ND, AD, WI, CE)	4
	Advanced Physics Elective	4
	0	18

Total Hours: 139

### Five Years, Three Co-ops in Summer 2 / Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 ENGW 1111 (WF)	4 Vacation	0 Vacation	0
CHEM 1153	0 GE 1502 (ER)	4		
GE 1000	1 MATH 1342 (FQ)	4		
GE 1501	4 PHYS 1165 (ND)	4		
MATH 1341 (FQ)	4 PHYS 1166 (AD)	1		

PHYS 1161 (ND)	4			
PHYS 1162 (AD)	1			
	18	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321 (FQ)	4 ENCP 2000	1 Vacation	0 Co-op	0
MATH 2341	4 ME 2340 (WI)	4		
ME 2350	4 ME 2341	1		
PHYS 2371 (ND)	3 ME 2355	4		
PHYS 2372 (EI)	1 ME 2356	1		
	ME 2380	4		
	ME 2381	0		
	PHYS 2303 (ND)	4		
	16	19	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3302 or 3315 (WD)	4 ME 3475 or 3480	4 Co-op	0
	ME 3455	4 PHYS 3600 (ND, AD, WI)	4	
	ME 3456	1		
	ME 4508	4		
	PHYS 3602 (ND)	4		
	0	17	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENCP 3000	1 ME 4550	4 Co-op	0
	ME 4505 (AD)	4 MEIE 4701 (EI, WI, CE)	1	
	ME 4506	1 General Elective	4	
	ME 4555	4		
	ME 4570	4		
	PHYS 3601 (ND)	4		
	0	18	9	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 MEIE 4702 (EI, WI, CE)	5
	PHYS 5318 (ND, AD, CE, WI)	4
	Advanced Physics Elective	4

General Elective	4
0	17

Total Hours: 139

**Notes:**

Physics courses are offered on the following schedule:

- PHYS 2303 offered every fall, spring and summer 2.
- PHYS 2371/2372 offered every fall.
- PHYS 3600 offered every summer 1 and summer 2.
- Classical Dynamics (PHYS 3601) is offered fall and spring semesters of even years only. Please meet with your COS Academic Advisor to discuss scheduling options for Year 4 of odd years.
- PHYS 3602 offered every fall and spring.
- PHYS 3603 offered fall (even years) and summer 1 (odd years).
- PHYS 4115 offered every fall and spring.
- PHYS 4305 offered every spring and summer 2 (even years).
- PHYS 4621 offered spring (odd years) and fall (even years).
- PHYS 4623 offered summer 1 and fall (even years).
- PHYS 4651 offered spring and fall (odd years).
- PHYS 4652 offered every spring.
- PHYS 5318 offered every spring.

**Aerospace, Minor**

This aerospace minor provides an opportunity for students to gain fundamental knowledge in science and technology of navigation in the air. These fundamentals are covered by a total of five courses, with courses on flight and propulsion, as well as in mechanics/structures, thermofluids, and guidance and navigation.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
<b>Core Courses</b>		
ME 3465	Introduction to Flight	4
ME 3470	Aeronautical Propulsion	4
<b>Guidance and Navigation Course</b>		
ME 5554	Robotics Sensing and Navigation	4
<b>Structures Course</b>		
Complete one of the following:		4
ME 4520	Mechanical Vibration	
ME 5655	Dynamics and Mechanical Vibration	
<b>Combustion and Aerodynamics Course</b>		
Complete one of the following:		4
ME 4565	Introduction to Computational Fluid Dynamics	
ME 5690	Gas Turbine Combustion	
ME 5695	Aerodynamics	

## GPA Requirement

Minimum 2.000 GPA required in the minor

## Credit Requirement

20 semester hours required

### Biomechanical Engineering, Minor

This minor provides an opportunity for students to explore the interaction between mechanical engineering and health. Recommended for students interested in aspects of engineering related to human kinematics, including biomedical devices, joint injury, prosthetic development, human-machine systems, and/or prosthetics.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Biology

Code	Title	Hours
<b>Biology 1</b>		
Complete one of the following:		5
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	

## Anatomy and Physiology

BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
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## Required Mechanical Engineering

Code	Title	Hours
ME 5665	Musculoskeletal Biomechanics	4
MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5

## Technical Elective

Additional electives may be approved by your academic adviser.

Code	Title	Hours
Complete one of the following:		4-5
IE 4520	Stochastic Modeling	
IE 4522 and IE 4523	Human-Machine Systems and Lab for IE 4522	
ME 4640	Mechanical Behavior and Processing of Materials	
ME 5650	Advanced Mechanics of Materials	
ME 5655	Dynamics and Mechanical Vibration	
PHYS 4621	Biological Physics 1	

## GPA Requirement

2.000 GPA required in the minor

### Healthcare System Operations, Minor

The objective of the minor in healthcare system operations is to prepare students to apply industrial and systems engineering methods in healthcare applications. Distinct from other service industries,

healthcare systems are characterized by extensive complexities driven by communication between and interdependencies among multiple actors, and the need to simultaneously address multiple competing objectives pertaining to economic, quality-driven, individual-driven, and population-driven goals. This minor will benefit students by highlighting the unique features of this industry and methods for addressing its unique challenges to engineer improvements to the design, operation, and management of healthcare systems.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Courses

At most, one course from the minor may be counted toward major requirements.

Code	Title	Hours
<b>Required Courses</b>		
IE 5617	Lean Concepts and Applications	4
IE 5400	Healthcare Systems Modeling and Analysis	4
or IE 3500	Introduction to Healthcare Systems Engineering	
PHTH 1260	The American Healthcare System	4
<b>Electives</b>		
Complete one of the following:		4
IE 5374	Special Topics in Industrial Engineering (System Dynamics in Healthcare)	
IE 5500	Systems Engineering in Public Programs	
IE 5640	Data Mining for Engineering Applications	
NRSG 5121	Epidemiology and Population Health	
PHTH 4511	Healthcare Management	
PHTH 5226	Strategic Management and Leadership in Healthcare	
PHTH 5232	Evaluating Healthcare Quality	
SCHM 3315	Managing Healthcare Operations and Supply Chain	

## GPA Requirement

2.000 GPA required in the minor

### Industrial Engineering, Minor

This minor provides an opportunity for students to explore core aspects of industrial engineering, including mathematical foundations, along with a technical focus into one of the many industrial engineering subdisciplines. This minor is not open to students majoring in Industrial Engineering.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.



**Required Courses**

Code	Title	Hours
IE 2310	Introduction to Industrial Engineering	4
IE 4515	Operations Research	4
IE 3412	Engineering Probability and Statistics (or equivalent)	4

**Technical Elective**

Consult mechanical and industrial engineering academic advisor for additional electives.

Code	Title	Hours
Complete one of the following:		4
IE 3425	Engineering Database Systems	
IE 4510	Simulation Modeling and Analysis	
IE 4512	Engineering Economy	
IE 4516	Quality Assurance	
IE 4520	Stochastic Modeling	
IE 4522 and IE 4523	Human-Machine Systems and Lab for IE 4522	
IE 4525	Logistics and Supply Chain Management	
IE 4530	Manufacturing Systems and Techniques	

**GPA Requirement**

2.000 GPA required in the minor

**Mechanical Engineering, Minor**

This minor provides an opportunity for students to explore core aspects of mechanical engineering, including mechanical and thermal foundations, along with a technical focus into one of the mechanical engineering disciplines (mechanics, thermofluids, materials, and/or controls). This minor is not open to students majoring in Mechanical Engineering.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
ME 2350	Statics	4
ME 2380	Thermodynamics	4

**Mechanical Engineering Technical Electives**

Code	Title	Hours
Complete two of the following:		8
ME 2340	Introduction to Material Science	
ME 2355	Mechanics of Materials	
ME 3455	Dynamics	
ME 3475	Fluid Mechanics	
or ME 3480	International Applications of Fluid Mechanics	
ME 4508	Mechanical Engineering Computation and Design	
ME 4550	Mechanical Engineering Design	

ME 4555	System Analysis and Control
ME 4570	Thermal Systems Analysis and Design

**GPA Requirement**

2.000 GPA required in the minor

**Robotics, Minor**

The minor in robotics is open to all students in the university. The minor is designed for the student who would like a coherent background in the theory and practice of robotics.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students need to complete the program requirements with at least three courses that are not part of their major required coursework.

**Required Courses**

Code	Title	Hours
ME 3460	Robot Dynamics and Control	4
Complete one of the following:		4
EECE 2210 and EECE 2211	Electrical Engineering and Lab for EECE 2210	
EECE 2160	Embedded Design: Enabling Robotics	

**Electives**

Code	Title	Hours
Complete three of the following:		12
CS 4100	Artificial Intelligence	
CS 4610	Robotic Science and Systems	
EECE 4630	Robotics	
EECE 5550	Mobile Robotics	
EECE 5552	Assistive Robotics	
EECE 5554	Robotics Sensing and Navigation	
EECE 5639	Computer Vision	
EECE 5644	Introduction to Machine Learning and Pattern Recognition	
EECE 5580	Classical Control Systems	
IE 4522	Human-Machine Systems	
ME 5245	Mechatronic Systems	
ME 5250	Robot Mechanics and Control	

**GPA Requirement**

2.000 GPA required in the minor

**Accelerated Bachelor/Graduate Degree Programs**

The College of Engineering offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://>

registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/).

## Bouvé College of Health Sciences

Website (<https://bouve.northeastern.edu/>)

**Carmen C. Sceppa, MD, PhD, Dean**

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The Bouvé College of Health Sciences strongly supports the mission of Northeastern University as a practice-oriented, student-centered, experiential research institution. The college is committed to the goals of the university, which include excellence in education, research, scholarship, clinical practice, experiential learning, access to educational opportunities, and a strong professional orientation.

Bouvé offers students an education in health, health profession fields, and public health that features a curriculum of highly relevant, closely integrated, basic and applied courses in the physical, biological, behavioral, social, environmental, and health systems sciences. Students engage in interprofessional patient care, interdisciplinary translational research, and experiential learning opportunities through the university's signature cooperative education program, as well as through service-learning, research, and global experiences.

Bouvé leverages interdisciplinary and interprofessional collaboration to tackle the world's most pressing health challenges. The college seeks to prepare students to become clinicians, researchers, and leaders in healthcare and in the promotion of health of individuals and populations.

Students are provided a broad range of services and programs to ensure their academic success and enhance their overall educational experience at Northeastern University, from their first year through graduation. Faculty are deeply committed to student success, as students interact with world-class healthcare and educational institutions nationally and globally, to advance health for all.

### Academic Requirements

Students are responsible for following the program requirements for their respective major, pattern of attendance, and graduation year. Students are responsible for monitoring their own progress through the curriculum by registering for the courses stipulated by their curriculum plan, abiding by course prerequisites, regularly checking their degree audits, and knowing the consequences for unsatisfactory academic progress. Any exceptions to a student's curriculum plan will be determined by protocols

established by the program, after consultation with the student's academic advisor.

The minimum passing grade for a course within a curriculum is stipulated in the program requirements published in this catalog. The minimum passing grade required for certain NUPATH writing-intensive courses is established by the university and can be viewed here (p. 49). For a course where the minimum passing grade is not established in the program requirements published in this catalog, the university's minimum passing grade for the course will be accepted.

### ACADEMIC PROGRESSION WITHIN BOUVÉ

- First-year students must complete the minimum semester hours outlined by the university Academic Progression Standards (p. 27) and meet all major/program prerequisite course requirements to progress to sophomore status.
- Students who incur an incomplete grade in a prerequisite course may not progress into the subsequent course(s). Any exceptions will be determined by protocols established by the program, after consultation with the student's academic advisor. See *Clearing an Incomplete or Changing Other Grades* section on the (<http://catalog.northeastern.edu/undergraduate/academic-policies-procedures/student-records-transcripts-related-policies/>) Student Records, Transcripts, and Related Policies page of this catalog for more detail.
- Please see each major/ program's requirements page in this catalog for progression requirements specific to that program.

### GRADE-POINT AVERAGE (GPA)

Bouvé College does not permit the use of a hand-calculated GPA under any circumstances. All GPA calculations will be performed by the university's standard process.

### ACADEMIC DISMISSAL FROM MAJOR

Students in the Bouvé College of Health Sciences will be dismissed from their major/program effective the following academic semester for failure to earn the minimum required grade in the same course twice. Additional grounds for academic dismissal specific to each major can be found on the program requirements page of the major in this catalog.

*Note:* Students dismissed from their major/program but who are otherwise in good standing with the university are allowed to remain at Northeastern University for up to two semesters as a provisional Bouvé student, by the end of which, the student is expected to move into a new major. If not moved into a new major by the end of two semesters, the student will be blocked from further registration.

### UNDERGRADUATE STUDENT ACADEMIC APPEALS

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Details about the process for undergraduate students may be found in the *Appeals Policies and Procedures* in the university Undergraduate Student Handbook (<http://www.northeastern.edu/osccr/code-of-student-conduct/>) supplemented by the college-specific policies and procedures below.

**Step 1.** For appeals concerning a course grade, students should discuss their concerns with the course instructor or unit head offering the course as outlined in the student handbook. If the concern remains unresolved after these conversations, the student should prepare an appeal to the College level, see step 5, below.

For all other academic appeals, including decisions concerning academic standing or progression or co-op, students should discuss their concerns

with the academic advisor and prepare an appeal statement for submission to the Unit level as shown in the step below. For appeals concerning a professionalism determination (when applicable to a student's program/major), the student should discuss their concerns with the program director.

The Disability Resource Center (<http://www.northeastern.edu/drc/>) provides an appeal process for students with disabilities who believe their accommodation requests were unduly denied. Appeals arising from allegations of discrimination or harassment on the basis of a protected category should be referred to the Office for University Equity and Compliance (<https://www.northeastern.edu/ouec/>). For appeals concerning student conduct, including academic integrity, please refer to the process outlined in the Code of Student Conduct.

**Step 2.** If the concern remains unresolved after informal discussions or if the concern pertains to an academic determination as outlined above, the student should prepare and submit an appeal statement. Students are encouraged to work with their advisor to complete the necessary forms.

**Step 3: BCHS Unit Level Appeal** When appealing a decision to the unit-level, students should submit a request to appeal and submit the appeal statement within 30 working days of the day when the student learns of the academic determination in question. The unit-level Academic Standing Committee must provide the student with a written report of the finding(s) and decision within 10 business days according to their established procedures.

**Step 4: Department Chair or School Dean Level Appeal** If the student believes they have been erroneously, capriciously, or otherwise unfairly treated with the unit-level committee's decision, they may pursue a secondary appeal to the next level as specified below:

School of Clinical and Rehabilitation Sciences: Department chair of the unit offering the course or program

School of Community Health and Behavioral Sciences: Department chair of the unit offering the course or program

School of Nursing: School Dean

School of Pharmacy: School Dean

The student must request the appeal by contacting the specified office in writing via e-mail within 10 business days of receiving the report from the previous step. After consideration, the department chair or school dean, or their representative, shall provide the student and involved faculty member with a written report of their finding(s) and decision within 10 business days of receiving the appeal request.

**Step 5. College Level Appeal** If the student is not satisfied with the disposition of the matter at the previous step, they may proceed with the appeal through the BCHS Academic Affairs Committee (BCHS AAC). The BCHS AAC hears cases that have been unsatisfactorily resolved at the prior school and unit levels for "students who believe that they have been erroneously, capriciously, or otherwise unfairly treated" or may directly hear appeals concerning course grades or when a unit does not have a unit-level committee.

The student must request an appeal hearing in writing (via email) within 10 business days of receiving the report from the previous step or the grade in question. After consideration, the college dean or their representative, shall provide the student and involved faculty member with a written report of their finding(s) and decision within 10 business days of receiving the appeal request.

Processes for College-Level Appeals to the BCHS AAC:

- Students wishing to bring an appeal before the college AAC should first consult with their appointed academic advisor, or when the appeal involves the academic advisor, with the Assistant Dean of Student Services.
- The chair of the college AAC will convene the college appeals panel from among the regular members of the BCHS AAC. The appeals panel will include three voting members of the BCHS AAC that appropriately represent the breadth and depth of programs within the college. At minimum, two schools will be represented on the panel and at least one member who teaches within a similar degree-level program. Members of the panel shall have no known conflicts of interest with the student. The Assistant Dean of Student Services and the chair of the AAC will attend the appeal panel hearing as non-voting members.
- A chair for the college appeal panel shall be selected from among the panel members and is responsible for producing a formal recommendation of the committee for communication to the college dean.
- The chair of the AAC will be responsible for scheduling the meeting, notifying the student and other participants in a timely manner so they may attend, and keeping and archiving records of the proceedings according to committee procedures.
- The chair of the college appeal panel will notify the college dean of the findings and recommended decision. The college dean will have the final decision.
- The college dean will notify the student and other relevant parties of the decision in writing no later than 10 business days after the decision.

#### Step 6. University Level Appeal

If the student is not satisfied with the college's disposition of the matter, or if the appeal is not resolved within 30 working days (six calendar weeks) after having been submitted to the college in the previous step, they may appeal the matter to the university level. The student shall submit a request in writing, within 10 working days (two calendar weeks) of the finding of the college in the previous step, to the vice provost for undergraduate programs and policies that the university convene an academic appeals resolution committee to review the issue. See the University Undergraduate Handbook for more information.

#### OTHER POLICIES AND PROCEDURES

In addition to policies and procedures referenced here, the following policies and procedures published in Bouvé's graduate catalog also apply to Bouvé's undergraduate students:

- Health Certification (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/health-certification/>)
- Requirements for Clinical, Internships, and Practicum Courses (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/practicum-internship-policies/>)
- Background Checks (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/background-checks/>)
- Liability Insurance (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/liability-insurance/>)

## Interdisciplinary

### Minors

- Health, Humanities, and Society (p. 539)
- Healthcare System Operations (p. 535)

### Combined Majors

- Communication Studies and Speech-Language Pathology and (p. 171) Audiology (p. 171), BS (p. 171)
- Data Science and Health (p. 415) Science (p. 415), BS (p. 415)
- Environmental Engineering and Health (p. 480) Science (p. 480), BSEnvE (p. 480)
- Health Science and Business Administration, BS (p. 281)
- Health Science and Communication Studies, BS (p. 172)
- Health Science and Psychology, BS (p. 550)
- Health Science and Sociology, BS (p. 553)
- Linguistics and Speech-Language Pathology and (p. 555)Audiology (p. 555), BS (p. 555)

## Health, Humanities, and Society, Minor

The health, humanities, and society minor is designed for students who would like to learn how to think capaciously and creatively about health using the rigorous, precise, and flexible skills trained by the social sciences and the humanities. The social sciences teach students to think about the social, economic, and political factors that structure health conditions and outcomes in particular societies, while the humanities train students to navigate the complexities of interpersonal interaction and their ethical implications, to relate the micro to the macro and texts to contexts, to historicize encounters, to communicate accurately and effectively across a variety of media, and to engage in creative analytical thinking about healthcare. The landscape of healthcare is quickly changing, and this training will equip students well not only for the diverse forms of health work that exist today, but for as yet unimaginable varieties of health-related work in the future.

This minor is structured around the particular competencies that the social sciences and humanities train. Those competencies are narrative and historical perspective, critical attention and observation, ethics and judgment, performance and creativity, and social and structural proficiency. Rather than adopting the more traditional approach of connecting particular skills to particular disciplines (say, narrative to literature and observation to art history), this minor builds from discipline-specific health knowledge while training students to think across disciplines. Thus, it will not be unusual for students to find a single course addressing multiple competencies or to take courses in different disciplines that address the same competency from distinct but complementary perspectives.

This minor is housed in the Humanities Center of the College of Social Sciences and Humanities in partnership with the Bouvé College of Health Sciences.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Courses

No more than two courses, in addition to the introductory course, may be taken under the 2000 level.

Code	Title	Hours
<b>Introductory Course</b>		
INSH 1300	Introduction to Health and Humanities	4
<b>Humanities Requirement</b>		
Complete two of the following:		8
ENGL 2770	Writing to Heal	
ENGL 3140	19th-Century Literatures	
ENGL 3700	Narrative Medicine	
ENGL 4710	Capstone Seminar	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1295	Religious Perspectives on Health and Healing	
WMNS 1225	Gender, Race, and Medicine	
<b>Social Sciences Requirement</b>		
Complete two of the following:		8
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4580	Special Topics in Anthropology	
ECON 1230	Healthcare and Medical Economics	
HLTH 5280	The (in)Visibility of (dis)Ability in Society	
PHTH 1270	Introduction to Global Health	
PHTH 2300	Communication Skills for the Health Professions	
or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 4120	Global Perspectives on Discrimination and Health	
PHTH 5202	Introduction to Epidemiology	
PHTH 5234	Economic Perspectives on Health Policy	
SOCL 1295	Drugs and Society	
SOCL 2303	Gender and Reproductive Justice	
SOCL 3441	Sociology of Health and Illness	
Total Hours		20

## GPA Requirement

2.000 GPA required in the minor

## Healthcare System Operations, Minor

The objective of the minor in healthcare system operations is to prepare students to apply industrial and systems engineering methods in healthcare applications. Distinct from other service industries, healthcare systems are characterized by extensive complexities driven by communication between and interdependencies among multiple actors, and the need to simultaneously address multiple competing objectives pertaining to economic, quality-driven, individual-driven, and

population-driven goals. This minor will benefit students by highlighting the unique features of this industry and methods for addressing its unique challenges to engineer improvements to the design, operation, and management of healthcare systems.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

At most, one course from the minor may be counted toward major requirements.

Code	Title	Hours
<b>Required Courses</b>		
IE 5617	Lean Concepts and Applications	4
IE 5400	Healthcare Systems Modeling and Analysis	4
or IE 3500	Introduction to Healthcare Systems Engineering	
PHTH 1260	The American Healthcare System	4
<b>Electives</b>		
Complete one of the following:		4
IE 5374	Special Topics in Industrial Engineering (System Dynamics in Healthcare)	
IE 5500	Systems Engineering in Public Programs	
IE 5640	Data Mining for Engineering Applications	
NRSG 5121	Epidemiology and Population Health	
PHTH 4511	Healthcare Management	
PHTH 5226	Strategic Management and Leadership in Healthcare	
PHTH 5232	Evaluating Healthcare Quality	
SCHM 3315	Managing Healthcare Operations and Supply Chain	

### GPA Requirement

2.000 GPA required in the minor

## Communication Studies and Speech-Language Pathology and Audiology, BS

The combined Bachelor of Science in Communication Studies and Speech-Language Pathology and Audiology offers an interdisciplinary approach to human communication and its disorders. Coursework focuses on the scientific and theoretical frameworks of speech, language, and hearing. Students will also be introduced to the fundamentals of communication theory, and they have an opportunity to acquire the practical skills necessary to thrive in a complex and changing society. The curriculum is enhanced by experiential learning opportunities in a clinical setting that prepare the students for a variety of professional careers.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### First-Year Seminar

Code	Title	Hours
COMM 1000	Communication Studies at Northeastern	1
or SLPA 1000	College: An Introduction	

### Communication Studies Requirements

Code	Title	Hours
No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.		
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1231	Principles of Organizational Communication	
COMM 1225	Communication Theory	
COMM 1255	Communication in a Digital Age	

<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

<b>Writing-Intensive Courses</b>		
Complete two of the following (COMM 3201 is strongly recommended):		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	

COMM 4605 Youth and Communication Technology

COMM 4631 Crisis Communication and Image Management

### Communication Studies Electives

Complete three COMM courses. 12

### Speech-Language Pathology and Audiology Requirements

**Code Title Hours**

All courses in these sections must be completed with a C or better.

#### SLPA Requirements

SLPA 1101 Introduction to Communication Disorders 4

SLPA 1102 Language Development 4

SLPA 1103 Anatomy and Physiology of Speech and Hearing Mechanism 4

SLPA 1200 Phonetics 4

SLPA 1203 Introduction to Audiology 4

SLPA 1205 Speech and Hearing Science 4

SLPA 2000 Introduction to Co-op 1

or EEAM 2000 Professional Development for Co-op

SLPA 4651 Speech Disorders across the Life Span 4

SLPA 5107 Clinical Procedures 4

SLPA 5110 Language Disorders across the Life Span 4

SLPA 6219 Aural Rehabilitation 4

### Supporting Courses

**Code Title Hours**

PSYC 1101 Foundations of Psychology 4

ENGW 1111 First-Year Writing 4

PHYS 1145 and PHYS 1146 Physics for Life Sciences 1 and Lab for PHYS 1145 5

BIOL 2217 and BIOL 2218 Integrated Anatomy and Physiology 1 and Lab for BIOL 2217 5

BIOL 2219 and BIOL 2220 Integrated Anatomy and Physiology 2 and Lab for BIOL 2219 5

HLTH 2100 Interprofessional Ethics for Individual and Population Health 4

PHTH 2300 Communication Skills for the Health Professions 4

PSYC 2320 Statistics in Psychological Research 4

### Integrative Course

**Code Title Hours**

Note: The selected integrative course counts toward the COMM writing-intensive (COMM 3201) or COMM elective (COMM 4102) as appropriate.

COMM 3201 Health Communication (WI)

or COMM 4102 Health Communication Campaigns

### Communication Studies Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

### Program Requirements

133 total semester hours required

### Plan of Study

#### Sample 4 Years, 2 Co-ops

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000 or SLPA 1000	1	Communication studies foundation course	4	COMM 1112	4	Communication studies elective	4
COMM 1101	4	SLPA 1101	4	Communicati studies elective	4	General elective	4
BIOL 2217 and BIOL 2218	5	SLPA 1205	4				
PSYC 1101	4	BIOL 2219 and BIOL 2220	5				
ENGW 1111	4						
	18		17		8		8

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000 or SLPA 2000	1	Co-op	0	Co-op	0	Vacation	0
Communicati studies cluster course	4						
SLPA 1203	4						
PHYS 1145 and PHYS 1146	5						
SLPA 1103	4						
	18		0		0		0

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 3409 or ENGW 3306	4	PSYC 2320 or MATH 2280	4	Vacation or optional co-op #2	0	Vacation or optional co-op #2	0
Communicati studies elective	4	SLPA 1102	4				
PHTH 2300	4	Communication studies writing-intensive	4				
HLTH 2100 or PHIL 1165	4	SLPA 1200	4				
	16		16		0		0

##### Year 4

Fall	Hours	Spring	Hours
SLPA 5110	4	SLPA 4651	4
SLPA 5107	4	SLPA 6219	4
General elective	4	COMM 3201	4

General elective	4 General elective	4
		16
		16

Total Hours: 133

A general elective or a COMM elective (e.g., COMM 1120) can be taken to fulfill the NUPATH Formal/Quantitative Reasoning (FQ) requirement.

## Data Science and Health Science, BS

The health science and computer science combined major offers a solid academic and experiential foundation integrating studies in health administration, computer science, mathematics, and statistics. This program reflects the impact of data in modern healthcare and prepares students for success in careers in health administration, community-based health promotion, public health, and big data analysis.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPATH Requirements

All undergraduate students are required to complete the NUPATH Requirements (p. 46).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Information Science Requirement</b>		

IS 4300	Human Computer Interaction	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

### Supporting Courses for Data Science

Code	Title	Hours
MATH 1341 or MATH 1241	Calculus 1 for Science and Engineering Calculus 1	4

### Data Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4

### Advanced Writing in the Disciplines

ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4
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### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4

### Supporting Courses for Health Science

Code	Title	Hours
<b>Research Methods</b>		
Complete one of the following:		4
HLTH 5450 or PHTH 4202	Healthcare Research Principles of Epidemiology in Medicine and Public Health	
IS 4800	Empirical Research Methods	
<b>Statistics</b>		
Complete one of the following:		4
PHTH 2210	Foundations of Biostatistics	
PSYC 2320	Statistics in Psychological Research	
ECON 2350	Statistics	
ENVR 2500	Biostatistics	

MATH 3081	Probability and Statistics	
<b>Philosophy</b>		
Complete one of the following:		4
PHIL 1145	Technology and Human Values	
PHIL 1165	Moral and Social Problems in Healthcare	
<b>Life Sciences Core</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
PSYC 1101	Foundations of Psychology	4

### Integrative Requirement

Code	Title	Hours
<b>Upper-Division Elective</b>		
Complete four credits from the following:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
PHTH 4000 or higher		
HSCI 4000 or higher		
<b>Integrative Course</b>		
DS 4420	Machine Learning and Data Mining 2	4

### Required General Electives

Code	Title	Hours
Complete 16 credits general electives.		16

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

### Program Requirement

133 semester hours required

### Plan of Study

#### Five Year, Two Co-op Sample Plan of Study

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 2500 and CS 2501	5 BIOL 1113 and BIOL 1114	5		
CS 1800 and CS 1802	5 PSYC 1101	4		
BIOL 1111 and BIOL 1112	5 MATH 1341	4		

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHTH 1260	4 CS 1210	1 Vacation	Co-op	
PHTH 2300	4 PHTH 2515	4		
CS 3500 and CS 3501	5 DS 3000	4		
CHEM 1161 and CHEM 1162 and CHEM 1163	5 CS 3200	4		
	General Elective	4		
18		17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	IS 4300	4 Vacation	Co-op	
	DS 4200	4		
	PHTH 2350	4		
	Statistics Course	4		
0		16	0	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Upper Division Elective	4 Vacation	Vacation	
	DS 4300	4		
	DS 4400	4		
	ENGW 3302	4		
0		16	0	0
Year 5				
Fall	Hours Spring	Hours		
PHTH 4540	4 DS 4420	4		
HLTH 5450, PHTH 4202, or IS 4800	4 PHTH 4120	4		
PHIL 1145 or 1165	4 General Elective	4		
General Elective	4 General Elective	4		
16		16		

Total Hours: 137

### Environmental Engineering and Health Science, BSEnvE

This intercollege combined major is designed for students who would like to explore their interest in the health sciences while earning the benefit of a Bachelor of Science degree in environmental engineering. The combined major reflects the respective departmental thrusts in environmental health and sustainable resource engineering to create awareness about the complex relationship between the environment and human health, prepare professionals in this growing area capable of providing engineering solutions to



current and emerging topics related to environmental engineering and health sciences, and maintain healthy environmental systems by applying and developing techniques to reduce exposure to health hazards. This program combines the content of two majors to allow students to learn the breadth and depth of the convergence between public health and environmental engineering.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 4765	Senior Design Project—Environmental	5
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4
GE 3300	Energy Systems: Science, Technology, and Sustainability	4
<b>Supplemental Credit</b>		
1 semester hour from the following course counts toward the engineering requirement:		1
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 2335	Environmental Engineering Chemistry	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 3430	Engineering Microbiology and Ecology	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

### Health Sciences Major Requirement

Code	Title	Hours
HLTH 5450	Healthcare Research (Principles of Epidemiology in Medicine and Public Health)	4
or PHTH 4202	Principles of Epidemiology in Medicine and Public Health	
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2210	Foundations of Biostatistics	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2414	Environmental Health	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
PHTH 5214	Environmental Health	3

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.<sup>2</sup>

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
<b>Science Elective (Earth)</b>		
Complete one of the following:		4-5
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	
<b>Supplemental Credit</b>		
3 semester hours from the following course count toward the mathematics/science requirement:		3
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 2335	Environmental Engineering Chemistry	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 3430	Engineering Microbiology and Ecology	

1 semester hour from the following course counts toward the mathematics/science requirement: 1  
 GE 1501 Cornerstone of Engineering 1<sup>1</sup>

### Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

#### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1<sup>1</sup>

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2<sup>1</sup>

### Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Integrative Course

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
CIVE 4765	Senior Design Project—Environmental	

### Engineering GPA Requirement

A minimum 2.000 GPA is required in major (CIVE) courses

### Health Sciences Major Requirement

A minimum grade of C or higher is required for all HLTH and PHTH courses

### Program Requirement

133 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

<sup>2</sup> Mathematics/Science Requirement: CHEM 1151, MATH 1341, and PHYS 1151 require a grade of C- or higher

### Plan of Study

#### FOUR YEARS, 1 CO-OP SUMMER 2/FALL

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 PHTH 1260 (SI)	4	

ENGW 1111 (WF)	4 PHTH 2210 (FQ, AD)	4		
GE 1000	1 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	8	0

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2221	4 CIVE 2331	4 MATH 2341	4 Co-op	
CIVE 2222	0 CIVE 2335	4 PHTH 2350 (SI)	4	
CIVE 2260	4 CIVE 3430	4		
CIVE 2261 (AD)	1 ENCP 2000	1		
CIVE 2334	4 PHTH 2414	4		
PHTH 2515	4			
	17	17	8	0

#### Year 3

Fall	Hours Spring	Hours	Summer 2	Hours
Co-op	CIVE 3435	4	Vacation	
	GE 3300	4		
	HLTH 5450 or PHTH 4202 (ND, WI)	4		
	PHTH 4120 (IC, DD)	4		
	0	16		0

#### Year 4

Fall	Hours Spring	Hours
CIVE 3464	4 CIVE 4765 (EI, WI, CE)	5
CIVE 4534 (WI)	3 CIVE 5300	2
CIVE 4535	1 CIVE 5301	2
ENCP 3000	1 PHTH 5214	3
ENGW 3302 or 3315 (WD)	4 Science Elective (Earth)	4
PHTH 4540 (WI)	4	
	17	16

Total Hours: 133

#### FIVE YEARS, 3 CO-OPS SUMMER 2/FALL

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 PHTH 1260 (SI)	4	
ENGW 1111 (WF)	4 PHTH 2210 (FQ, AD)	4		

GE 1000	1	PHYS 1151 (ND)	3		
GE 1501	4	PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4	PHYS 1153	1		
	17		17	8	0
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
CIVE 2221	4	CIVE 2331	4	MATH 2341	4
CIVE 2222	0	CIVE 2335	4	PHTH 2350 (SI)	4
CIVE 2260	4	CIVE 3430	4		
CIVE 2261 (AD)	1	ENCP 2000	1		
CIVE 2334	4	PHTH 2414	4		
PHTH 2515	4				
	17	17	8		0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	CIVE 3435	4	Vacation	Co-op	
	GE 3300	4			
	HLTH 5450 or PHTH 4202 (ND, WI)	4			
	PHTH 4540 (WI)	4			
	0	16	0		0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	CIVE 3464	4	Vacation	Co-op	
	CIVE 4534 (WI)	3			
	CIVE 4535	1			
	ENCP 3000	1			
	ENGW 3302 or 3315 (WD)	4			
	PHTH 4120 (IC, DD)	4			
	0	17	0		0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	CIVE 4765 (EI, WI, CE)	5			
	CIVE 5300	2			
	CIVE 5301	2			
	PHTH 5214	3			
	Science Elective (Earth)	4			
	0	16			

Total Hours: 133

## Health Science and Business Administration, BS

The combined major in health science and business administration provides students at Northeastern with an opportunity to study a curriculum that is synergetic with the growing field of healthcare. This academic combination will provide students with the knowledge and expertise needed to enter a multitude of careers upon graduation. The degree will allow students the unique opportunity to better understand the business side of the healthcare industry in Massachusetts, which is home to some of the best hospitals and medical research companies in the country. The field is compatible with all the undergraduate concentrations in the School of Business and prepares students to enter the workforce after graduation.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions— Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
HLTH 5450 or PHTH 4202	Healthcare Research Principles of Epidemiology in Medicine and Public Health	4
<b>Life Sciences Core</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
PSYC 1101	Foundations of Psychology	4
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

**Business Administration Requirements**

Code	Title	Hours
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**Required Courses**

ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4

**Business Electives**

Complete two of the following: 8

MISM 2301	Management Information Systems	
MKTG 2201	Introduction to Marketing	
SCHM 2301	Supply Chain and Operations Management	
ORGB 3201	Organizational Behavior	

**Supporting Courses for Business**

Complete one of the following: 4

ECON 1115	Principles of Macroeconomics	
or ECON 1116	Principles of Microeconomics	

**Business Concentration**

Complete one of the following concentrations. Requirements for the concentrations are listed below. (p. )

- Accounting (p. )
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. )
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. )
- Management Information Systems (p. )
- Marketing (p. )
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. )

**Supporting Courses**

Code	Title	Hours
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**Introduction to College**

HSCI 1000	College: An Introduction	1
or BUSN 1102	Personal Skill Development for Business	

**Calculus**

MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	

**Statistics**

PHTH 2210	Foundations of Biostatistics	4
or MGSC 2301	Business Statistics	

**Co-op Preparation**

Complete one of the following: 1

BUSN 1103	Professional Development for Business Co-op	
HSCI 2000	Professional Development for Bouvé Co-op	

**Writing**

ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions	4
or ENGW 3304	Advanced Writing in the Business Administration Professions	

**Capstone**

Complete one of the following: 4

STRT 4501	Strategy in Action	
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700)	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	

**Integrative Requirement**

Code	Title	Hours
MGMT 3340	Healthcare Management, Innovation, and Design	4

**Required General Electives**

Code	Title	Hours
Complete at least 16 credits of general electives		16

**Business GPA Requirement**

A minimum 2.000 GPA is required in all business courses.

**Health Sciences Major Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Program Requirement**

133 total semester hours required

**Plan of Study****Sample Plan of Study**

Year 1			
Fall	Hours	Spring	Hours
HSCI 1000 or BUSN 1102	1	BIOL 1113 and BIOL 1114	5
PHTH 1260	4	ENGW 1111	4
PSYC 1101	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
BIOL 1111 and BIOL 1112	5	Elective	4
MATH 1241 or 1231	4		
		18	18

**Year 2**

Fall	Hours Spring	Hours	Summer 2	Hours
PHTH 2210 or MGSC 2301	4 HSCI 2000 or BUSN 1103	1	Co-op	
PHTH 2350	4 PHTH 2300	4		
ECON 1115 or 1116	4 PHTH 2515	4		
ACCT 1201	4 FINA 2201	4		
	INTB 1203	4		
	16	17		0

**Year 3**

Fall	Hours Spring	Hours
Co-op	HLTH 5450 or PHTH 4202	4
	Elective or concentration course	4
	ACCT 2301	4
	Business core selective #1	4
	0	16

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
ENGW 3306 or 3304	4 Co-op	Co-op	
PHTH 4540	4		
MGMT 3340	4		
Business core selective #2	4		
	16	0	0

**Year 5**

Fall	Hours Spring	Hours
PHTH 4120	4 HSCI 4720, 4730, or STRT 4501	4
HSCI 4700	0 Electives or concentration courses	12
Electives or concentration courses	12	
	16	16

Total Hours: 133

## Health Science and Communication Studies, BS

The combined Bachelor of Science degree program in health science and communication studies offers an interdisciplinary approach to public health communication. Students combine courses from health sciences and communication studies to learn about health and illness and the important role of communication in shaping the public's understanding of health issues. The interdisciplinary curriculum is enhanced by experiential learning opportunities and is designed to prepare students for challenging careers that involve crafting messages about health,

developing strategies for promoting healthcare services, and specific applications such as disease awareness and prevention.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Communication Studies Major Requirements

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4

Code	Title	Hours
<b>Foundation Course</b>		

Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	

#### Cluster Course

Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

#### Writing-Intensive

Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	

COMM 4631	Crisis Communication and Image Management	
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**Communication Studies Electives**

Complete three additional communication studies courses.	12
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**Health Science Requirements**

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2210	Foundations of Biostatistics	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4

**Life Sciences**

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
MATH 1241	Calculus 1	4
PSYC 1101	Foundations of Psychology	4
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

**Other Requirements**

Code	Title	Hours
<b>Intro to College</b>		
HSCI 1000 or COMM 1000	College: An Introduction Communication Studies at Northeastern	1

**Professional Development**

HSCI 2000 or EEAM 2000	Professional Development for Bouvé Co-op Professional Development for Co-op	1
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**Writing**

ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions (or other Advanced Writing course)	4

**Electives**

Complete 28 semester hours of electives.	28
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**Integrative Course**

Code	Title	Hours
<b>Capstone</b>		
HSCI 4720	Health Science Capstone—Service	4

or HSCI 4730	Health Science Capstone—Research
or COMM 4102	Health Communication Campaigns
or COMM 4530	Communication and Quality of Life

**Health Sciences Major Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Communication Studies Major Requirement**

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

**Program Requirement**

133 total semester hours required

**Plan of Study****Four Years, Two Co-ops**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
HSCI 1000 or COMM 1000	1	BIOL 1113	4	Public health core	4
PHTH 1260	4	BIOL 1114	1	Elective	4
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5	Vacation	4
BIOL 1112	1	Elective	4		
MATH 1241	4	ENGW 1111	4		
PSYC 1101	4				
	18		18		8

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
Public health core	4	Co-op		Co-op	
HSCI 2000 or EEAM 2000	1	Elective	4	Elective	4
COMM 1101	4				
COMM 1112 or 2301	4				
COMM elective	4				
	17		4		0

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Public health core	4	Co-op		Co-op	
Foundation course	4	Elective	4		
Public health core	4				
Cluster course	4				
	16		4		0

8

**Year 4**

Fall	Hours Spring	Hours
Public health core	4 HSCI 4720, 4730, COMM 4102, or COMM 4530	4
Elective	4 COMM elective	4
COMM WI course	4 COMM WI course	4
COMM elective	4 Elective	4
	16	16

Total Hours: 133

**Five Years, Two Co-ops in Summer 2/Fall**

This is a sample plan of study.

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSCI 1000 or COMM 1000	1 BIOL 1113	4 Vacation	0 Vacation	0
PHTH 1260	4 BIOL 1114	1		
PSYC 1101	4 ENGW 1111	4		
BIOL 1111	4 CHEM 1161 and CHEM 1162 and CHEM 1163	5		
BIOL 1112	1 Elective	4		
MATH 1241	4			
	18	18	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Public health core	4 HSCI 2000 or EEAM 2000	1 Vacation	0 Co-op	0
Public health core	4 Public health core	4		
COMM 1101	4 Foundation course	4		
COMM 1112 or 2301	4 Elective	4		
	Cluster course	4		
	16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3306	4 Vacation	0 Vacation	0
	Public health core	4		
	COMM electives	8		
	0	16	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHTH 4202	4 Co-op	0 Co-op	0 Vacation	0
PHTH 4540	4			

COMM elective	4			
COMM WI course	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
PHTH 4120	4 HSCI 4720, 4730, COMM 4102, or COMM 4530	4
HSCI 4700	0 Electives	12
COMM WI course	4	
Electives	8	
	16	16

Total Hours: 133

**Health Science and Psychology, BS**

The combined Bachelor of Science degree program in health science and psychology is designed to provide an interdisciplinary approach to public health and psychology. Through interdisciplinary explorations, students have the opportunity to develop knowledge in health promotion and illness prevention by way of understanding people's behaviors, perceptions, and emotions within the contexts of relationships and culture. This highly flexible curriculum is enhanced by experiential learning opportunities and prepares students to practice in interdisciplinary settings and be successful in sustaining and promoting health across populations.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Health Science Requirements**

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4

PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
<b>Supporting Courses for Health Science</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

## Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3458	Biological Psychology	4
<b>Personal/Social Bases of Behavior (Area A)</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Biological/Cognitive Bases of Behavior (Area B)</b>		
Complete one of the following:		4
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Psychology Electives</b>		
Complete 12 semester hours from the following subject area:		12
PSYC		
<b>Psychology Lab</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	
<b>Psychology Seminar</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	

PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

## Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following		1
HSCI 1000	College: An Introduction	
PSYC 1000	Psychology at Northeastern	
<b>First-Year Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Co-op Preparation</b>		
Complete one of the following:		1
HSCI 2000	Professional Development for Bouvé Co-op	
EESC 2000	Professional Development for Co-op	
<b>Math</b>		
MATH 1241	Calculus 1	4
<b>Advanced Writing in the Discipline</b>		
ENGW 3306	Advanced Writing in the Health Professions	4
<b>Ethical Reasoning</b>		
PHIL 1165	Moral and Social Problems in Healthcare	4
<b>Open Electives</b>		
Complete 28 semester hours of general electives.		28

## Integrative Requirement

Code	Title	Hours
PSYC 3510	Brain, Behavior, and Immunity	4
or PSYC 4514	Clinical Neuroscience	
or CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research	

## Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

## Psychology GPA Requirement

A grade of C or higher is required for all PSYC courses.

## Program Requirement

133 total semester hours required

## Plan of Study

### Four Years, One Co-op Plan

Year 1	Fall	Hours Spring	Hours
HSCI 1000 or PSYC 1000	1	BIOL 1113	4
PHTH 1260 or 1261	4	BIOL 1114	1



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BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
BIOL 1112	1	ENGW 1111	4
MATH 1241	4	Elective	4
PSYC 1101	4		
	18		18

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours
PSYC 2320	4	Public health core	4	Psychology elective	4
Area A course	4	Public health core	4	Area B course	4
Public health core	4	Area A course	4		
PSYC 3458	4	Psychology elective	4		
	16		16		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 2000 or EESC 2000	1	Co-op	4	Co-op	4	ENGW 3306	4
Psychology lab	4					PHTH 4540	4
PHIL 1165	4						
Open electives	8						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Public health core	4	Psychology seminar	4
Psychology elective	4	PSYC 3510, 4514, or CAEP 2012	4
Open electives	8	Open electives	8
	16		16

Total Hours: 133

**Four Years, Two Co-ops Plan (College: Bouvé)**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1000 or HSCI 1000	1	PSYC Area A selective	4	PSYC Area B selective	4	Open electives	8
PHTH 1260 or 1261	4	BIOL 1113	4	public health core	4		
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
BIOL 1112	1	BIOL 1114	1				
MATH 1241	4	ENGW 1111	4				

PSYC 1101	4				
	18		18		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 2320	4	Co-op	4	Co-op	4	PHIL 1165	4
Public health core	4					ENGW 3306	4
PSYC 3458	4						
Public health core	4						
HSCI 2000 or EESC 2000	1						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Public health core	4	Co-op	4	Co-op	4	Open electives	8
PSYC Area A selective	4						
PSYC elective	4						
Open elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Public health core	4	PSYC 3510, 4514, or CAEP 2012	4
PSYC lab	4	Psychology seminar	4
PSYCH elective	4	PSYC elective	4
Open elective	4	Open Elective	4
	16		16

Total Hours: 133

**Four Years, Two Co-ops Plan (College: Science)**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1000 or HSCI 1000	1	PSYC Area A selective	4	PSYC Area B selective	4	Open electives	8
PHTH 1260 or 1261	4	BIOL 1113	4	public health core	4		
BIOL 1111	4	BIOL 1114	1				
BIOL 1112	1	ENGW 1111	4				
MATH 1241	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
PSYC 1101	4						
	18		18		8		8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 2320	4 Public health core	4 PSYC elective	4 Co-op	
Public health core	4 Public health core	4 Open elective	4	
PSYC 3458	4 PSYC Area A selective	4		
PHIL 1165	4 PSYC elective	4		
	EESC 2000 or HSCI 2000	1		
	16	17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Public health core	4 Open electives	8 Co-op	
	PSYC lab	4		
	ENGW 3306	4		
	PSYC 3510, 4514, or CAEP 2012	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	Psychology seminar	4
	PSYC elective	4
	Open electives	8
	0	16

Total Hours: 133

## Health Science and Sociology, BS

The combined Bachelor of Science in Health Science and Sociology integrates social scientific perspectives to the study of health, illness, and healthcare. Students explore basic sociological concepts relevant for the study of health and healthcare, such as social construction and medicalization. Students explore why, for instance, despite having the most expensive healthcare system, the United States ranks comparatively low in life expectancy and health and well-being outcomes. Provides students with an opportunity to explore the ways that societal factors such as race, class, and gender interplay with health, healthcare, and health disparities.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4

### Supporting Courses for Health Science

PSYC 1101	Foundations of Psychology	4
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

### Sociology Requirements

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
SOCL 2321	Research Methods in Sociology	4
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Social Change Selective</b>		
Complete one of the following:		4
SOCL 1260	Gender in a Changing Society	
SOCL 3468	Social Movements	
SOCL 3450	Class, Power, and Social Change	
<b>Social Inequality Selective</b>		
Complete one of the following:		4
SOCL 1245	Sociology of Poverty	
SOCL 2225	Sociology of Disability	
<b>Lower-Level Elective</b>		
Complete one of the following:		4
SOCL 1000 to SOCL 3999		
<b>Advanced Elective</b>		

Complete one of the following: 4  
SOCL 4000 to SOCL 4999

### Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following: 1		
HSCI 1000	College: An Introduction	
SOCL 1000	Sociology at Northeastern	

<b>Writing in the First Year</b>		
ENGW 1111	First-Year Writing	4

<b>Statistics</b>		
Complete one of the following: 4		
PHTH 2210	Foundations of Biostatistics	
SOCL 2320	Statistical Analysis in Sociology	

<b>Co-op Preparation (Based on Home College)</b>		
Complete one of the following: 1		
HSCI 2000	Professional Development for Bouvé Co-op	
EESH 2000	Professional Development for Co-op	

<b>Advanced Writing in the Discipline</b>		
Complete one of the following: 4		
ENGW 3306	Advanced Writing in the Health Professions	
ENGW 3308	Advanced Writing in the Social Sciences	

<b>NUPath: Ethical Reasoning</b>		
PHIL 1165	Moral and Social Problems in Healthcare	4

<b>Capstone (Based on Home College)</b>		
Complete one of the following: 4		
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700))	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	
SOCL 4600	Senior Seminar	

<b>Open Electives</b>		
24		

### Integrative Requirement

Code	Title	Hours
Choose one of the courses below: 4		
SOCL 3441	Sociology of Health and Illness	
ANTH 3441	Medical Anthropology	

### Health Sciences GPA Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

133 total semester hours required

## Plan of Study Four Years, One Co-op Plan

Year 1			
Fall	Hours	Spring	Hours
HSCI 1000 or SOCL 1000	1	BIOL 1113	4
PHTH 1260	4	BIOL 1114	1
BIOL 1111	4	ENGW 1111	4
BIOL 1112	1	Elective	4
PSYC 1101	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
SOCL 1101	4		
		18	18

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
Public health core	4	SOCL 3300	4	Public health core	4
ANTH 1101	4	SOCL 2321	4	PHIL 1165	4
PHTH 2210 or SOCL 2321	4	Social change or social inequality selective	4		
Lower-level sociology elective	4	Public health core	4		
		16	16	8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 2000 or EESH 2000	1	Co-op		Co-op		ENGW 3306 or 3308	4
ANTH 2305	4					PHTH 4540	4
Public health core	4						
Social inequality and social change selective	4						
Open electives	4						
		17	0	0		8	

Year 4			
Fall	Hours	Spring	Hours
Public health core	4	Capstone course	4
SOCL 3441	4	Open electives	12
Advanced sociology elective	4		

Open electives	4	
	16	16

Total Hours: 133

## Four Years, Two Co-ops Plan

### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours
HSCI 1000 or SOCL 1000	1	ANTH 1101	4	PHTH 2350	4
PHTH 1260	4	BIOL 1113	4	Open Elective	4
PSYC 1101	4	BIOL 1114	1		
BIOL 1111	4	ENGW 1111	4		
BIOL 1112	1	CHEM 1161 and CHEM 1162 and CHEM 1163	5		
SOCL 1101	4				
	18		18		8

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHTH 2210 or SOCL 2321	4	Co-op		Co-op		ENGW 3306	4
Public health core	4			Open elective		4 PHIL 1165	4
HSCI 2000 or EESH 2000	1						
SOCL 2321	4						
SOCL 3300	4						
	17		0		4		8

### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2305	4	Co-op		Co-op		PHTH 4540	4
SOCL 3441	4			Open elective		4 Public health core	4
Lower-level sociology elective	4						
Public health core	4						
	16		0		4		8

### Year 4

Fall	Hours	Spring	Hours
Social change or social inequality selective	4	Capstone course	4
Advanced sociology elective	4	Public health core	4

HSCI 4700 (if student will complete an HSCI capstone) 0 Social change or social inequality selective 4

Open electives	8	Open electives	4
	16		16

Total Hours: 133

## Linguistics and Speech-Language Pathology and Audiology, BS

The combined major in linguistics and speech-language pathology and audiology provides students with extensive background in the formal structures of human language; the methods and applications of linguistic analyses of language data; the biology, neurology, and physics of the human vocal tract; and the nature of both normal and disordered human speech communication and language development. Students have an opportunity to develop critical thinking, information literacy, and strong oral and written communication skills. While on co-op, students gain clinical experience, including preprofessional training appropriate to pursue a graduate degree in SLPA, related clinical healthcare domains, or education.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
LING 3420	Phonetics (Integrative course)	4
LING 3422	Phonology	4
LING 3450	Syntax	4
LING 3424 or LING 3452	Morphology Semantics	4
<b>Psychology Requirements</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
<b>Linguistics Elective</b>		
Complete one of the following, not counted elsewhere:		4
LING 3424	Morphology	

LING 3434	Bilingualism
LING 3442	Sociolinguistics
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics
LING 3460	Historical Linguistics
LING 4654	Seminar in Linguistics
LING 4891	Research Seminar in Linguistics
LING 4970	Junior/Senior Honors Project 1
LING 4971	Junior/Senior Honors Project 2
LING 4991	Directed Study Research
LING 4993	Independent Study
PSYC 3404	Developmental Psychology
PSYC 3466	Cognition
PSYC 4520	Language and the Brain
PSYC 4522	Psychology of Reading
PSYC 4524	Cognitive Development
PSYC 4610	Laboratory in Psycholinguistics

### Speech-Language Pathology and Audiology Requirements

**Code Title Hours**  
All courses in these sections must be completed with a C or better.

Speech-Language Pathology and Audiology		
Code	Title	Hours
SLPA 1101	Introduction to Communication Disorders	4
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4
SLPA 1203	Introduction to Audiology	4
SLPA 1205	Speech and Hearing Science	4
SLPA 4651	Speech Disorders across the Life Span	4
SLPA 5107	Clinical Procedures	4
SLPA 5110	Language Disorders across the Life Span	4
SLPA 6219	Aural Rehabilitation	4

### Biology and Physics Requirements

BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5

### Integrative Requirement

Code	Title	Hours
The following course is taken in another area of the major:		
LING 3420	Phonetics	4

### Supporting Courses

Code	Title	Hours
ENGW 3306	Advanced Writing in the Health Professions	4
HLTH 2100	Interprofessional Ethics for Individual and Population Health	4

or PHIL 1165	Moral and Social Problems in Healthcare	
PHTH 2300	Communication Skills for the Health Professions	4

### Major Credit Requirement

Complete 104 hours in the major.

### Program Requirements

128 total semester hours required

### Plan of Study

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2217 and BIOL 2218	5	BIOL 2219 and BIOL 2220	5	Vacation		Vacation	
ENGW 1111	4	LING 2350	4				
PSYC 1101	4	SLPA 1101	4				
LING 1150	4	SLPA 1205	4				
SLPA 1000 or LING 1000	1						
	18		17		0		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3420	4	Co-op		Co-op		Elective	4
PHYS 1145 and PHYS 1146	5					Elective	4
SLPA 1103	4						
SLPA 1203	4						
SLPA 2000	1						
	18		0		0		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3306	4	HLTH 2100 or PHIL 1165	4	Vacation		Elective	4
LING 3422 or 3450	4	LING 3422 or 3450	4			Elective	4
PHTH 2300	4	PSYC 3464	4				
PSYC 2320	4	SLPA 1102	4				
	16		16		0		8

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3412	4	LING 3424 or 3452	4				
SLPA 5107	4	SLPA 4651	4				
SLPA 5110	4	SLPA 6219	4				
Linguistics elective	4	Elective	4				
	16		16				

Total Hours: 133

**School of Clinical and Rehabilitation Sciences**

Trent Honda, PhD, MMS, PA-C

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Website (<https://bouve.northeastern.edu/csd/>)

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The School of Clinical and Rehabilitation Sciences (SoCRS) within the Bouvé College of Health Sciences at Northeastern University brings together the clinical fields of physical therapy (<https://bouve.northeastern.edu/physical-therapy/>), speech-language pathology (<https://bouve.northeastern.edu/csd/>), and physician assistant studies (<https://bouve.northeastern.edu/physician-assistant/>). #Students and fellows in the school are prepared for clinical and research excellence, training with interdisciplinary experts in habilitation and rehabilitation sciences, epidemiology, neuroscience, engineering, physiology, exercise science, clinical medicine, design, diagnostic and therapeutic imaging, and communication. Working at the intersection of rehabilitation, clinical practice, data, and engineering, students and fellows engage in transformative research and experiential learning that prepares them to improve the quality of life and self-care for patients and communities, while promoting and developing innovative approaches to the future of healthcare.

## Communication Sciences and Disorders

The Department of Communication Sciences and Disorders (CSD) offers an undergraduate major (Bachelor of Science in Speech-Language Pathology and Audiology), two combined majors, and three undergraduate minors.

Speech-language pathologists and audiologists are involved with the evaluation, treatment, counseling, and research of human communication and its disorders. They provide clinical services to a full range of individuals with communication delays/differences/disorders, from infants through geriatrics. Speech-language pathologists treat disorders such as developmental language and articulation disorders; voice and resonance problems; stuttering; pediatric and adult swallowing disorders; and language and cognitive impairments due to stroke, head injury, and progressive neurological disease. Audiologists specialize in the prevention, identification, assessment, and rehabilitation of hearing disorders for individuals with congenital and acquired hearing impairments. Both speech-language pathologists and audiologists

require graduate education to practice as certified and licensed clinicians.

## BS in Speech-Language Pathology and Audiology

The Bachelor of Science degree program in speech-language pathology and audiology (SLPA) includes an experiential learning component, a broad-based academic core, and the scientific and clinical courses necessary for understanding normal and disordered communication. The degree offers preprofessional training for individuals who want to pursue graduate education. Alternatively, graduates may be hired as speech-language pathology assistants in a variety of clinical settings or they may pursue other career paths in healthcare and education.

The SLPA curriculum is designed to facilitate critical thinking, information literacy, and oral and written communication skills. In addition to courses in the basic communication sciences, coursework in education, allied health, ethics, multicultural/diversity issues, and psychology is required. The curriculum provides a solid foundation in SLPA, and it is sufficiently flexible to provide students with the opportunity to minor in an area of related interest.

## BS Combined Majors

Two combined majors are available for students to pursue: the Bachelor of Science in Communication Studies and Speech-Language Pathology and Audiology and the Bachelor of Science in Linguistics and Speech-Language Pathology and Audiology.

The combined major in linguistics and speech-language pathology and audiology provides students with extensive background in the formal structures of human language; the methods and applications of linguistic analyses of language data; the biology, neurology, and physics of the human vocal tract; and the nature of both normal and disordered human speech communication and language development. Students have an opportunity to develop critical thinking, information literacy, and strong oral and written communication skills. While on co-op, students gain clinical experience, including preprofessional training appropriate to pursue a graduate degree in SLPA, related clinical healthcare domains, or education.

The combined Bachelor of Science in Communication Studies and Speech-Language Pathology and Audiology offers an interdisciplinary approach to human communication and its disorders. Coursework focuses on the scientific and theoretical frameworks of speech, language, and hearing. Students will also be introduced to the fundamentals of communication theory, and they have an opportunity to acquire the practical skills necessary to thrive in a complex and changing society. The curriculum is enhanced by experiential learning opportunities in a clinical setting that prepare the students for a variety of professional careers.

## Minors

Three minors are available for students to pursue. Two flexible minors allow students from various fields of study to enhance their academics with general courses related to the field of communication sciences, as well as specific courses covering topics such as audiology or speech-language disorders across the life span. A third minor allows students from various fields of study to learn about working with very young children and their families and includes an experiential learning component. Advisors assist students with accommodating their interests in their curriculum plans.

## COMMUNICATION SCIENCES AND DISORDERS MINOR

The Communication Sciences and Disorders (CSD) minor includes courses that offer exposure to a variety of aspects of the CSD field.

Students progress to graduate programs in fields such as applied psychology, linguistics, neuroscience, and education, among others; but the minor does not by itself prepare students for admission to graduate programs in speech-language pathology or audiology. Speech-language pathology and audiology courses are designed to help students develop entry-level competencies that will enable them to function in a preprofessional capacity in educational settings, medical and rehabilitation centers, and private-practice clinics.

The CSD minor consists of one required foundation course taken prior to any core or elective courses, then two core courses and one elective from either the remaining core courses in the list or from a specified set of elective courses that are taught outside of the CSD department. Students may consult with an advisor in the CSD department concerning the current listing of eligible elective courses for the CSD minor.

### **SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY MINOR**

The Speech-Language Pathology and Audiology (SLPA) minor seeks to prepare students for admission into a graduate program in SLPA. In particular, students in this minor are on a track that, if supplemented with certain elective choices within their major, would meet all admissions requirements for our department's own Master of Science in Speech-Language Pathology (<http://catalog.northeastern.edu/graduate/health-sciences/clinical-rehabilitation-sciences/speech-language-pathology-ms/>) program.

The SLPA minor consists of one required foundation course taken prior to core courses, then five department-specific SLPA core courses.

Students pursuing this minor are advised to consult early and regularly with their academic advisors in order to ensure a timely completion of the combination of their majors and the SLPA minor requirements.

Students pursuing this minor who plan to apply to graduate school at institutions other than Northeastern are advised to carefully check admissions requirements for those programs.

### **EARLY INTERVENTION MINOR**

The interdisciplinary Early Intervention (EI) minor is designed for students who enjoy working with very young children and their families. Through coursework and practicum experiences, students are prepared to work with infants and toddlers with known disabilities, or those who are at risk for developmental delay, and their families.

The EI minor consists of four required foundation courses and two semesters (150 hours each semester) of supervised practicum experience. Seniors or those in their final year of study are encouraged to enroll. Since this minor includes a practicum component, students pursuing this minor are advised to consult with the program director and submit an application to ensure that all requirements can be met.

## **Bachelor of Science (BS)**

- Speech-Language Pathology and Audiology
- Communication Studies and Speech-Language Pathology and Audiology (p. 171)
- Linguistics and Speech-Language Pathology and Audiology (p. 555)

## **Minors**

- Communication Sciences and Disorders (p. 563)
- Speech-Language Pathology and Audiology (p. 564)
- Early Intervention (p. 563)

## **Physical Therapy, Movement, and Rehabilitation Sciences**

The cornerstone of the Department of Physical Therapy, Movement, and Rehabilitation Sciences is experiential learning aligned with the mission

of Bouvé College of Health Sciences and Northeastern University. The programs within the department enhance and extend students' learning of human movement and rehabilitation through experiential education, interdisciplinary collaborations, interprofessional education, research opportunities, and a variety of global educational experiences. The department is led by a collaborative interdisciplinary body of faculty with research, scholarship, clinical, and teaching expertise across a diverse spectrum. The Department of Physical Therapy, Movement, and Rehabilitation Sciences' research mission is to build the evidence for best practices to maintain and improve the health and well-being of local, national, and global community members. Students have the opportunity to work with faculty to conduct ongoing research in one of the many diverse Department of Physical Therapy, Movement, and Rehabilitation Sciences' labs and centers, including Neuromotor Systems Laboratory, Laboratory for Locomotion Research, ReGameVR Laboratory, Movement Neuroscience Laboratory, Musculoskeletal Epidemiology and Biomechanics Laboratory, Neuroscience Wet Lab, Occupational Biomechanics Laboratory, Teaching and Learning Innovation Lab, and the Center for Cognitive and Brain Health. The Department of Physical Therapy, Movement, and Rehabilitation Sciences graduates are innovative, global leaders who excel in clinical practice, research, human movement, leadership, and community service.

## **Minors**

- Human Movement Science (p. 564)

## **Speech-Language Pathology and Audiology, BS**

The Bachelor of Science degree program in speech-language pathology and audiology includes an experiential learning component, a broad-based academic core, and the scientific and clinical course work necessary for understanding normal and disordered communication. The degree offers preprofessional training for individuals who want to pursue graduate education in speech-language pathology and audiology. Alternatively, graduates may be hired as speech-language pathology assistants in a variety of clinical settings or they may pursue other career paths in healthcare and education.

The speech-language pathology and audiology curriculum is designed to facilitate critical thinking, information literacy, and oral and written communication skills. In addition to courses in the basic communication sciences, courses in education, allied health, computer literacy, ethics, multicultural/diversity issues, and psychology are required. The curriculum provides a solid foundation in speech-language pathology and audiology and basic sciences, and it is sufficiently flexible to provide students with the opportunity to minor in an area of related interest.

Please visit Bouvé College Learning Outcomes (<https://bouve.northeastern.edu/bchs/about/learning-outcomes/>) for the specific student learning outcomes for this program.

## **Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## **University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Speech-Language Pathology and Audiology Major Courses

Code	Title	Hours
HLTH 5450	Healthcare Research	4
PHTH 2300	Communication Skills for the Health Professions	4
SLPA 1000	College: An Introduction (College: An Introduction)	1
SLPA 1101	Introduction to Communication Disorders	4
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4
SLPA 1200	Phonetics	4
SLPA 1203	Introduction to Audiology	4
SLPA 1205	Speech and Hearing Science	4
SLPA 2000	Introduction to Co-op	1
SLPA 4651	Speech Disorders across the Life Span	4
SLPA 5107	Clinical Procedures	4
SLPA 5110	Language Disorders across the Life Span	4
SLPA 6219	Aural Rehabilitation	4

### Supporting Courses

Code	Title	Hours
<i>A grade of C- or higher is required for all BIOL courses.</i>		
BIOL 2217	Integrated Anatomy and Physiology 1	4
BIOL 2218	Lab for BIOL 2217	1
BIOL 2219	Integrated Anatomy and Physiology 2	4
BIOL 2220	Lab for BIOL 2219	1
ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions	4
PSYC 1101	Foundations of Psychology	4
PSYC 3404	Developmental Psychology	4
PSYC 3466	Cognition	4
<i>A grade of C- or higher is required for all PHYS courses.</i>		
PHYS 1145	Physics for Life Sciences 1	4
PHYS 1146	Lab for PHYS 1145	1
<i>A grade of C- or higher is required for all MATH courses.</i>		
MATH 1215	Mathematical Thinking	4
MATH 1241	Calculus 1	4
MATH 2280	Statistics and Software	4
PHIL 1165	Moral and Social Problems in Healthcare	4
NUpath Interpreting Cultures (IC) Elective		4
NUpath Ethical Reasoning (ER) Elective		4
Complete one PSYC course (1000-5999)		4
Complete one EDUC course (1000-5999)		4

## Required General Electives

Code	Title	Hours
Complete general electives for a minimum of 20 credits		20

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World (ND)
- Exploring Creative Expression and Innovation (EI)
- Conducting Formal and Quantitative Reasoning (FQ)
- Understanding Societies and Institutions (SI)
- Engaging Difference and Diversity (DD)
- Writing in the First Year (WF)
- Advanced Writing in the Disciplines (WD)
- Writing-Intensive in the Major (WI, two required courses)
- Demonstrating Thought and Action in a Capstone (CE)
- Integrating Knowledge and Skills Through Experience is satisfied through co-op.

Students are responsible for using the general electives in this program to complete NUpath requirements not satisfied by required courses in this program.

### Speech-Language Pathology and Audiology Major Requirement

A grade of C or higher is required in all SLPA courses.

### Program Requirement

133 total semester hours required.

### Plan of Study

#### Year 1

Fall	Hours	Spring	Hours
ENGW 1111 (WF)	4	SLPA 1101 (ND)	4
MATH 1215 or 1241 (AD)	4	SLPA 1205	4
PSYC 1101 (ND, SI)	4	BIOL 2219	4
SLPA 1000 (College: An Introduction)	1	BIOL 2220	1
BIOL 2217	4	NUpath Interpreting Cultures (IC) elective	4
BIOL 2218	1		
	18		17

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SLPA 2000	1	COOP 3945 (EX)	0	COOP 3945 (EX)	0	Elective	4
SLPA 1203	4					Elective	4
PHYS 1145	4						
PHYS 1146	1						
PSYC 3404	4						
SLPA 1103	4						
	18		0		0		8



**Year 3**

Fall	Hours	Spring	Hours	Summer 2	Hours
ENGW 3306 (WD)	4	SLPA 1200	4	Elective	4
MATH 2280 (AD)	4	SLPA 1102	4	Elective	4
PSYC 3466	4	HLTH 5450 (FQ, WI, ND)	4		
PHTH 2300 (DD, EI)	4	NUpath Ethical Reasoning (ER) elective	4		
	16		16		8

**Year 4**

Fall	Hours	Spring	Hours
SLPA 5107 (WI, CE)	4	SLPA 4651	4
SLPA 5110	4	PHIL 1165	4
PSYC elective	4	SLPA 6219	4
Elective	4	EDUC elective	4
	16		16

Total Hours: 133

## Communication Studies and Speech-Language Pathology and Audiology, BS

The combined Bachelor of Science in Communication Studies and Speech-Language Pathology and Audiology offers an interdisciplinary approach to human communication and its disorders. Coursework focuses on the scientific and theoretical frameworks of speech, language, and hearing. Students will also be introduced to the fundamentals of communication theory, and they have an opportunity to acquire the practical skills necessary to thrive in a complex and changing society. The curriculum is enhanced by experiential learning opportunities in a clinical setting that prepare the students for a variety of professional careers.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**First-Year Seminar**

Code	Title	Hours
COMM 1000	Communication Studies at Northeastern	1
or SLPA 1000	College: An Introduction	

**Communication Studies Requirements**

Code	Title	Hours
No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.		

**Communication Studies Common Requirements**

COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

**Foundation Course**

Complete one of the following:		
COMM 1210	Persuasion and Rhetoric	4
COMM 1231	Principles of Organizational Communication	4
COMM 1225	Communication Theory	4
COMM 1255	Communication in a Digital Age	4

**Cluster Course**

Complete one of the following:		
COMM 1131	Sex, Relationships, and Communication	4
COMM 2303	Global and Intercultural Communication	4
COMM 2304	Communication and Gender	4
COMM 2501	Communication Law	4
COMM 2551	Free Speech in Cyberspace	4

**Writing-Intensive Courses**

Complete two of the following (COMM 3201 is strongly recommended):		
COMM 3200	Mobile Communication	4
COMM 3201	Health Communication	4
COMM 3230	Interpersonal Communication	4
COMM 3304	Communication and Inclusion	4
COMM 3320	Political Communication	4
COMM 3414	Great Speakers and Speeches	4
COMM 3415	Communication Criticism	4
COMM 3445	Public Relations Principles	4
COMM 3500	Environmental Issues, Communication, and the Media	4
COMM 3501	Free Speech: Law and Practice	4
COMM 3530	Communication and Sexualities	4
COMM 3532	Theories of Conflict and Negotiation	4
COMM 4535	Nonverbal Social Interaction	4
COMM 4605	Youth and Communication Technology	4
COMM 4631	Crisis Communication and Image Management	4

**Communication Studies Electives**

Complete three COMM courses.		12
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**Speech-Language Pathology and Audiology Requirements**

Code	Title	Hours
All courses in these sections must be completed with a C or better.		

**SLPA Requirements**

SLPA 1101	Introduction to Communication Disorders	4
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4

SLPA 1200	Phonetics	4
SLPA 1203	Introduction to Audiology	4
SLPA 1205	Speech and Hearing Science	4
SLPA 2000	Introduction to Co-op	1
or EEAM 2000	Professional Development for Co-op	
SLPA 4651	Speech Disorders across the Life Span	4
SLPA 5107	Clinical Procedures	4
SLPA 5110	Language Disorders across the Life Span	4
SLPA 6219	Aural Rehabilitation	4

PSYC 1101	4	BIOL 2219 and BIOL 2220	5		
ENGW 1111	4				
		18	17	8	8

### Supporting Courses

Code	Title	Hours
PSYC 1101	Foundations of Psychology	4
ENGW 1111	First-Year Writing	4
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
HLTH 2100	Interprofessional Ethics for Individual and Population Health	4
PHTH 2300	Communication Skills for the Health Professions	4
PSYC 2320	Statistics in Psychological Research	4

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000 or SLPA 2000	1	Co-op	0	Co-op	0	Vacation	0
Communicati studies cluster course	4						
SLPA 1203	4						
PHYS 1145 and PHYS 1146	5						
SLPA 1103	4						
		18	0	0	0		0

### Integrative Course

Code	Title	Hours
COMM 3201 or COMM 4102	Health Communication (WI) or Health Communication Campaigns	

Note: The selected integrative course counts toward the COMM writing-intensive (COMM 3201) or COMM elective (COMM 4102) as appropriate.

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 3409 or ENGW 3306	4	PSYC 2320 or MATH 2280	4	Vacation or optional co-op #2	0	Vacation or optional co-op #2	0
Communicati studies elective	4	SLPA 1102	4				
PHTH 2300	4	Communication studies writing-intensive	4				
HLTH 2100 or PHIL 1165	4	SLPA 1200	4				
		16	16	0	0		0

### Communication Studies Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

### Program Requirements

133 total semester hours required

### Plan of Study

#### Sample 4 Years, 2 Co-ops

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000 or SLPA 1000	1	Communication studies foundation course	4	COMM 1112	4	Communication studies elective	4
COMM 1101	4	SLPA 1101	4	Communicati studies elective	4	General elective	4
BIOL 2217 and BIOL 2218	5	SLPA 1205	4				

**Year 4**

Fall	Hours	Spring	Hours
SLPA 5110	4	SLPA 4651	4
SLPA 5107	4	SLPA 6219	4
General elective	4	COMM 3201	4
General elective	4	General elective	4
		16	16

Total Hours: 133

A general elective or a COMM elective (e.g., COMM 1120) can be taken to fulfill the NUpath Formal/Quantitative Reasoning (FQ) requirement.

### Linguistics and Speech-Language Pathology and Audiology, BS

The combined major in linguistics and speech-language pathology and audiology provides students with extensive background in the formal structures of human language; the methods and applications of linguistic analyses of language data; the biology, neurology, and physics of the human vocal tract; and the nature of both normal and disordered human speech communication and language development. Students have an opportunity to develop critical thinking, information literacy, and strong oral and written communication skills. While on co-op, students gain

clinical experience, including preprofessional training appropriate to pursue a graduate degree in SLPA, related clinical healthcare domains, or education.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
LING 3420	Phonetics (Integrative course)	4
LING 3422	Phonology	4
LING 3450	Syntax	4
LING 3424	Morphology	4
or LING 3452	Semantics	
<b>Psychology Requirements</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
<b>Linguistics Elective</b>		
Complete one of the following, not counted elsewhere: 4		
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3442	Sociolinguistics	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
LING 4970	Junior/Senior Honors Project 1	
LING 4971	Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	
LING 4993	Independent Study	
PSYC 3404	Developmental Psychology	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	

PSYC 4524	Cognitive Development
PSYC 4610	Laboratory in Psycholinguistics

### Speech-Language Pathology and Audiology Requirements

**Code Title Hours**  
All courses in these sections must be completed with a C or better.

<b>Speech-Language Pathology and Audiology</b>		
SLPA 1101	Introduction to Communication Disorders	4
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4
SLPA 1203	Introduction to Audiology	4
SLPA 1205	Speech and Hearing Science	4
SLPA 4651	Speech Disorders across the Life Span	4
SLPA 5107	Clinical Procedures	4
SLPA 5110	Language Disorders across the Life Span	4
SLPA 6219	Aural Rehabilitation	4

### Biology and Physics Requirements

BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5

### Integrative Requirement

Code	Title	Hours
The following course is taken in another area of the major:		
LING 3420	Phonetics	4

### Supporting Courses

Code	Title	Hours
ENGW 3306	Advanced Writing in the Health Professions	4
HLTH 2100	Interprofessional Ethics for Individual and Population Health	4
or PHIL 1165	Moral and Social Problems in Healthcare	
PHTH 2300	Communication Skills for the Health Professions	4

### Major Credit Requirement

Complete 104 hours in the major.

### Program Requirements

128 total semester hours required

### Plan of Study

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 2217 and BIOL 2218	5 BIOL 2219 and BIOL 2220	5 Vacation	Vacation	
ENGW 1111	4 LING 2350	4		
PSYC 1101	4 SLPA 1101	4		

LING 1150	4	SLPA 1205	4		
SLPA 1000 or LING 1000	1				
	18		17	0	0
<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
LING 3420	4	Co-op		Co-op	Elective
PHYS 1145 and PHYS 1146	5				Elective
SLPA 1103	4				
SLPA 1203	4				
SLPA 2000	1				
	18		0	0	8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
ENGW 3306	4	HLTH 2100 or PHIL 1165	4	Vacation	Elective
LING 3422 or 3450	4	LING 3422 or 3450	4		Elective
PHTH 2300	4	PSYC 3464	4		
PSYC 2320	4	SLPA 1102	4		
	16		16	0	8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
LING 3412	4	LING 3424 or 3452	4		
SLPA 5107	4	SLPA 4651	4		
SLPA 5110	4	SLPA 6219	4		
Linguistics elective	4	Elective	4		
	16		16		

Total Hours: 133

### Communication Sciences and Disorders, Minor

The communication sciences and disorders (CSD) minor consists of one required foundation course taken prior to any core or elective courses, then two core courses and one elective from either the remaining core courses in the list or from a specified set of elective courses that are taught by units other than the CSD department. Students may consult with an advisor in the CSD department concerning the current listing of eligible elective courses for the CSD minor.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

#### Foundation Course

Code	Title	Hours
Complete one of the following:		
SLPA 1101	Introduction to Communication Disorders	4
SLPA 1555	Communication Disorders in Movies	

### Communication Sciences and Disorders Core

Code	Title	Hours
Complete two of the following:		
SLPA 1102	Language Development	6-8
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	
SLPA 1200	Phonetics	
SLPA 1203	Introduction to Audiology	
SLPA 1205	Speech and Hearing Science	
SLPA 4651	Speech Disorders across the Life Span	
SLPA 5110	Language Disorders across the Life Span	

#### Electives

Code	Title	Hours
Complete at least one of the following. Additional courses may be needed to complete a minimum of 15 semester hours for the minor.		
AMSL 1101	Elementary ASL 1	3-6
CAEP 3480	Counseling Theories and Practice	
COMM 1112	Public Speaking	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 2534	Group Communication	
ENTR 2301	Innovation!	
HLTH 1510	Introduction to Healthcare Ethics	
PHTH 2300	Communication Skills for the Health Professions	
PHTH 2301	Communication Skills for the Health Professions—Global	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	

#### Minor Credit Requirement

Minimum of 15 semester hours required in the minor

#### GPA Requirement

2.000 GPA required in the minor

### Early Intervention, Minor

The interdisciplinary minor in early intervention (EI) is designed for students who enjoy working with very young children and their families. Through coursework and practicum experiences, students are prepared to work with infants and toddlers with known disabilities, or those who are at risk for developmental delay, and their families.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

#### Required Courses

Code	Title	Hours
CAEP 5150	Early Intervention: Family Systems	3
CAEP 5151	Early Intervention: Infant and Toddler Development, Risk, and Disability	3

SLPA 5152	Early Intervention: Planning and Evaluating Services	3
CAEP 5153	Early Intervention: Assessment and Intervention	3
SLPA 5154	Early Intervention Practicum 1	2
SLPA 5155	Early Intervention Practicum 2	2

### GPA Requirement

2.000 GPA required in the minor

### Speech-Language Pathology and Audiology, Minor

The clinical SLPA minor seeks to prepare students for admission into a graduate program in speech-language pathology or audiology. In particular, students in this minor are on a track that, if supplemented with certain elective choices within their major, would meet all admissions requirements for our department's own MS/SLP (<http://catalog.northeastern.edu/graduate/health-sciences/clinical-rehabilitation-sciences/speech-language-pathology-ms/>) program.

The clinical SLPA minor consists of one required foundation course taken prior to core courses, then five department-specific SLPA core courses.

Students pursuing this minor are advised to consult early and regularly with their academic advisors in order to ensure a timely completion of the combination of their major and the clinical SLPA minor requirements.

Students pursuing this minor who wish to go to graduate school at institutions other than Northeastern are advised to carefully check admissions requirements for those programs.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Foundation Course

Code	Title	Hours
Complete one of the following:		4
SLPA 1101	Introduction to Communication Disorders	
SLPA 1555	Communication Disorders in Movies	

### Speech-Language Pathology and Audiology Core

Code	Title	Hours
SLPA 1102	Language Development	3-4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	3-4
SLPA 1200	Phonetics	3-4
SLPA 1203	Introduction to Audiology	3-4
SLPA 1205	Speech and Hearing Science	3-4

### GPA Requirement

2.000 GPA required in the minor

### Human Movement Science, Minor

The Minor in Human Movement Science is open to all majors at the university with the exception of Bouvé Doctor of Physical Therapy students. The minor is designed for students who seek to complement

their current studies with a more detailed understanding of the interplay of human anatomy and kinetic forces of movement specific to their chosen career path. It includes three required courses and one elective course with offerings that can be tailored to a student's interest in ergonomics, sport, kinetic movement, or deeper human anatomy knowledge through cadaveric education. Pursuing a Minor in Human Movement Science will complement students' knowledge in their related fields of science, engineering, and entrepreneurship to provide a baseline understanding of human anatomy, functional demands, and movement analysis as they relate to activities of daily living. To be admitted to the Minor in Human Movement Science, students must be in good academic standing (minimum 2.000 GPA overall).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
PT 3400	Human Kinesiology	4
PT 3500	Motor Control of Human Movement	4
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5

### Electives

Code	Title	Hours
Complete one of the following:		4-5
BIOL 5601	Multidisciplinary Approaches in Motor Control	
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	
EXSC 4500	Exercise Physiology 1	
HLTH 2001	Introductory Skills for Healthcare and Rehabilitation	
PT 1880	Introduction to Sports Medicine	
PT 5410 and PT 5411	Functional Human Neuroanatomy and Lab for PT 5410	
PT 5010 and PT 5011	Human Gross Anatomy and Lab for PT 5010	
PT 3555	Human Pathology and the Influence on Movement	

### GPA Requirement

All coursework must be completed at a minimum grade of C and courses may not be taken Pass/Fail.

### Credit Requirement

A minimum of 17 semester hours is required.

### School of Community Health and Behavioral Sciences

Website (<https://bouve.northeastern.edu/ap/>)

### Robert J. Volpe, PhD

Professor and Chair  
Department of Applied Psychology

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### Sharon L. Harlan, PhD

Professor and Chair  
Department of Health Sciences

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The School of Community Health and Behavioral Sciences offers students interdisciplinary education and research excellence, drawing on novel health technologies and data literacy to address society's most pressing public health issues.

Students in the school are prepared to be the next generation of innovators and thought leaders in the health professions and public health, empowered to effect real change by leveraging new and emerging technologies and data.

The school is designed to improve individuals, communities, and society through three pillars of excellence:

- Health technology innovation
- Public mental health interventions
- Improvement of social and environmental determinants of health to achieve social justice

## Department of Applied Psychology

The Department of Applied Psychology offers an undergraduate minor in health psychology that is designed for students from a variety of disciplines within Bouvé and across the university who wish to expand and to apply their understanding in key concepts of behavioral science and how they inform and intersect with public health, prevention science, clinical applications, and interdisciplinary and interprofessional care. The department also offers an undergraduate minor in mindfulness studies, which is designed for students who seek to enrich their understanding of mindfulness practice, including its benefits and potential applications. In addition to these minors, the department offers three PlusOne programs to accelerate the advancement of undergraduate students to a master's degree in applied behavior analysis, applied psychology, and school psychology.

### Minors

- Health Psychology (p. 586)
- Mindfulness Studies (p. 589)

## Department of Health Sciences

The Department of Health Sciences in the Bouvé College of Health Sciences at Northeastern University provides a unique, transdisciplinary setting that incorporates instruction, research, and practice and seeks to prepare students for a wide range of career paths. The department offers two bachelor's degrees, a Bachelor of Science in Health Science and a Bachelor of Arts in Public Health and options for combined majors with the D'Amore-McKim School of Business; the College of Arts, Media and Design; the College of Social Sciences and Humanities; the College of Science; the College of Engineering; and the Houry College of Computer Sciences, in addition to minors in exercise science, public health, global health, nutrition, and health research methods. We also offer several graduate degrees: Master of Public Health, Master of Science in Exercise Science, and a combined master in the two fields. We also collaborate with the Houry College of Computer Sciences to offer a Master of

Science in Health Informatics, as well as combined graduate degrees with the School of Pharmacy, the Physician Assistant Program, and the School of Law. At the doctoral level, we offer a PhD in Population Health and, in cooperation with Houry, a PhD in Personal Health Informatics. Finally, we offer a Graduate Certificate in Exercise Science for Clinicians.

Our diverse faculty has expertise in the fields of population health; health disparities; nutrition; social epidemiology; exercise science; medical sociology; public policy; personal health technologies; neurodevelopmental disorders; environmental, occupational, and mental health; among many more. Students have the opportunity to work side by side with faculty in conducting cutting-edge research in these fields. We also have research staff highly skilled in providing unique, specialized dietary assessment services.

In line with Northeastern's commitment to interdisciplinary research and urban engagement, we teach and work closely with many other schools, centers, and departments in the university, including the Institute for Health Equity and Social Justice Research (IHESJR), the Center for Community Health Education Research and Service (CCHERS), the Social Science Environmental Health Research Institute (SSEHRI), and the Center for Health Policy and Healthcare Research (CHPHR), as well as community agencies and neighborhood health centers in the local Boston area and beyond.

## Bachelor of Arts (BA)

- Public Health (p. 565)

## Bachelor of Science (BS)

- Health Science (p. 569)

## Combined Majors

- Data Science and Health Science (p. 415)
- Environmental Engineering and Health Science (p. 480)
- Health Science and Business Administration (p. 281)
- Health Science and Communication Studies (p. 172)
- Health Science and Psychology (p. 550)
- Health Science and Sociology (p. 553)

## Minors

- Exercise Science (p. 585)
- Global Health (p. 585)
- Health, Humanities, and Society (p. 539)
- Health Research Methods (p. 587)
- Healthcare System Operations (p. 535)
- Nutrition (p. 589)
- Public Health (p. 589)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Public Health, BA

The public health major offers students a strong foundation and experiential education in the core components of public health, such as the social determinants of health, biostatistics and research methods, health communication and health education, and program planning. The public health core is supported with social science and the biology of health and disease to provide breadth and depth for students to discover their passion and desired discipline. The major positions students well

with a broad range of knowledge and skills to pursue graduate and professions such as:

- Community health
- Epidemiology
- Health administration
- Health communication and education
- Law
- Public policy
- Social work

Please visit Bouvé College Learning Outcomes (<https://bouve.northeastern.edu/learning-outcomes/>) for the specific student learning outcomes for this program.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Public Health Core

Code	Title	Hours
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2210	Foundations of Biostatistics	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4

## Science Requirement

Code	Title	Hours
<b>Psychology</b>		
PSYC 1101	Foundations of Psychology	4
<b>Biology</b>		
Complete one of the following options:		8-10

### Option 1

BIOL 1143	Biology and Society
BIOL 1147	The Human Organism

### Option 2

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113

## Social Science Requirement

Code	Title	Hours
Complete three of the following introductory courses:		
ANTH 1101	Peoples and Cultures	12
COMM 1225	Communication Theory	
ECON 1115 and ECON 1125	Principles of Macroeconomics and Recitation for ECON 1115	
ECON 1116 and ECON 1126	Principles of Microeconomics and Recitation for ECON 1116	
ENGL/HIST 1300	Introduction to Health and Humanities	
HUSV 1101	Social Change and Human Services	
INTL 1101	Globalization and International Affairs	
PHIL 1101	Introduction to Philosophy	
POLS 1160 and POLS 1161	International Relations and Recitation for POLS 1160	
SOCL 1101	Introduction to Sociology	
Complete three of the following (two must be at the 3000 level or above and from the same area):		9-12

### Society and Behavior

AFAM 1225 or HIST 1225 or WMNS 1225	Gender, Race, and Medicine Gender, Race, and Medicine Gender, Race, and Medicine
AFAM 2355	Race, Identity, Social Change, and Empowerment
AFAM 2360	Politics of Poverty
AFAM 2600	Issues in Race, Science, and Technology
ANTH 3441	Medical Anthropology
ASNS 2245	The Asian-American Experience
CAEP 1290	Personal Behavior Change
CAEP 2101	Behavioral Assessment and Treatment of Health Problems in the 21st Century
COMM 2105	Social Networks
COMM 3201	Health Communication
COMM 4102	Health Communication Campaigns
CRIM 3040	Psychology of Crime
ECON 3420	Urban Economic Issues
HLTH 2100	Interprofessional Ethics for Individual and Population Health
HLTH 5280	The (in)Visibility of (dis)Ability in Society
PHIL 1165	Moral and Social Problems in Healthcare
PHTH 5222	Health Advocacy
PSYC 1214	The Moral Mind: The Science Underlying Ethical Decision-Making and Virtuous Character

PSYC 3402	Social Psychology
PSYC 3404	Developmental Psychology
PSYC 3450	Learning and Motivation
SOCL 2303	Gender and Reproductive Justice
SOCL 2358	Current Issues in Cities and Suburbs
SOCL 3241	Violence and Society
SOCL 3441	Sociology of Health and Illness
SOCL 4520	Race, Class, and Gender
WMNS 1101	Sex, Gender, and Popular Culture

**Globalization and Global Health**

AFRS 1270 or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
HIST 2233	The History of Medicine in North America
INTL 2240	Global Population and Development
INTL 3200	Cities in a Global Context
INTL 3400	International Conflict and Negotiation
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

**Environmental Health and Climate Change**

ECON 3423	Environmental Economics
ENVR 1110	Global Climate Change
COMM 3500	Environmental Issues, Communication, and the Media
INTL 5100 or PPUA 5100	Climate and Development
PHTH 2414	Environmental Health
PHTH 5214	Environmental Health
PPUA 5238	Climate Change and Global Urbanization
SOCL 1246	Environment and Society
SOCL 2485	Environment, Technology, and Society

**Law, Policy, and Human Rights**

AFAM 2549	Public Policy and Black America
ECON 3424	Law and Economics
CRIM 1400	Human Trafficking
HIST 2299	Uses and Abuses of History: Historical Reasoning in U.S. Global and Domestic Policy
INTL 2480	Women and World Politics
LPSC 2301	Introduction to Law, Policy, and Society
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 2155	Human Rights
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2303	Social and Political Philosophy
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 5001	Global Justice

PHIL 5002	Ethics and Public Policy
POLS 2345	Urban Policies and Politics
POLS 2385	U.S. Health and Welfare Policy
POLS 3307	Public Policy and Administration
POLS 3900	Social Policy
PHTH 4515	Critical Issues in Health and Public-Health Policy

**Healthcare Administration and Management**

ECON 1230	Healthcare and Medical Economics
ECON 1291	Development Economics
ECON 3413	Health Economics and Healthcare Policy
IS 2000	Principles of Information Science
MGMT 3340	Healthcare Management, Innovation, and Design
ORGB 3201	Organizational Behavior
PHTH 4511	Healthcare Management
PHTH 5232	Evaluating Healthcare Quality
PHTH 5234	Economic Perspectives on Health Policy

**Capstone Requirements**

Code	Title	Hours
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Complete one of the following options: 4-8

*Health Science Capstone*

Complete 4 credits from the following:

HSCI 4700	Health Science Capstone Introduction
HSCI 4720	Health Science Capstone—Service
or HSCI 4730	Health Science Capstone—Research
or HSCI 4740	Health Science Capstone Seminar

*Honors Project*

Complete 8 credits from the following (must meet GPA requirement):

HSCI 4970 and HSCI 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2
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**Other Major Requirements**

Code	Title	Hours
HSCI 1000	College: An Introduction	1
HSCI 2000	Professional Development for Bouvé Co-op	1
ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions	4

**General Electives**

Code	Title	Hours
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Complete at least 10 general electives (Honors Capstone HSCI 4970 will use 1 elective, if chosen). 40

**Public Health Major Requirement**

A grade of C or higher is required for all BIOL, HSCI, and PHTH courses.

**Academic Policies and Procedures**

Please visit Bouvé College of Health Sciences Undergraduate page for academic policies and procedures, including Academic Appeals.



**Program Requirements**

Minimum of 128 semester hours required

**Plan of Study****Sample Four Years, Two Co-ops (Option 1 of Science Requirement)**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSCI 1000	1 ENGW 1111	4 PHTH 2350	4 Vacation	
PHTH 1260	4 PHTH 2515	4 Elective	4	
PSYC 1101	4 BIOL 1147	4		
BIOL 1143	4 Introductory language course	4		
Elective	4			
	17	16	8	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSCI 2000	1 Co-op	Co-op	ENGW 3306	4
PHTH 2210	4 Elective*	4	Social science course	4
PHTH 2300	4			
Intermediate language course	4			
Social science course	4			
	17	4	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHTH 4202	4 Co-op	Co-op	Social science course	4
PHTH 4540	4 Elective*	4	Elective	4
Social science course	4			
Elective	4			
	16	4	0	8
Year 4				
Fall	Hours Spring	Hours		
PHTH 4120	4 Electives	8		
Social science course	4 Capstone course	4		
Elective (HSCI 4970 can be used for 4 credits)	8 Social science course	4		
	16	16		

Total Hours: 130

\*Students must fulfill two electives during co-op or vacation or use AP/IB credit.

**Sample Five Years, Two Co-ops (Option 2 of Science Requirement)**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSCI 1000	1 PHTH 2350	4 NUterm (optional)	Vacation	
PHTH 1260	4 ENGW 1111	4		
PSYC 1101	4 BIOL 1113 and BIOL 1114	5		
BIOL 1111 and BIOL 1112	5 Introductory language course	4		
Elective	4			
	18	17	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHTH 2300	4 HSCI 2000	1 Vacation	Co-op	
PHTH 2515	4 PHTH 2210	4		
Intermediate language course	4 Social science course	4		
Social science course	4 Electives	8		
	16	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ENGW 3306	4 Vacation	Co-op	
	PHTH 4202	4		
	Elective	4		
	Social science course	4		
	0	16	0	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHTH 4540	4 Vacation	Vacation	
	Social science course	4		
	Electives	8		
	0	16	0	0
Year 5				
Fall	Hours Spring	Hours		
HSCI 4700	0 HSCI 4720, 4730, or 4740	4		
PHTH 4120	4 Electives	8		
Electives	8 Social science course	4		

Social science course	4	
	16	16

Total Hours: 132

## Health Science, BS

The health science major offers students a solid academic and experiential foundation that positions them well to pursue graduate and professional school training in the following programs:

- Medicine
- Dentistry
- Veterinary medicine
- Public health
- Physician assistant studies
- Nurse practitioner
- Pharmacy
- Physical therapy
- Social work
- Speech-language pathology

The health science major is also designed for students who are seeking a strong foundation for a career in health administration and in community-based health promotion and public health.

Please visit Bouvé College Learning Outcomes (<https://bouve.northeastern.edu/learning-outcomes/>) for the specific student learning outcomes for this program.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Public Health Core

Code	Title	Hours
<b>YEAR 1</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
<b>YEARS 2 and 3</b>		
PHTH 2210	Foundations of Biostatistics	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4

PHTH 2515	Healthcare Policy and Administration	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4
<b>FINAL YEAR</b>		
PHTH 4120	Global Perspectives on Discrimination and Health	4

### Health Science Courses

Code	Title	Hours
<b>YEAR 1</b>		
HSCI 1000	College: An Introduction	1
<b>YEAR 2 OR 3</b>		
HSCI 2000	Professional Development for Bouvé Co-op	1
<b>FINAL YEAR</b>		
Complete one of the following:		4-8
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700)	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	
HSCI 4971	Junior/Senior Honors Project 2 (Prerequisite course HSCI 4970, for a total of 8 cr)	
HSCI 4740	Health Science Capstone Seminar (Prerequisite course HSCI 4700)	

### Selectives

Code	Title	Hours
Complete at least three courses from the groups listed below with at least two in one category. At least one of the courses must be at 2000 level or higher. Students may complete additional courses to fulfill a minor, such as global health, nutrition, exercise science, and health research methods.		9-13

<b>Society and Health</b>		
ANTH 2365	Sport, Culture, and Society	
ANTH 3441	Medical Anthropology	
CRIM 3040	Psychology of Crime	
HLTH 5280	The (in)Visibility of (dis)Ability in Society	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHTH 1270 or AFRS 1270	Introduction to Global Health Introduction to Global Health	
PHTH 2414	Environmental Health	
PHTH 5214	Environmental Health	
PHTH 5222	Health Advocacy	
PHTH 5230	Global Health	
PHTH 5234	Economic Perspectives on Health Policy	
SOCL 1246	Environment and Society	
SOCL 1295	Drugs and Society	
SOCL 2303	Gender and Reproductive Justice	
SOCL 2485	Environment, Technology, and Society	
SOCL 3441	Sociology of Health and Illness	

### Policy and Administration

ENTR 2206	Global Social Enterprise
HUSV 2800	Sexual Orientation and Gender Expression
MGMT 3340	Healthcare Management, Innovation, and Design
ORGB 3201	Organizational Behavior
PHTH 4511	Healthcare Management
PHTH 4515	Critical Issues in Health and Public-Health Policy
PHTH 5232	Evaluating Healthcare Quality
PHTH 5234	Economic Perspectives on Health Policy
SOCL 3241	Violence and Society

**Nutrition and Wellness**

CAEP 1280	Introduction to Mindfulness
CAEP 1290	Personal Behavior Change
CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research
CAEP 2101	Behavioral Assessment and Treatment of Health Problems in the 21st Century
COMM 3201	Health Communication
EXSC 1120	Introduction to Exercise, Fitness, and Health
EXSC 4500 and EXSC 4501	Exercise Physiology 1 and Lab for EXSC 4500
EXSC 5200	Cardiopulmonary Physiology
EXSC 5220	Advanced Exercise Physiology
HSCI 1105	Human Nutrition
HSCI 1106	Contemporary Issues in Nutrition
HSCI 2350	Advanced Nutrition in Health and Disease
HSCI 2500	Public Health Nutrition in the Community

**Digital Health**

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum
HINF 5101	Introduction to Health Informatics and Health Information Systems
HINF 5200	Theoretical Foundations in Personal Health Informatics
HINF 5300	Personal Health Interface Design and Development
IS 2000	Principles of Information Science

**Research**

PHTH 3250	Fundamentals of Qualitative Research
PHTH 5202	Introduction to Epidemiology

**Supporting Courses**

Code	Title	Hours
<b>YEAR 1</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
MATH 1241	Calculus 1	4
PSYC 1101	Foundations of Psychology	4
<b>YEAR 2 OR 3</b>		
PHIL 1165 or HLTH 2100	Moral and Social Problems in Healthcare Interprofessional Ethics for Individual and Population Health	4

**Writing Requirements**

Code	Title	Hours
<b>YEAR 1</b>		
ENGW 1111	First-Year Writing	4
<b>YEAR 2 OR 3</b>		
ENGW 3306	Advanced Writing in the Health Professions	4

**Electives**

Code	Title	Hours
Complete a minimum of 41 credits of general electives. Total elective semester hours required to meet degree completion requirement will depend on student's choice of selectives above.		41

**Health Sciences Major Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Academic Policies and Procedures**

Please visit Bouvé College of Health Sciences Undergraduate page (p. 537) for academic policies and procedures, including Academic Appeals (p. 26).

**Program Requirement**

132 total semester hours required

**Plan of Study**

In addition to the required courses for the Bachelor of Science in Health Science, students who are interested in clinical graduate school programs are encouraged to enroll in the following courses, utilizing available elective slots:

**Premed Track**

Code	Title	Hours
SOCL 1101	Introduction to Sociology	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

## Pre-PA Track

Each Physician assistant (PA) program is unique, and students must research prerequisite courses for the programs to which they plan to apply. Common courses students preparing for PA school take as their electives often include:

Code	Title	Hours
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	5
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
PSYC 3404	Developmental Psychology	4

## Pre-Pharmacy Track

Code	Title	Hours
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5

## Pre-Physical Therapy Track\*

Code	Title	Hours
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
CHEM—take one additional chemistry course with lab		5
EXSC 4500	Exercise Physiology 1	4
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	5
PSYC 3404	Developmental Psychology	4

**\*There is a priority application process for current Northeastern students who meet the required criteria. Visit the Doctor of Physical Therapy page (<https://bouve.northeastern.edu/physical-therapy/programs/pbdpt/>) for more information.**

## Five Years, Two Co-ops in Summer 2/Fall

This is a sample plan of study.

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSCI 1000	1 BIOL 1113	4 Vacation	0 Vacation	0
PHTH 1260	4 BIOL 1114	1		

PSYC 1101	4	ENGW 1111	4	
BIOL 1111	4	Elective	4	
BIOL 1112	1	CHEM 1161	4	
MATH 1241	4	CHEM 1162	1	
		CHEM 1163	0	
	18	18	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHTH 2350	4 PHTH 2515	4 Vacation	0 Co-op	0
PHTH 2210	4 HSCI 2000	1		
Electives	8 HLTH 1200 and HLTH 1201	3		
	Electives	8		
	16	16	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 PHIL 1165	4 Vacation	0 Vacation	0
	Selective	4-5		
	ENGW 3306	4		
	PHTH 2300	4		
	0	16	0	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HLTH 5450 or PHTH 4202	4 Co-op	0 Co-op	0 Vacation	0
PHTH 4540	4			
Elective <sup>1</sup>	4-5			
Selective <sup>1</sup>	3-5			
	16	0	0	0

Year 5				
Fall	Hours Spring	Hours		
PHTH 4120	4 HSCI 4720 or 4730	4		
HSCI 4700	0 Electives	12		
Selective	3-5			
Electives	8-9			
	16	16		

Total Hours: 132

<sup>1</sup> Credit count of selective/elective is dependent on credit count of selective/elective in same term, to avoid unintended credit overload.

## Data Science and Health Science, BS

The health science and computer science combined major offers a solid academic and experiential foundation integrating studies in health administration, computer science, mathematics, and statistics. This program reflects the impact of data in modern healthcare and prepares students for success in careers in health administration, community-based health promotion, public health, and big data analysis.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Information Science Requirement</b>		
IS 4300	Human Computer Interaction	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

## Supporting Courses for Data Science

Code	Title	Hours
MATH 1341 or MATH 1241	Calculus 1 for Science and Engineering Calculus 1	4

## Data Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

## Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4

## Supporting Courses for Health Science

Code	Title	Hours
<b>Research Methods</b>		
Complete one of the following:		4
HLTH 5450 or PHTH 4202	Healthcare Research Principles of Epidemiology in Medicine and Public Health	
IS 4800	Empirical Research Methods	
<b>Statistics</b>		
Complete one of the following:		4
PHTH 2210	Foundations of Biostatistics	
PSYC 2320	Statistics in Psychological Research	
ECON 2350	Statistics	
ENVR 2500	Biostatistics	
MATH 3081	Probability and Statistics	
<b>Philosophy</b>		
Complete one of the following:		4
PHIL 1145	Technology and Human Values	
PHIL 1165	Moral and Social Problems in Healthcare	
<b>Life Sciences Core</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
PSYC 1101	Foundations of Psychology	4

### Integrative Requirement

Code	Title	Hours
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#### Upper-Division Elective

Complete four credits from the following:	4
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CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

PHTH 4000 or higher

HSCI 4000 or higher

#### Integrative Course

DS 4420	Machine Learning and Data Mining 2	4
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### Required General Electives

Code	Title	Hours
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Complete 16 credits general electives. 16

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

### Program Requirement

133 semester hours required

### Plan of Study

#### Five Year, Two Co-op Sample Plan of Study

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 2500 and CS 2501	5 BIOL 1113 and BIOL 1114	5		
CS 1800 and CS 1802	5 PSYC 1101	4		
BIOL 1111 and BIOL 1112	5 MATH 1341	4		
ENGW 1111	4			
	20	18	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHTH 1260	4 CS 1210	1 Vacation	Co-op	
PHTH 2300	4 PHTH 2515	4		
CS 3500 and CS 3501	5 DS 3000	4		

CHEM 1161 and CHEM 1162 and CHEM 1163	5 CS 3200	4		
	General Elective	4		
	18	17	0	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	IS 4300	4 Vacation	Co-op	
	DS 4200	4		
	PHTH 2350	4		
	Statistics Course	4		
	0	16	0	0

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Upper Division Elective	4 Vacation	Vacation	
	DS 4300	4		
	DS 4400	4		
	ENGW 3302	4		
	0	16	0	0

#### Year 5

Fall	Hours Spring	Hours
PHTH 4540	4 DS 4420	4
HLTH 5450, PHTH 4202, or IS 4800	4 PHTH 4120	4
PHIL 1145 or 1165	4 General Elective	4
General Elective	4 General Elective	4
	16	16

Total Hours: 137

### Environmental Engineering and Health Science, BSEnVE

This intercollege combined major is designed for students who would like to explore their interest in the health sciences while earning the benefit of a Bachelor of Science degree in environmental engineering. The combined major reflects the respective departmental thrusts in environmental health and sustainable resource engineering to create awareness about the complex relationship between the environment and human health, prepare professionals in this growing area capable of providing engineering solutions to current and emerging topics related to environmental engineering and health sciences, and maintain healthy environmental systems by applying and developing techniques to reduce exposure to health hazards. This program combines the content of two majors to allow students to learn the breadth and depth of the convergence between public health and environmental engineering.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses

where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 4765	Senior Design Project—Environmental	5
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4
GE 3300	Energy Systems: Science, Technology, and Sustainability	4

#### Supplemental Credit

1 semester hour from the following course counts toward the engineering requirement:		1
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 2335	Environmental Engineering Chemistry	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 3430	Engineering Microbiology and Ecology	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

### Health Sciences Major Requirement

Code	Title	Hours
HLTH 5450	Healthcare Research (Principles of Epidemiology in Medicine and Public Health)	4
or PHTH 4202	Principles of Epidemiology in Medicine and Public Health	
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4

PHTH 2210	Foundations of Biostatistics	4
PHTH 2350 or PHTH 2351	Community and Public Health - Global	4
PHTH 2414	Environmental Health	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
PHTH 5214	Environmental Health	3

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.<sup>2</sup>

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

#### Science Elective (Earth)

Complete one of the following:		4-5
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	

#### Supplemental Credit

3 semester hours from the following course count toward the mathematics/science requirement:		3
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 2335	Environmental Engineering Chemistry	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 3430	Engineering Microbiology and Ecology	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

### Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1

ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1
<b>Additional Required Courses</b>		
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

## Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Integrative Course

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
CIVE 4765	Senior Design Project—Environmental	

## Engineering GPA Requirement

A minimum 2.000 GPA is required in major (CIVE) courses

## Health Sciences Major Requirement

A minimum grade of C or higher is required for all HLTH and PHTH courses

## Program Requirement

133 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

<sup>2</sup> Mathematics/Science Requirement: CHEM 1151, MATH 1341, and PHYS 1151 require a grade of C- or higher

## Plan of Study

### FOUR YEARS, 1 CO-OP SUMMER 2/FALL

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 PHTH 1260 (SI)	4	
ENGW 1111 (WF)	4 PHTH 2210 (FQ, AD)	4		
GE 1000	1 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	8	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2221	4 CIVE 2331	4 MATH 2341	4 Co-op	
CIVE 2222	0 CIVE 2335	4 PHTH 2350 (SI)	4	
CIVE 2260	4 CIVE 3430	4		
CIVE 2261 (AD)	1 ENCP 2000	1		
CIVE 2334	4 PHTH 2414	4		
PHTH 2515	4			
	17	17	8	0

Year 3				
Fall	Hours Spring	Hours	Summer 2	Hours
Co-op	CIVE 3435	4	Vacation	
	GE 3300	4		
	HLTH 5450 or PHTH 4202 (ND, WI)	4		
	PHTH 4120 (IC, DD)	4		
	0	16		0

Year 4				
Fall	Hours Spring	Hours		Hours
CIVE 3464	4 CIVE 4765 (EI, WI, CE)	5		
CIVE 4534 (WI)	3 CIVE 5300	2		
CIVE 4535	1 CIVE 5301	2		
ENCP 3000	1 PHTH 5214	3		
ENGW 3302 or 3315 (WD)	4 Science Elective (Earth)	4		
PHTH 4540 (WI)	4			
	17	16		

Total Hours: 133

### FIVE YEARS, 3 CO-OPS SUMMER 2/FALL

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 MATH 2321 (FQ)	4 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 PHTH 1260 (SI)	4	
ENGW 1111 (WF)	4 PHTH 2210 (FQ, AD)	4		
GE 1000	1 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	8	0



**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2221	4 CIVE 2331	4 MATH 2341	4 Co-op	
CIVE 2222	0 CIVE 2335	4 PHTH 2350 (SI)	4	
CIVE 2260	4 CIVE 3430	4		
CIVE 2261 (AD)	1 ENCP 2000	1		
CIVE 2334	4 PHTH 2414	4		
PHTH 2515	4			
	17	17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CIVE 3435	4 Vacation	Co-op	
	GE 3300	4		
	HLTH 5450 or PHTH 4202 (ND, WI)	4		
	PHTH 4540 (WI)	4		
	0	16	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CIVE 3464	4 Vacation	Co-op	
	CIVE 4534 (WI)	3		
	CIVE 4535	1		
	ENCP 3000	1		
	ENGW 3302 or 3315 (WD)	4		
	PHTH 4120 (IC, DD)	4		
	0	17	0	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	CIVE 4765 (EI, WI, CE)	5
	CIVE 5300	2
	CIVE 5301	2
	PHTH 5214	3
	Science Elective (Earth)	4
	0	16

Total Hours: 133

## Health Science and Business Administration, BS

The combined major in health science and business administration provides students at Northeastern with an opportunity to study a curriculum that is synergistic with the growing field of healthcare. This academic combination will provide students with the knowledge and expertise needed to enter a multitude of careers upon graduation. The degree will allow students the unique opportunity to better understand the business side of the healthcare industry in Massachusetts, which

is home to some of the best hospitals and medical research companies in the country. The field is compatible with all the undergraduate concentrations in the School of Business and prepares students to enter the workforce after graduation.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
HLTH 5450 or PHTH 4202	Healthcare Research Principles of Epidemiology in Medicine and Public Health	4

### Life Sciences Core

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
PSYC 1101	Foundations of Psychology	4
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

### Business Administration Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4

### Business Electives

Complete two of the following: 8

MISM 2301	Management Information Systems
MKTG 2201	Introduction to Marketing
SCHM 2301	Supply Chain and Operations Management
ORGB 3201	Organizational Behavior

**Supporting Courses for Business**

Complete one of the following: 4

ECON 1115	Principles of Macroeconomics
or ECON 1116	Principles of Microeconomics

**Business Concentration**

Complete one of the following concentrations. Requirements for the concentrations are listed below. (p. )

- Accounting (p. )
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. )
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. )
- Management Information Systems (p. )
- Marketing (p. )
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. )

**Supporting Courses**

Code	Title	Hours
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**Introduction to College**

HSCI 1000	College: An Introduction	1
or BUSN 1102	Personal Skill Development for Business	

**Calculus**

MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	

**Statistics**

PHTH 2210	Foundations of Biostatistics	4
or MGSC 2301	Business Statistics	

**Co-op Preparation**

Complete one of the following: 1

BUSN 1103	Professional Development for Business Co-op	
HSCI 2000	Professional Development for Bouvé Co-op	

**Writing**

ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions	4
or ENGW 3304	Advanced Writing in the Business Administration Professions	

**Capstone**

Complete one of the following: 4

STRT 4501	Strategy in Action	
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700)	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	

**Integrative Requirement**

Code	Title	Hours
MGMT 3340	Healthcare Management, Innovation, and Design	4

**Required General Electives**

Code	Title	Hours
Complete at least 16 credits of general electives		16

**Business GPA Requirement**

A minimum 2.000 GPA is required in all business courses.

**Health Sciences Major Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Program Requirement**

133 total semester hours required

**Plan of Study****Sample Plan of Study**

Year 1				
Fall	Hours	Spring	Hours	
HSCI 1000 or BUSN 1102	1	BIOL 1113 and BIOL 1114	5	
PHTH 1260	4	ENGW 1111	4	
PSYC 1101	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5	
BIOL 1111 and BIOL 1112	5	Elective	4	
MATH 1241 or 1231	4			
		18	18	
Year 2				
Fall	Hours	Spring	Hours	Summer 2
PHTH 2210 or MGSC 2301	4	HSCI 2000 or BUSN 1103	1	Co-op
PHTH 2350	4	PHTH 2300	4	
ECON 1115 or 1116	4	PHTH 2515	4	
ACCT 1201	4	FINA 2201	4	
		INTB 1203	4	
		16	17	0

**Year 3**

Fall	Hours Spring	Hours
Co-op	HLTH 5450 or PHTH 4202	4
	Elective or concentration course	4
	ACCT 2301	4
	Business core selective #1	4
	0	16

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
ENGW 3306 or 3304	4 Co-op	Co-op	
PHTH 4540	4		
MGMT 3340	4		
Business core selective #2	4		
	16	0	0

**Year 5**

Fall	Hours Spring	Hours
PHTH 4120	4 HSCI 4720, 4730, or STRT 4501	4
HSCI 4700	0 Electives or concentration courses	12
Electives or concentration courses	12	
	16	16

Total Hours: 133

## Health Science and Communication Studies, BS

The combined Bachelor of Science degree program in health science and communication studies offers an interdisciplinary approach to public health communication. Students combine courses from health sciences and communication studies to learn about health and illness and the important role of communication in shaping the public's understanding of health issues. The interdisciplinary curriculum is enhanced by experiential learning opportunities and is designed to prepare students for challenging careers that involve crafting messages about health, developing strategies for promoting healthcare services, and specific applications such as disease awareness and prevention.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Communication Studies Major Requirements

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4

Code	Title	Hours
<b>Foundation Course</b>		

Complete one of the following: 4

COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	

#### Cluster Course

Complete one of the following: 4

COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

#### Writing-Intensive

Complete two of the following: 8

COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	

#### Communication Studies Electives

Complete three additional communication studies courses. 12

### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4

PHTH 2210	Foundations of Biostatistics	4
PHTH 2300	Communication Skills for the Health Professions	4
or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 2350	Community and Public Health	4
or PHTH 2351	Community and Public Health - Global	
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4

**Life Sciences**

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
MATH 1241	Calculus 1	4
PSYC 1101	Foundations of Psychology	4
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

**Other Requirements**

Code	Title	Hours
<b>Intro to College</b>		
HSCI 1000 or COMM 1000	College: An Introduction Communication Studies at Northeastern	1

**Professional Development**

HSCI 2000 or EEAM 2000	Professional Development for Bouvé Co-op Professional Development for Co-op	1
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**Writing**

ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions (or other Advanced Writing course)	4

**Electives**

Complete 28 semester hours of electives. 28

**Integrative Course**

Code	Title	Hours
<b>Capstone</b>		
HSCI 4720 or HSCI 4730 or COMM 4102 or COMM 4530	Health Science Capstone—Service Health Science Capstone—Research Health Communication Campaigns Communication and Quality of Life	4

**Health Sciences Major Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Communication Studies Major Requirement**

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

**Program Requirement**

133 total semester hours required

**Plan of Study  
Four Years, Two Co-ops****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 1000 or COMM 1000	1	BIOL 1113	4	Public health core	4	Vacation	0
PHTH 1260	4	BIOL 1114	1	Elective	4		
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
BIOL 1112	1	Elective	4				
MATH 1241	4	ENGW 1111	4				
PSYC 1101	4						
	18		18		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Public health core	4	Co-op	4	Co-op	4	ENGW 3306	4
HSCI 2000 or EEAM 2000	1	Elective	4			Elective	4
COMM 1101	4						
COMM 1112 or 2301	4						
COMM elective	4						
	17		4		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Public health core	4	Co-op	4	Co-op	4	Public health core	4
Foundation course	4	Elective	4			Public health core	4
Public health core	4						
Cluster course	4						
	16		4		0		8

**Year 4**

Fall	Hours	Spring	Hours
Public health core	4	HSCI 4720, 4730, COMM 4102, or COMM 4530	4
Elective	4	COMM elective	4
COMM WI course	4	COMM WI course	4
COMM elective	4	Elective	4
	16		16

Total Hours: 133

**Five Years, Two Co-ops in Summer 2/Fall**

This is a sample plan of study.

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSCI 1000 or COMM 1000	1 BIOL 1113	4 Vacation	0 Vacation	0
PHTH 1260	4 BIOL 1114	1		
PSYC 1101	4 ENGW 1111	4		
BIOL 1111	4 CHEM 1161 and CHEM 1162 and CHEM 1163	5		
BIOL 1112	1 Elective	4		
MATH 1241	4			
	18	18	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Public health core	4 HSCI 2000 or EEAM 2000	1 Vacation	0 Co-op	0
Public health core	4 Public health core	4		
COMM 1101	4 Foundation course	4		
COMM 1112 or 2301	4 Elective	4		
	Cluster course	4		
	16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3306	4 Vacation	0 Vacation	0
	Public health core	4		
	COMM electives	8		
	0	16	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHTH 4202	4 Co-op	0 Co-op	0 Vacation	0
PHTH 4540	4			
COMM elective	4			
COMM WI course	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
PHTH 4120	4 HSCI 4720, 4730, COMM 4102, or COMM 4530	4
HSCI 4700	0 Electives	12
COMM WI course	4	

Electives	8
	16
	16

Total Hours: 133

**Health Science and Psychology, BS**

The combined Bachelor of Science degree program in health science and psychology is designed to provide an interdisciplinary approach to public health and psychology. Through interdisciplinary explorations, students have the opportunity to develop knowledge in health promotion and illness prevention by way of understanding people's behaviors, perceptions, and emotions within the contexts of relationships and culture. This highly flexible curriculum is enhanced by experiential learning opportunities and prepares students to practice in interdisciplinary settings and be successful in sustaining and promoting health across populations.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Health Science Requirements**

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions— Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
<b>Supporting Courses for Health Science</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

**Psychology Requirements**

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3458	Biological Psychology	4
<b>Personal/Social Bases of Behavior (Area A)</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Biological/Cognitive Bases of Behavior (Area B)</b>		
Complete one of the following:		4
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Psychology Electives</b>		
Complete 12 semester hours from the following subject area:		12
PSYC		
<b>Psychology Lab</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	
<b>Psychology Seminar</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	

**Supporting Courses**

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following		1

HSCI 1000	College: An Introduction	
PSYC 1000	Psychology at Northeastern	
<b>First-Year Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Co-op Preparation</b>		
Complete one of the following:		1
HSCI 2000	Professional Development for Bouvé Co-op	
EESC 2000	Professional Development for Co-op	
<b>Math</b>		
MATH 1241	Calculus 1	4
<b>Advanced Writing in the Discipline</b>		
ENGW 3306	Advanced Writing in the Health Professions	4
<b>Ethical Reasoning</b>		
PHIL 1165	Moral and Social Problems in Healthcare	4
<b>Open Electives</b>		
Complete 28 semester hours of general electives.		28

**Integrative Requirement**

Code	Title	Hours
PSYC 3510	Brain, Behavior, and Immunity	4
or PSYC 4514	Clinical Neuroscience	
or CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research	

**Health Sciences Major Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Psychology GPA Requirement**

A grade of C or higher is required for all PSYC courses.

**Program Requirement**

133 total semester hours required

**Plan of Study****Four Years, One Co-op Plan**

Year 1			
Fall	Hours	Spring	Hours
HSCI 1000 or PSYC 1000	1	BIOL 1113	4
PHTH 1260 or 1261	4	BIOL 1114	1
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
BIOL 1112	1	ENGW 1111	4
MATH 1241	4	Elective	4
PSYC 1101	4		
	18		18

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours
PSYC 2320	4 Public health core	4 Psychology elective	4
Area A course	4 Public health core	4 Area B course	4
Public health core	4 Area A course	4	
PSYC 3458	4 Psychology elective	4	
	16	16	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSCI 2000 or EESC 2000	1 Co-op	Co-op	ENGW 3306	4
Psychology lab	4		PHTH 4540	4
PHIL 1165	4			
Open electives	8			
	17	0	0	8

**Year 4**

Fall	Hours Spring	Hours
Public health core	4 Psychology seminar	4
Psychology elective	4 PSYC 3510, 4514, or CAEP 2012	4
Open electives	8 Open electives	8
	16	16

Total Hours: 133

**Four Years, Two Co-ops Plan (College: Bouvé)**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 1000 or HSCI 1000	1 PSYC Area A selective	4 PSYC Area B selective	4 Open electives	8
PHTH 1260 or 1261	4 BIOL 1113	4 public health core	4	
BIOL 1111	4 CHEM 1161 and CHEM 1162 and CHEM 1163	5		
BIOL 1112	1 BIOL 1114	1		
MATH 1241	4 ENGW 1111	4		
PSYC 1101	4			
	18	18	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 2320	4 Co-op	Co-op	PHIL 1165	4
Public health core	4		ENGW 3306	4
PSYC 3458	4			
Public health core	4			

HSCI 2000 or EESC 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Public health core	4 Co-op	Co-op	Open electives	8
PSYC Area A selective	4			
PSYC elective	4			
Open elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours
Public health core	4 PSYC 3510, 4514, or CAEP 2012	4
PSYC lab	4 Psychology seminar	4
PSYCH elective	4 PSYC elective	4
Open elective	4 Open Elective	4
	16	16

Total Hours: 133

**Four Years, Two Co-ops Plan (College: Science)**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 1000 or HSCI 1000	1 PSYC Area A selective	4 PSYC Area B selective	4 Open electives	8
PHTH 1260 or 1261	4 BIOL 1113	4 public health core	4	
BIOL 1111	4 BIOL 1114	1		
BIOL 1112	1 ENGW 1111	4		
MATH 1241	4 CHEM 1161 and CHEM 1162 and CHEM 1163	5		
PSYC 1101	4			
	18	18	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 2320	4 Public health core	4 PSYC elective	4 Co-op	
Public health core	4 Public health core	4 Open elective	4	
PSYC 3458	4 PSYC Area A selective	4		
PHIL 1165	4 PSYC elective	4		
	EESC 2000 or HSCI 2000	1		
	16	17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Public health core	4 Open electives	8 Co-op	
	PSYC lab	4		
	ENGW 3306	4		
	PSYC 3510, 4514, or CAEP 2012	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	Psychology seminar	4
	PSYC elective	4
	Open electives	8
	0	16

Total Hours: 133

## Health Science and Sociology, BS

The combined Bachelor of Science in Health Science and Sociology integrates social scientific perspectives to the study of health, illness, and healthcare. Students explore basic sociological concepts relevant for the study of health and healthcare, such as social construction and medicalization. Students explore why, for instance, despite having the most expensive healthcare system, the United States ranks comparatively low in life expectancy and health and well-being outcomes. Provides students with an opportunity to explore the ways that societal factors such as race, class, and gender interplay with health, healthcare, and health disparities.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350	Community and Public Health	4

or PHTH 2351	Community and Public Health - Global	
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4

### Supporting Courses for Health Science

PSYC 1101	Foundations of Psychology	4
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

### Sociology Requirements

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
SOCL 2321	Research Methods in Sociology	4
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Social Change Selective</b>		
Complete one of the following:		4
SOCL 1260	Gender in a Changing Society	
SOCL 3468	Social Movements	
SOCL 3450	Class, Power, and Social Change	
<b>Social Inequality Selective</b>		
Complete one of the following:		4
SOCL 1245	Sociology of Poverty	
SOCL 2225	Sociology of Disability	
<b>Lower-Level Elective</b>		
Complete one of the following:		4
SOCL 1000 to SOCL 3999		
<b>Advanced Elective</b>		
Complete one of the following:		4
SOCL 4000 to SOCL 4999		

### Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		1
HSCI 1000	College: An Introduction	
SOCL 1000	Sociology at Northeastern	
<b>Writing in the First Year</b>		
ENGW 1111	First-Year Writing	4
<b>Statistics</b>		
Complete one of the following:		4
PHTH 2210	Foundations of Biostatistics	
SOCL 2320	Statistical Analysis in Sociology	



**Co-op Preparation (Based on Home College)**

Complete one of the following:		1
HSCI 2000	Professional Development for Bouvé Co-op	
EESH 2000	Professional Development for Co-op	

**Advanced Writing in the Discipline**

Complete one of the following:		4
ENGW 3306	Advanced Writing in the Health Professions	
ENGW 3308	Advanced Writing in the Social Sciences	

**NUPath: Ethical Reasoning**

PHIL 1165	Moral and Social Problems in Healthcare	4
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**Capstone (Based on Home College)**

Complete one of the following:		4
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700))	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	
SOCL 4600	Senior Seminar	

**Open Electives** **24****Integrative Requirement**

Code	Title	Hours
Choose one of the courses below:		
SOCL 3441	Sociology of Health and Illness	4
ANTH 3441	Medical Anthropology	

**Health Sciences GPA Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

133 total semester hours required

**Plan of Study****Four Years, One Co-op Plan**

Year 1		
Fall	Hours Spring	Hours
HSCI 1000 or SOCL 1000	1 BIOL 1113	4
PHTH 1260	4 BIOL 1114	1
BIOL 1111	4 ENGW 1111	4
BIOL 1112	1 Elective	4
PSYC 1101	4 CHEM 1161 and CHEM 1162 and CHEM 1163	5
SOCL 1101	4	
	18	18

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours
Public health core	4 SOCL 3300	4 Public health core	4
ANTH 1101	4 SOCL 2321	4 PHIL 1165	4
PHTH 2210 or SOCL 2321	4 Social change or social inequality selective	4	
Lower-level sociology elective	4 Public health core	4	
	16	16	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSCI 2000 or EESH 2000	1 Co-op	Co-op	ENGW 3306 or 3308	4
ANTH 2305	4		PHTH 4540	4
Public health core	4			
Social inequality and social change selective	4			
Open electives	4			
	17	0	0	8

**Year 4**

Fall	Hours Spring	Hours
Public health core	4 Capstone course	4
SOCL 3441	4 Open electives	12
Advanced sociology elective	4	
Open electives	4	
	16	16

Total Hours: 133

**Four Years, Two Co-ops Plan**

Year 1			
Fall	Hours Spring	Hours Summer 1	Hours
HSCI 1000 or SOCL 1000	1 ANTH 1101	4 PHTH 2350	4
PHTH 1260	4 BIOL 1113	4 Open Elective	4
PSYC 1101	4 BIOL 1114	1	
BIOL 1111	4 ENGW 1111	4	
BIOL 1112	1 CHEM 1161 and CHEM 1162 and CHEM 1163	5	

SOCL 1101	4				
	18	18	8		
<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
PHTH 2210 or SOCL 2321	4	Co-op		Co-op	4
				ENGW 3306	4
Public health core	4			Open elective	4
HSCI 2000 or EESH 2000	1				
SOCL 2321	4				
SOCL 3300	4				
	17		0	4	8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
ANTH 2305	4	Co-op		Co-op	4
					PHTH 4540
SOCL 3441	4			Open elective	4
					Public health core
Lower-level sociology elective	4				
Public health core	4				
	16		0	4	8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Social change or social inequality selective	4	Capstone course	4		
Advanced sociology elective	4	Public health core	4		
HSCI 4700 (if student will complete an HSCI capstone)	0	Social change or social inequality selective	4		
Open electives	8	Open electives	4		
	16		16		

Total Hours: 133

### Exercise Science, Minor

The minor in exercise science is for undergraduate students from any discipline wishing to expand their understanding in this area. Exercise science is a discipline that examines the short- and long-term responses to exercise and benefits of exercise training for healthy persons, as well as persons with chronic diseases such as heart disease, pulmonary diseases, diabetes, and obesity. Through this minor, undergraduate students have an opportunity to broaden their understanding of exercise and physical activity in health promotion, disease prevention, and interventions. Students who elect a minor in exercise science may then apply to the Master of Science in Exercise Science upon graduation.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Exercise Science Requirements

A minimum grade of C is required in all courses taken toward the minor.

### Required Courses

Code	Title	Hours
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
EXSC 4500 and EXSC 4501	Exercise Physiology 1 and Lab for EXSC 4500	5
EXSC 5200	Cardiopulmonary Physiology	3
EXSC 5220	Advanced Exercise Physiology	3

### GPA Requirement

2.000 GPA required in the minor

### Global Health, Minor

The area of global health has become a critical field of study across and within diverse disciplines, because of the cross-border and cross-national implications of health-related risks for national security, commerce, transportation, and healthcare delivery itself. In collaboration with the College of Social Sciences and Humanities, the minor in global health is designed to provide undergraduate students an opportunity to explore and discuss the implications with an interdisciplinary lens. The minor is comprised of five courses: one foundation and one core course, three electives, and a global health experience to be approved by the global health minor advisor.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Foundation Course

Code	Title	Hours
AFRS 1270 or PHTH 1270	Introduction to Global Health	4

### Core Course

Complete one of the following. If additional courses are taken, they may be used as electives.

Code	Title	Hours
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	3-4
PHTH 4120	Global Perspectives on Discrimination and Health	
PHTH 5230	Global Health	

## Elective Courses

Code	Title	Hours
Complete three courses from the following areas. Only two courses from any one area may count toward the minor electives. No more than two required courses in the student's major may count toward the minor electives. At least one of the minor electives must be at the 3000-level or above.		

### Area 1: Community and Public Health

AFRS 4939	Community Health, Culture, and Development in Kenya <sup>(Dialogue Only)</sup>	9-12
CAEP 2010	Counseling and Applied Educational Psychology in a Global Context <sup>(Dialogue only)</sup>	
ENVR 1110	Global Climate Change	
PHTH 1261	Comparative Healthcare Systems <sup>(Dialogue only)</sup>	
PHTH 2301	Communication Skills for the Health Professions—Global <sup>(Dialogue Only)</sup>	
PHTH 2350 or PHTH 2351 or NRSR 4604	Community and Public Health Community and Public Health - Global Public Health Community Nursing	
PHTH 4202 or PHTH 5202	Principles of Epidemiology in Medicine and Public Health Introduction to Epidemiology	
PHTH 4540	Health Education and Program Planning	

### Area 2: Biology of Health and Disease

BIOL 1141	Microbes and Society
BIOL 1143	Biology and Society
BIOL 2327	Human Parasitology
EEMB 3466	Disease Ecology

### Area 3: Society and Cultural Health / Area Studies

AFRS 2900	Swahili, Culture, and Politics in Kenya <sup>(Dialogue only)</sup>
ANTH 4350	Ethnography of Southeast Asia
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India
ECON 1230	Healthcare and Medical Economics
HIST 2233	The History of Medicine in North America
LACS 1220	Latino, Latin American, and Caribbean Studies
PHIL 1165	Moral and Social Problems in Healthcare

### Area 4: Globalization and Development

CRIM 1400	Human Trafficking
ECON 1291	Development Economics
ECON 3404	International Food Policy
ECON 3413	Health Economics and Healthcare Policy
ECON 3416	Behavioral Economics
ECON 5292	Gender and Development Economics
HLTH 1510 or HLTH 2100	Introduction to Healthcare Ethics Interprofessional Ethics for Individual and Population Health

HUSV 4945	Leadership and International Program Development <sup>(Dialogue only)</sup>
INTL 1101	Globalization and International Affairs
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations

## Global Health Experience

Complete a global health experience that has been approved by the global health minor adviser.

## Recommended

Competency in another language other than English is recommended.

## Completion of the Minor

All coursework must be completed at a minimum grade of B and courses may not be taken Pass/Fail.

Complete a minimum of 16 semester hours.

3.000 GPA required in the minor.

## Health Psychology, Minor

The objective of the minor in health psychology is to provide students with knowledge regarding the relationship between psychological and behavioral processes and health and illness. Distinct from other specialty areas in psychology, health psychology focuses on how biology, psychology, behavior, and social factors influence health and illness.

This minor seeks to benefit students by highlighting the unique features of this specialty area and help students understand how to apply this knowledge to the provision of health services and various career paths relevant to health psychology, should they choose to pursue careers in professional psychology focused on the promotion of health. The minor in health psychology is designed for undergraduate students from a variety of disciplines within Bouvé and across the university who wish to expand and to apply their understanding in key concepts of behavioral science and how they inform and intersect with public health, prevention science, clinical applications, and interdisciplinary and interprofessional care.

The minor is comprised of five courses. It requires two foundational courses, one that provides an introduction to the role of psychology in health, illness, and healthcare—Health Psychology: An Introduction to Concepts, Theories, and Research (CAEP 2012)—and one that focuses on the application of principles of behavior analysis to address common health problems, such as obesity, addiction, and adherence to medical procedures—Behavioral Assessment and Treatment of Health Problems in the 21st Century (CAEP 2101).

These courses instruct students on basic, foundational principles of mental/behavioral health and the role of psychology in overall health and well-being in applied settings. Students may choose three other electives based on their specific interests.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Courses

Code	Title	Hours
CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research	4
CAEP 2101	Behavioral Assessment and Treatment of Health Problems in the 21st Century	4

## Elective Courses

Code	Title	Hours
Complete any three of the following:		12
CAEP 2105	College Student Mental Health	
CAEP 2106	History and Systems of Psychology	
CAEP 2107	Introduction to School Psychology	
CAEP 3899	Relationships in College	
CAEP 4525	Introduction to Professional Psychology	
CAEP 5150	Early Intervention: Family Systems	
CAEP 5151	Early Intervention: Infant and Toddler Development, Risk, and Disability	
HLTH 5002	Mindfulness: Theory and Practice	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 3520	Child Intervention and Treatment	
PSYC 1101	Foundations of Psychology	
PSYC 3404	Developmental Psychology	

## GPA Requirement

2.000 GPA required in the minor

### Health Research Methods, Minor

The health research methods minor is for undergraduate students from any major in any college at the university who have an interest in developing health-research-related skills. This minor creates an opportunity for students to develop marketable, applied skills and seeks to benefit students pursuing positions within research groups, as well as students pursuing advanced degrees.

**Admissions requirements:** Approval of the student's unit or college advisor and approval of the health research methods minor advisor are required for admission into the minor. Applicants are required to have an overall grade-point average of 3.000 or higher.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Up to 8 credits of completed coursework from the student's major program of study may be applied to fulfillment of requirements of this minor.

## Required Courses

Code	Title	Hours
PHTH 3210	Using Data in Health Research	2
PHTH 3250	Fundamentals of Qualitative Research	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	3-4
or PHMD 3450	Research Methodology and Biostatistics	

or HLTH 5450	Healthcare Research	
PHTH 2949	Research Ethics Training	0
Complete one of the following (PHTH 2210 is recommended):		3-4
ECON 2350	Statistics	
ENVR 2500	Biostatistics	
MATH 2280	Statistics and Software	
MATH 3081	Probability and Statistics	
MGSC 2301	Business Statistics	
NRSG 5120	Statistics for Health Science	
PHMD 3450	Research Methodology and Biostatistics	
PHTH 2210	Foundations of Biostatistics	
POLS 2400	Quantitative Techniques	
PSYC 2320	Statistics in Psychological Research	

## Elective Courses

Code	Title	Hours
Complete 6–8 semester hours from the following:		6-8
ANTH 3410	Ethnographic Field Experience	
ECON 2560	Applied Econometrics	
HLTH 3001	The Research Process	
HLTH 4992	Directed Study	
or HLTH 4991	Research	
IS 4800	Empirical Research Methods	
PHMD 5223	Evidence-Based Medicine	
PHSC 2400	Research Ethics for Beginning Health Scientists	
PHTH 5320	Grant Writing in Public Health	
PHTH 5330	Using Publicly Available Data in Public Health	
PHTH 5340	Writing for Peer-Reviewed Journals in Public Health	
PHTH 5350	Using SAS in Public Health Research	

## Grade Requirement

Courses must be completed with a grade of C or better. Courses may not be taken pass/fail for fulfillment of the minor.

### Health, Humanities, and Society, Minor

The health, humanities, and society minor is designed for students who would like to learn how to think capaciously and creatively about health using the rigorous, precise, and flexible skills trained by the social sciences and the humanities. The social sciences teach students to think about the social, economic, and political factors that structure health conditions and outcomes in particular societies, while the humanities train students to navigate the complexities of interpersonal interaction and their ethical implications, to relate the micro to the macro and texts to contexts, to historicize encounters, to communicate accurately and effectively across a variety of media, and to engage in creative analytical thinking about healthcare. The landscape of healthcare is quickly changing, and this training will equip students well not only for the diverse forms of health work that exist today, but for as yet unimaginable varieties of health-related work in the future.

This minor is structured around the particular competencies that the social sciences and humanities train. Those competencies are narrative and historical perspective, critical attention and observation, ethics

and judgment, performance and creativity, and social and structural proficiency. Rather than adopting the more traditional approach of connecting particular skills to particular disciplines (say, narrative to literature and observation to art history), this minor builds from discipline-specific health knowledge while training students to think across disciplines. Thus, it will not be unusual for students to find a single course addressing multiple competencies or to take courses in different disciplines that address the same competency from distinct but complementary perspectives.

This minor is housed in the Humanities Center of the College of Social Sciences and Humanities in partnership with the Bouvé College of Health Sciences.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

No more than two courses, in addition to the introductory course, may be taken under the 2000 level.

Code	Title	Hours
<b>Introductory Course</b>		
INSH 1300	Introduction to Health and Humanities	4
<b>Humanities Requirement</b>		
Complete two of the following:		8
ENGL 2770	Writing to Heal	
ENGL 3140	19th-Century Literatures	
ENGL 3700	Narrative Medicine	
ENGL 4710	Capstone Seminar	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1295	Religious Perspectives on Health and Healing	
WMNS 1225	Gender, Race, and Medicine	
<b>Social Sciences Requirement</b>		
Complete two of the following:		8
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4580	Special Topics in Anthropology	
ECON 1230	Healthcare and Medical Economics	
HLTH 5280	The (in)Visibility of (dis)Ability in Society	
PHTH 1270	Introduction to Global Health	
PHTH 2300	Communication Skills for the Health Professions	
or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 4120	Global Perspectives on Discrimination and Health	
PHTH 5202	Introduction to Epidemiology	
PHTH 5234	Economic Perspectives on Health Policy	

SOCL 1295	Drugs and Society	
SOCL 2303	Gender and Reproductive Justice	
SOCL 3441	Sociology of Health and Illness	
Total Hours		20

### GPA Requirement

2.000 GPA required in the minor

### Healthcare System Operations, Minor

The objective of the minor in healthcare system operations is to prepare students to apply industrial and systems engineering methods in healthcare applications. Distinct from other service industries, healthcare systems are characterized by extensive complexities driven by communication between and interdependencies among multiple actors, and the need to simultaneously address multiple competing objectives pertaining to economic, quality-driven, individual-driven, and population-driven goals. This minor will benefit students by highlighting the unique features of this industry and methods for addressing its unique challenges to engineer improvements to the design, operation, and management of healthcare systems.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

At most, one course from the minor may be counted toward major requirements.

Code	Title	Hours
<b>Required Courses</b>		
IE 5617	Lean Concepts and Applications	4
IE 5400	Healthcare Systems Modeling and Analysis	4
or IE 3500	Introduction to Healthcare Systems Engineering	
PHTH 1260	The American Healthcare System	4
<b>Electives</b>		
Complete one of the following:		4
IE 5374	Special Topics in Industrial Engineering (System Dynamics in Healthcare)	
IE 5500	Systems Engineering in Public Programs	
IE 5640	Data Mining for Engineering Applications	
NRSG 5121	Epidemiology and Population Health	
PHTH 4511	Healthcare Management	
PHTH 5226	Strategic Management and Leadership in Healthcare	
PHTH 5232	Evaluating Healthcare Quality	
SCHM 3315	Managing Healthcare Operations and Supply Chain	

### GPA Requirement

2.000 GPA required in the minor

## Mindfulness Studies, Minor

The minor in mindfulness studies is open to all majors at the university. The term “mindfulness” refers to maintaining an awareness of the present moment without judgment. Modern-day mindfulness has roots in Eastern spiritual traditions including Buddhism and Hinduism; after arriving in the West, mindfulness practice became a mostly secular practice used by many to promote health and wellbeing. The minor in mindfulness studies is designed for students who seek to enrich their understanding of mindfulness practice, including its benefits and potential applications. Pursuing a minor in mindfulness studies will complement students’ knowledge in the related fields of psychology, health sciences, philosophy, and religious studies. However, developing a mindfulness practice and an understanding of the potential benefits and applications of mindfulness may help enrich the lives of students in any major. Whether students are interested in health, education, or business, by pursuing the minor in mindfulness studies they have an opportunity to learn how to develop a mindfulness practice and explore how to apply mindfulness to their career.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
CAEP 1280	Introduction to Mindfulness	4
PHIL 1133	Selling Spirituality	4
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	4
or PHIL 2395	Japanese Buddhism	

### Electives

Code	Title	Hours
Complete two of the following:		7-8
CAEP 1290	Personal Behavior Change	
CAEP 3899	Relationships in College	
HLTH 5002	Mindfulness: Theory and Practice	
PHIL 1130	Ethics: East and West	
PHIL 1290	Chinese Philosophy and Religion	

### GPA and Grade Requirement

Minimum 2.000 GPA required in the minor. All coursework must be completed with a minimum grade of C.

### Credit Requirement

19 hours required

## Nutrition, Minor

The minor in nutrition is designed for undergraduate students from a variety of disciplines across the university who wish to expand and apply their understanding in key concepts of nutrition and how they intersect with public health, clinical applications, food policy, behavioral counseling, or health communication.

The minor is comprised of five courses. It requires a foundational course in Human Nutrition (HSCI 1105) that instructs students in the basic principles of human nutrition. Students expand foundational

concepts in additional required courses to apply knowledge of nutrition in clinical settings and to public health initiatives. Following the initial core courses, students complete two elective courses, at least one at 3000 level or higher, developing deeper knowledge and specific professional skills.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
HSCI 1105	Human Nutrition	4
HSCI 2350	Advanced Nutrition in Health and Disease	4
HSCI 2500	Public Health Nutrition in the Community	4

### Supporting Courses

Code	Title	Hours
Complete two of the following. At least one elective must be at the 3000 level or above:		7-8
BIOL 3611	Biochemistry	
or PHSC 2320	Biochemistry	
CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research	
CAEP 3480	Counseling Theories and Practice	
COMM 3201	Health Communication	
or PHTH 2300	Communication Skills for the Health Professions	
or PHTH 2301	Communication Skills for the Health Professions—Global	
ECON 3404	International Food Policy	
EXSC 1120	Introduction to Exercise, Fitness, and Health	
HSCI 1106	Contemporary Issues in Nutrition	
PHSC 4340	Pharmacology for the Health Professions	
PHSC 4502	Pharmacology/Medicinal Chemistry 2	
PPUA 5270	Food Systems and Public Policy	

### GPA Requirement

2.000 GPA required in the minor

## Public Health, Minor

The minor in public health is designed for undergraduate students from a variety of disciplines who wish to explore key components of public health including the basic components of the U.S. healthcare system, core values and concepts of public health, public health analytic methods, and the social determinants of health. The minor is comprised of five courses for a minimum of 18 semester hours. The four required courses focus on the key components of public health and the remaining course is an elective from the provided list. Through the elective course, students can explore policy, healthcare management and delivery, research methods, health communication, nutrition and exercise, health disparities, and environmental health.

## Minor Requirements

*Note:* This minor is not open to students majoring in the Bachelor of Science in Health Science or those pursuing a combined major with health science.

Code	Title	Hours
<b>Required Courses</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
Complete one of the following. PHTH 2210 is recommended.		3-4
ECON 2350	Statistics	
ENVR 2500	Biostatistics	
MATH 2280	Statistics and Software	
MATH 3081	Probability and Statistics	
MGSC 2301	Business Statistics	
NRSR 5120	Statistics for Health Science	
PHMD 3450	Research Methodology and Biostatistics	
PHTH 2210	Foundations of Biostatistics	
POLS 2400	Quantitative Techniques	
PSYC 2320	Statistics in Psychological Research	
<b>Elective</b>		
Complete one course from the lists below:		3-4
<i>Nutrition and Wellness</i>		
EXSC 1120	Introduction to Exercise, Fitness, and Health	
HSCI 1105 or HSCI 1106	Human Nutrition Contemporary Issues in Nutrition	
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	
PHTH 4540	Health Education and Program Planning	
<i>Policy and Administration</i>		
PHTH 2515	Healthcare Policy and Administration	
PHTH 4511	Healthcare Management	
PHTH 4515	Critical Issues in Health and Public-Health Policy	
<i>Society and Health</i>		
PHTH 1270 or AFRS 1270	Introduction to Global Health Introduction to Global Health	
PHTH 2414	Environmental Health	
PHTH 4120	Global Perspectives on Discrimination and Health	
<i>Research Methods</i>		
PHTH 3250	Fundamentals of Qualitative Research	

## GPA Requirement

2.000 GPA required in the minor

## School of Nursing

Website (<http://www.northeastern.edu/bouve/nursing/>)

### Maria van Pelt, CRNA, PhD, FAAN

Dean and Associate Clinical Professor, School of Nursing  
Associate Dean, Bouvé College of Health Sciences

### Caroline M. Hewitt, DNS, RN, WHNP-BC, ANP-BC

Clinical Professor and Assistant Dean of Undergraduate Programs

### Janet S. Rico, PhD, MBA, FNP

Associate Clinical Professor and Assistant Dean for Graduate Education

#### Office of the Dean

617.373.3649

617.373.8675 (fax)

#### Undergraduate Program Office

617.373.2480

The School of Nursing offers a traditional Bachelor of Science, an Accelerated Bachelor of Science, and a Direct Entry (BSN) to Master's (MSN) for second-degree students in nursing designed to prepare students to become professional nurses by providing them with the knowledge, skills, and professional values needed for successful practice in a variety of healthcare settings. The school aims to provide all students—including those with diverse backgrounds and changing career goals—with a broad-based education that will foster ongoing personal and professional growth.

The mission of the Northeastern University School of Nursing is to educate students to provide evidence-based, culturally and linguistically competent, ethical healthcare that is high quality, safe, and accessible to diverse local, national, and global communities. Our programs seek to prepare students to become leaders as nurse clinicians, educators, scholars, and researchers.

Nursing is both a science-based profession and a caring art. The curriculum draws on basic and behavioral sciences, the arts and humanities, and the art and science of nursing to help students understand the complexities of health and illness across the life span.

## CLINICAL SETTINGS

Clinical settings require student criminal background checks. Additionally, international students require curricular practical training (CPT) clearance to meet federal requirements for all clinical and co-op experiences. Please see Requirements for Clinical, Internships, and Practicum Courses (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/practicum-internship-policies/>) and Background Checks (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/background-checks/>) in this catalog for further details.

## ACCREDITATION

The baccalaureate degree program in nursing at Northeastern University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791, and is approved by the Board of Registration in Nursing of the Commonwealth of Massachusetts and the state of North Carolina. Accreditation and approval indicate that the program meets educational standards for faculty, curriculum design, student quality, and overall university support.

## Programs

### Bachelor of Science in Nursing (BSN)

- Nursing (p. 591)
- Nursing—Accelerated Program for Second-Degree Students (p. 598)

### Minor

- Wellness Studies (p. 601)

## Nursing, BSN

The goal of the School of Nursing is to prepare students to think critically and to practice nursing competently and compassionately in rapidly changing practice environments. All efforts are designed to build nursing knowledge; enhance nursing practice and patient safety; foster professional integrity; and ultimately improve the health outcomes of patients, families, and communities across the continuum of care. This approach requires knowledge, skills, and attitudes that demonstrate leadership, quality care, critical thinking and clinical reasoning, cultural and linguistic competence, interprofessional collaboration, evidence-based practice, and integration of informatics and technology.

The clinical program takes place in the community where people live, as well as in hospitals, rehabilitation centers, and long-term-care facilities. The curriculum is capped by courses that enable students to put leadership and management skills into action and to synthesize the complete role of the professional nurse in a clinical practicum.

In addition to completing academic coursework, students must meet the cooperative education requirement as specified by their plan of study, which gives them the opportunity to integrate the theory and practice of nursing in selected settings. Numerous community and institutional healthcare agencies in Greater Boston and across the country offer students an opportunity to gain experience in providing nursing care to a variety of patients and families and to understand that nurses have major roles in wellness and health promotion, acute care, and long-term care. Students in the program are strongly encouraged to participate in research activity and in global educational opportunities that can all be a part of the program.

The baccalaureate degree program in nursing at Northeastern University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791, and is also approved by the Board of Registration in Nursing of the Commonwealth of Massachusetts. Accreditation and approval indicate that the program meets educational standards for faculty, curriculum design, student quality, and overall university support.

The school subscribes to the standards established by the American Association of Colleges of Nursing (AACN), of which it is a member.

### Academic Standards for Nursing Majors

#### ACADEMIC DISMISSAL FROM MAJOR

Students in the Bouvé College of Health Sciences will be dismissed from their major effective the following academic semester for any of the reasons noted below:

- Students who do not meet the required minimum grade in two professional courses, including labs and clinical, will be dismissed from the program. Only one professional course can be remediated.
- Remediation of a failed professional course is a requirement for progression in the program.

- Students who do not meet the minimum grade requirement within two attempts of the course will be dismissed from the program.

*Note:* Students dismissed from their major but who are otherwise in good standing with the university are allowed to remain at Northeastern University for up to two semesters as a provisional Bouvé student, by the end of which the student is expected to move into a new major.

#### ACADEMIC APPEALS

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Additional details about the process may be found in the Bouvé College of Health Sciences Academic Appeals Procedures (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/appeals-process/>) and in *Appeals Policies and Procedures* in the university Undergraduate Student Handbook (<http://www.northeastern.edu/osccr/code-of-student-conduct/>).

#### Program Policies and Standards

Students are expected to adhere to the policies and standards of their program major as stated in the Undergraduate Student Handbook (<http://www.northeastern.edu/osccr/code-of-student-conduct/>) to progress through their curriculum as planned. Students seeking any exceptions to the program policies and standards specified for their program major will be brought before the School of Nursing Academic Standing Committee to present their petitions.

#### BACHELOR OF SCIENCE IN NURSING PROGRAM REQUIREMENTS

The nursing program includes several options for a student's plan of attendance, as specified below:

For those students entering Northeastern as first-year (freshman) students (including NUin) and current Northeastern students entering the BSN via the change-of-major process:

- A five-year plan with three, six-month co-ops and a four-year plan with two, six-month co-ops

Students must declare either the four- or five-year plan by September 1 of their third year. At least one of the two co-op experiences must involve working with registered nurses providing direct patient care.

Students must complete all co-op experiences planned in their academic program with a grade of S for each co-op experience.

**Current Northeastern students** entering the BSN via the change-of-major process should follow the requirements found at the Bouvé College of Health Sciences Office of Student Services under Change of Major (<https://bouve.northeastern.edu/student-services/undergraduate-change-of-major/>).

Transfer students from institutions outside Northeastern University may select one of the options below and must declare their plan upon admission to the program. All plans are not offered at all campuses.

- A five-year plan with three, six-month co-ops (where offered)
- A four-year plan with two, six-month co-ops (where offered)
- A four-semester accelerated plan with no co-ops (where offered and approved by the State Board of Nursing; accelerated programs not offered on all campuses)

All students, regardless of entry point, must successfully complete 133 semester hours of academic credit to graduate in compliance with



university and nursing curriculum requirements and in their expected year of graduation.

- Degree requirements must be completed within eight years from the date of matriculation.
- Students are required to attend all scheduled nursing classes, clinical experiences, and clinical labs on campus and in clinical agencies. If the student fails to meet attendance requirements, the student will fail the associated class, clinical, and/or lab.

### CLINICAL REQUIREMENTS

Clinical settings require criminal background checks. Additionally, international students require curricular practical training (CPT) clearance to meet federal requirements for all clinical and co-op experiences.

All students must receive a health clearance from University Health and Counseling Services (UHCS). Health clearance is based on specific documentation of immunity from infectious disease and a physical examination (this may be done by the student's own healthcare provider). In addition, nursing students need a clinical clearance in order to participate in clinical courses. Clinical clearance, managed by the School of Nursing's Clinical Placement Office, includes verification of certification of *Healthcare Provider* cardiopulmonary resuscitation (CPR); recent negative tuberculosis screening (PPD); positive titers for MMR, varicella, and hepatitis B; vaccines including TDAP and influenza; and additional health screenings as may be required by the program. It is the responsibility of the student to stay current and to provide documentation required for clinical clearance throughout the entire nursing program.

Six weeks prior to the start of a clinical course, students must show:

- Evidence of immunizations and health clearance by University Health and Counseling Services.
- Documentation of *Healthcare Provider* CPR certification.
- Completion of a Criminal Offender Record Information (CORI) background check to be eligible for clinical placement.
- Students will not be allowed to start the clinical course, and may be dropped from the clinical course, if these processes are not satisfactorily completed.

Students should refer to clinical course requirements, health clearance requirements for clinical rotations, and the professional conduct statement here (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/practicum-internship-policies/>) for additional details.

### CLINICAL WARNING

A nursing student may be placed on clinical warning, or fail the clinical course, at any time during the semester for the following reasons:

- Failing to meet the clinical objectives at a satisfactory level.
- Failing to demonstrate safe practice. Students may be removed from the clinical area, before completion of the clinical rotation, if the instructor determines that the student is unsafe. This will result in the student failing the clinical course.
- Failing to meet the attendance requirement.

### Conditions

- Students on clinical warning must develop an academic plan with the clinical instructor to address clinical performance.
- Students will be expected to improve clinical performance by adhering to the plan.

- Failure to adhere to the terms of the plan will result in the student failing the course and being placed on academic probation. All conditions of academic probation will then apply.

### Notification

- The clinical instructor will issue the student a Clinical Warning via the Faculty and Advisor Communication Tool (FACT) identifying the problem.
- The student and the instructor should then develop a plan together to address the deficiency.
- Copies of the warning will be forwarded to the program director and/or the assistant dean for undergraduate programs if needed.
- This is an administrative warning and will not be posted on the transcript.
- Satisfactory completion of the clinical experience component of the course will result in removal of the warning from the student's file.

### BLOOD-BORNE PATHOGEN EXPOSURE AND INJURY

Any student who sustains any kind of injury and/or exposure related to blood-borne, respiratory, or other pathogens or hazardous materials while on a clinical rotation should seek immediate treatment. They must also immediately follow the procedures listed below:

### Procedures

- Students must follow the affiliate site's protocol for exposure reporting, testing, counseling, and follow-up.
- Students can present their clinical accident insurance identification card to arrange billing at the site or a suitable nearby hospital or urgent care clinic. If students do not know a local provider, they can call the resource number on their identification card for aid in finding a local provider.
- Within 24 hours of the accident, students must also inform their program's director of clinical education (or unit designee responsible for clinical placements) of the accident and submit, in writing, a description of the incident and injury or exposure using the BCHS Accident Report form, linked here (<https://northeastern.sharepoint.com/sites/BouveCurrentStudentResources/SitePages/Clinical-Accident-Report-Form.aspx>). *If a student is incapacitated and unable to file their own report within the 24-hour time frame, a NU faculty or staff person familiar with the incident may file on their behalf. The student should file their own report as soon as possible thereafter.*
- Submission of the Accident Report form will automatically notify:
  - The program's director of clinical education or clinical placement office (or unit designee responsible for clinical placements)
  - The program director and medical director (if applicable)
  - The department chair or school dean
  - BCHS dean's office
  - Office of Environmental Health and Safety
  - Risk Services (<https://www.northeastern.edu/risk-services/>)
- If for any reason a student is not able to receive immediate medical treatment, there is the resource of postexposure counseling through the university's partner, OEHN (Occupational & Environmental Health Network). They can be reached at 1-866-360-8100. OEHN is open 24 hours a day, 7 days a week, 365 days a year. OEHN will collect appropriate information and engage the doctor on call who can help to direct appropriate care depending on exposure and circumstances.

## Technical Standards for Admission, Academic Progression, and Graduation

The primary mission of the School of Nursing is to educate our students to provide evidence-based, culturally and linguistically competent, ethical healthcare that is high quality, safe, and accessible to diverse local, national, and global communities. Our programs are designed to prepare students to become leaders as nurse clinicians, educators, scholars, and researchers. The School of Nursing is also committed to achieving the goals of the university to become an outstanding national research, practice-oriented, student-centered, urban institution.

The goal of the School of Nursing is to prepare students to think critically and to practice nursing competently and compassionately in rapidly changing practice environments. All efforts are designed to build nursing knowledge, enhance nursing practice and patient safety, foster professional integrity, and ultimately improve the health outcomes of patients, families, and communities across the continuum of care.

In addition to classroom learning, students' clinical education experiences occur in settings, like hospitals, in which patient safety is the priority. For this reason, students who, upon enrollment in any of the nursing programs, seek accommodations from the Disability Resource Center (DRC) at NU must also request an assessment of accommodations that would be needed for clinical education.

Certain functional abilities are essential for the delivery of safe, effective nursing care during clinical education activities. Therefore, the School of Nursing has determined that certain technical standards are requisite for admission, progression, and graduation from the nursing programs. An individual must be able to independently, with or without reasonable accommodation, meet the following technical standards:

1. General abilities
2. Observational ability
3. Communication ability
4. Motor ability
5. Intellectual, conceptual, and quantitative abilities
6. Behavioral and social attributes
7. Ability to manage stressful situations

Individuals unable to meet these technical standards, with or without reasonable accommodation, will not be able to complete the program.

### GENERAL ABILITIES

The student is expected to possess functional use of the senses of vision, touch, hearing, and smell so that data received by the senses may be integrated, analyzed, and synthesized in a consistent and accurate manner. A student must be able to respond promptly to urgent situations that may occur during clinical training activities and must not hinder the ability of other members of the healthcare team to provide prompt treatment and care to patients.

### OBSERVATIONAL ABILITY

The student must have sufficient capacity to make accurate visual observations and interpret them in the context of laboratory studies, medication administration, and patient care activities. In addition, the student must be able to document these observations and maintain accurate records.

### COMMUNICATION ABILITY

The student must communicate both verbally and nonverbally in order to elicit information and to convey that information to others. Each student must have the ability to read and write accurately and comprehensively in English. The student must be able to thoroughly comprehend and fluently

speak the English language so as to facilitate communication with patients, families, professionals in healthcare settings, instructors, and other students. The student must also be able to present information in a professional, logical manner and to provide counseling and instruction in order to effectively care for patients and their families.

### MOTOR ABILITY

The student must be able to perform gross and fine motor movements with sufficient coordination needed to perform complete physical examinations utilizing the techniques of inspection, palpation, percussion, auscultation, and other diagnostic maneuvers. A student must develop the skills needed to perform or assist with procedures, treatments, administration of medication, and the management and operation of diagnostic and therapeutic medical equipment. The student must possess the physical and mental stamina to meet the demands associated with extended periods of sitting, standing, moving, and physical exertion required for satisfactory and safe performance in the clinical and classroom settings.

### INTELLECTUAL, CONCEPTUAL, AND QUANTITATIVE ABILITIES

The student must be able to develop and refine critical thinking skills that are essential to nursing practice. Critical thinking involves the abilities to measure, calculate, reason, analyze, and synthesize objective and subjective data and to make decisions, often in a time-urgent environment, that reflect consistent and thoughtful deliberation and sound clinical judgment.

### BEHAVIORAL AND SOCIAL ATTRIBUTES

Compassion, integrity, motivation, effective interpersonal skills, and concern for others are personal attributes required of those in the nursing programs. The student must be able to work under supervision of a clinical instructor or preceptor; this is essential to ensure patient safety. The student must exercise good judgment and promptly complete all responsibilities in the classroom and clinical settings. The ability to establish culturally competent relationships with individuals, families, and groups and to respond effectively to patients who have different intellectual capacities is critical to nursing practice.

### ABILITY TO MANAGE STRESSFUL SITUATIONS

The student must be able to adapt to and function effectively in stressful situations in both the classroom and clinical settings, including emergency situations. These stressors include personal, patient care/family, faculty/peer, and/or program-related issues.

### Disability and Special Needs

Students with special needs are encouraged to contact the Disability Resource Center (<https://drc.sites.northeastern.edu/>) (DRC) to register and request services. Students must notify the instructor at the beginning of the semester if they plan to use DRC services throughout the course. The staff in that office is available for assistance.

### State Board Nursing Examination

In Massachusetts, and several other states, the registering board requires that graduates taking the National Council Licensing Examination (NCLEX-RN) meet standards of "good moral character" (GMC). Students may review the GMC requirement specified at Massachusetts General Laws Chapter 112, sections 74, 74A, and 76; Licensure Policy No. 00-01 under "Rules & Regulations" on the Massachusetts BORN website.

Please visit Bouvé College of Health Sciences Program Learning Outcomes for the specific student learning outcomes for this program.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

Professional courses with a prefix HLTH, HSCI, and NRSRG and professional prerequisite courses with a prefix BIOL, CHEM, MATH, and PSYC require a minimum passing grade of C.

## Nursing Major Requirements

Code	Title	Hours
NRSRG 2150	Ethical Healthcare: Genetics and Genomics	4
or HLTH 2100	Interprofessional Ethics for Individual and Population Health	
or PHIL 1165	Moral and Social Problems in Healthcare	
NRSRG 2210	Influences on Health and Illness: A Nursing Perspective	3
NRSRG 2220 and NRSRG 2221	Health Assessment and Fundamental Nursing Skills and Lab for NRSRG 2220	4
NRSRG 2350	Integrated Pathophysiology and Pharmaceutical Interventions for Nursing Practice	6
NRSRG 3302 and NRSRG 3303	Nursing with Women and Families and Clinical for NRSRG 3302	5
NRSRG 3320 and NRSRG 3321	Nursing Care of Adults 1 and Clinical for NRSRG 3320	6
NRSRG 3323 and NRSRG 3324	Advanced Assessment and Interventions and Lab for NRSRG 3323	2
NRSRG 3400 and NRSRG 3401	Nursing and the Promotion of Mental Health and Clinical for NRSRG 3400	5
NRSRG 3420 and NRSRG 3421	Nursing Care of Adults 2 and Clinical for NRSRG 3420	6
NRSRG 4502 and NRSRG 4503	Nursing Care of the Child and Clinical for NRSRG 4502	6
NRSRG 4604 and NRSRG 4605	Public Health Community Nursing and Clinical for NRSRG 4604	5
NRSRG 4610 or NRSRG 4611	Managing and Leading in Healthcare or Managing and Leading in Healthcare—An International Perspective	4
NRSRG 4995 and NRSRG 4996	Comprehensive Nursing Practicum and Clinical for NRSRG 4995	5
NRSRG 5120	Statistics for Health Science	3
NRSRG 5220	Introduction to Research Methods and Application for Healthcare	4

## Supporting Courses

Code	Title	Hours
<b>CORE TERM 1</b>		
NRSRG 1000	College: An Introduction	1
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
Please complete one of the following two lecture/lab pairs:		
CHEM 1101 and CHEM 1102	General Chemistry for Health Sciences and Lab for CHEM 1101	5
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
HSCI 1105	Human Nutrition	4
Complete one of the following:		
MATH 1215	Mathematical Thinking	
MATH 1241	Calculus 1	
MATH 1242	Calculus 2	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	
MATH 1341	Calculus 1 for Science and Engineering	
<b>CORE TERM 2</b>		
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
PSYC 1101	Foundations of Psychology	4
BIOL 2221 and BIOL 2222	Foundations of Microbiology and Lab for BIOL 2221	5
ENGW 1111	First-Year Writing	4
<i>The university requires a minimum grade of C for ENGW 1111.</i>		
<b>CLINICAL TERM 2</b>		
NRSRG 2000	Professional Development for Co-op	1
SOCL 1101	Introduction to Sociology	4
<b>CLINICAL TERM 3</b>		
PSYC 3404	Developmental Psychology	4
<b>CLINICAL TERM 4</b>		
<b>CLINICAL TERM 5</b>		
ENGW 3306	Advanced Writing in the Health Professions	4
<i>The university requires a minimum grade of C for ENGW 3306.</i>		
<b>Electives</b>		
<b>Code</b>	<b>Title</b>	<b>Hours</b>
Complete four courses (for at least 15 credits) outside the School of Nursing or NRSRG courses not used to fulfill requirements above.		15
<b>NUPATH REQUIREMENTS SATISFIED</b>		
<ul style="list-style-type: none"> <li>Analyzing/Using Data (AD)</li> <li>Capstone Experience (CE)</li> <li>Engaging Difference/Diversity (DD)</li> <li>Exploring Creative Expression and Innovation (EI)</li> <li>Ethical Reasoning (ER)</li> <li>Conducting Formal/Quantitative Reasoning (FQ)</li> <li>Interpreting Culture (IC)</li> <li>Natural/Designed World (ND)</li> <li>Society/Institutions (SI)</li> </ul>		

- Writing-Intensive in the Major (WI)
- Advanced Writing in the Disciplines (WD)

Integrating Knowledge and Skills Through Experience (EX) is satisfied through co-op.

Students are responsible for using the general electives in this program to complete NUPath requirements not satisfied by required courses in this program.

### Academic Standards for Nursing Majors

Minimum passing grade standards exist for both professional courses, which are required courses taught within the major/college, and professional prerequisite courses and are outlined before the nursing requirements above.

Courses in the above-listed professional or professional prerequisite subjects that are taken as electives are exempt from the C or better rule, and the university's minimum satisfactory grade will be accepted.

For all other courses, the university's minimum passing grade for the course will be accepted.

### PROGRESSION WITHIN NURSING

- First-year students must complete at least 27 semester hours and meet all major prerequisite course requirements to progress to sophomore status. First-year students who earn fewer than the semester hours stipulated by the curriculum plan for their major must make up the difference prior to graduation.
- To progress into the subsequent year of professional courses, students must have completed all professional prerequisites with the required minimum passing grade as noted in the program requirements.
- Students must successfully complete all courses, as stipulated by their approved curriculum plan, with a grade of C or better in order to progress into the next professional course.
- Students who either fail or withdraw from a professional course will need to successfully remediate that course before continuing in their approved curriculum plan.
- Students who incur an incomplete grade in a prerequisite course must obtain approval from their academic advisor, upon consultation with the department faculty and, when appropriate, the School of Nursing Academic Standing Committee, prior to progression into the subsequent course(s).
- Students may not change their graduation date more than twice.

### Program Requirements

133 total semester hours required

### Plan of Study

#### Sample Plans of Study

#### Four Years, Two Co-ops in Spring/Summer 1

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSG 1000	1	PSYC 1101 (ND) (SI)	4	NUterm (Optional)		Vacation	
Select ONE of the following CHEM course sequences:	5	BIOL 2219 and BIOL 2220	5	Elective	4		

CHEM 1101 and CHEM 1102 and CHEM 1103	5	BIOL 2221 and BIOL 2222	4	Elective	4		
CHEM 116 and CHEM 116 and CHEM 116	4	ENGW 1111	4				
BIOL 2217 and BIOL 2218	5						
MATH 1215, 1241, 1242, 1251, 1252, or 1341	4						
HSCI 1105	4						
	19		18		8		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSG 2000	1	Co-op 1		Co-op 1		NRSG 3302 and NRSG 3303	5
NRSG 2210 (DD) (EI)	3					PSYC 3404	4
NRSG 2220 and NRSG 2221	4						
NRSG 2350	6						
Elective	4						
	18		0		0		9

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSG 3320 and NRSG 3321	6	Co-op 2		Co-op 2		NRSG 2150, HLTH 2100, or PHIL 1165 (ER)	4
NRSG 3323 and NRSG 3324	2					NRSG 5220 (ND) (WI)	4
NRSG 3400 and NRSG 3401	5						
NRSG 5120 (AD) (FQ)	3						
Elective	3						
	19		0		0		8

##### Year 4

Fall	Hours	Spring	Hours
SOCL 1101 (SI)	4	NRSG 4604 and NRSG 4605 (For NRSG 4604 (IC), For NRSG 4605 (EX))	5
NRSG 4502 and NRSG 4503	6	NRSG 4610 or 4611 (CE) (WI)	4

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NRSG 3420 and NRSG 3421	6 NRSG 4995 and NRSG 4996	5	
	ENGW 3306 (WD)	4	
		16	18

Total Hours: 133

**Four Years, Two Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
NRSG 1000	1 PSYC 1101 (ND) (SI)	4 NUterm (Optional)	Vacation	
BIOL 2217 and BIOL 2218	5 BIOL 2219 and BIOL 2220	5 Elective	4	
Select ONE of the following CHEM course sequences:	5 BIOL 2221 and BIOL 2222	5 Elective	4	
CHEM 110 and CHEM 110 and CHEM 110	ENGW 1111	4		
CHEM 1161 and CHEM 1162 and CHEM 1163				
HSCI 1105	4			
MATH 1215, 1241, 1242, 1251, 1252, or 1341	4			
		19	18	8
				0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
NRSG 2210 (DD) (EI)	3 NRSG 2000	1 NRSG 3400 and NRSG 3401	5 Co-op 1	0
NRSG 2220 and NRSG 2221	4 NRSG 3302 and NRSG 3303	5 PSYC 3404	4	
NRSG 2350	6 NRSG 3320 and NRSG 3321	6		
Elective	4 NRSG 3323 and NRSG 3324	2		
	SOCL 1101 (SI)	4		
		17	18	9
				0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op 1	NRSG 3420 and NRSG 3421	6 ENGW 3306 (WD)	4 Co-op 2	

NRSG 4502 and NRSG 4503	6 NRSG 4604 and NRSG 4605 (For NRSG 4604 (IC), For NRSG 4605 (EX))	5	
NRSG 5120 (AD) (FQ)		3	
Elective		3	
		0	18
			9
			0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
Co-op 2	NRSG 2150, HLTH 2100, or PHIL 1165 (ER)	4	
	NRSG 4610 or 4611 (CE) (WI)	4	
	NRSG 4995 and NRSG 4996	5	
	NRSG 5220 (ND) (WI)	4	
		0	17
			0

Total Hours: 133

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
NRSG 1000	1 ENGW 1111	4 NUterm (Optional)	Vacation	0
Select ONE of the following CHEM course sequences:	5 BIOL 2219 and BIOL 2220	5		
CHEM 1101 and CHEM 1102 and CHEM 1103	BIOL 2221 and BIOL 2222	5		
CHEM 116 and CHEM 116 and CHEM 116	PSYC 1101 (ND) (SI)	4		
BIOL 2217 and BIOL 2218		5		
HSCI 1105	4			
MATH 1215, 1241, 1242, 1251, 1252, or 1341	4			
		19	18	0
				0

## Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
NRSG 2210 (EI) (DD)	3 NRSG 2000	1 NRSG 3400 and NRSG 3401	5 Co-op 1	0
NRSG 2220 and NRSG 2221	4 NRSG 3302 and NRSG 3303	5 PSYC 3404	4	
NRSG 2350	6 NRSG 3320 and NRSG 3321	6		
Elective	4 NRSG 3323 and NRSG 3324	2		
	SOCL 1101 (SI)	4		
	17	18	9	0

## Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op 1	0 ENGW 3306	4 Vacation	Co-op 2	0
	NRSG 3420 and NRSG 3421	6		
	NRSG 4604 and NRSG 4605 (For NRSG 4604 (IC), For NRSG 4605 (EX))	5		
	NRSG 5120 (FQ) (AD)	3		
	0	18	0	0

## Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op 2	NRSG 4502 and NRSG 4503	6 Vacation	Co-op 3	
	Elective	4		
	NRSG 5220 (ND) (WI)	4		
	Elective	3		
	0	17	0	0

## Year 5

Fall	Hours Spring	Hours
Co-op 3	NRSG 2150, HLTH 2100, or PHIL 1165 (ER)	4
	NRSG 4610 or 4611 (CE) (WI)	4
	NRSG 4995 and NRSG 4996	5
	Elective	4
	0	17

Total Hours: 133

## Five Years, Three Co-ops in Spring/Summer 1

## Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
NRSG 1000	1 ENGW 1111	4 NUterm (Optional)	0 Vacation	0
BIOL 2217 and BIOL 2218	5 BIOL 2219 and BIOL 2220	5		
Select ONE of the following CHEM course sequences:	5 BIOL 2221 and BIOL 2222	5		
CHEM 110 and CHEM 110 and CHEM 110	PSYC 1101 (ND) (SI)	4		
CHEM 1161 and CHEM 1162 and CHEM 1163				
MATH 1215, 1241, 1242, 1251, 1252, or 1341	4			
HSCI 1105	4			
	19	18	0	0

## Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
NRSG 2000	1 Co-op 1	0 Co-op 1	0 NRSG 3302 and NRSG 3303	5
NRSG 2210 (EI) (DD)	3		PSYC 3404	4
NRSG 2220 and NRSG 2221	4			
NRSG 2350	6			
Elective	4			
	18	0	0	9

## Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
NRSG 3320 and NRSG 3321	6 Co-op 2	0 Co-op 2	0 Vacation	
NRSG 3323 and NRSG 3324	2			
NRSG 3400 and NRSG 3401	5			
SOCL 1101 (SI)	4			
	17	0	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3306	4 Co-op 3	0 Co-op 3	0 Vacation	
NRSG 3420 and NRSG 3421	6			
NRSG 5120 (FQ) (AD)	3			
NRSG 2150, HLTH 2100, or PHIL 1165 (ER)	4			
	17	0	0	0

**Year 5**

Fall	Hours Spring	Hours
NRSG 4502 and NRSG 4503	6 NRSG 4604 and NRSG 4605 (For NRSG 4604 (IC), For NRSG 4605 (EX))	5
Elective	4 NRSG 4610 or 4611 (WI) (CE)	4
NRSG 5220 (ND) (WI)	4 NRSG 4995 and NRSG 4996	5
Elective	3 Elective	4
	17	18

Total Hours: 133

**Four-Semester Accelerated Plan with No Co-ops**

Code	Title	Hours
<b>Semester 1</b>		
NRSG 2350	Integrated Pathophysiology and Pharmaceutical Interventions for Nursing Practice	6
NRSG 2220	Health Assessment and Fundamental Nursing Skills	3
NRSG 2221	Lab for NRSG 2220	1
NRSG 3302	Nursing with Women and Families	3
NRSG 3303	Clinical for NRSG 3302	2
NRSG 5120	Statistics for Health Science	3
<b>Semester 2</b>		
NRSG 2210	Influences on Health and Illness: A Nursing Perspective	3
NRSG 3320	Nursing Care of Adults 1	4
NRSG 3321	Clinical for NRSG 3320	2
NRSG 3323	Advanced Assessment and Interventions	1
NRSG 3324	Lab for NRSG 3323	1
NRSG 3400	Nursing and the Promotion of Mental Health	3
NRSG 3401	Clinical for NRSG 3400	2
ENGW 3306	Advanced Writing in the Health Professions	4
<b>Semester 3</b>		

NRSG 3420	Nursing Care of Adults 2	4
NRSG 3421	Clinical for NRSG 3420	2
NRSG 4502	Nursing Care of the Child	4
NRSG 4503	Clinical for NRSG 4502	2
NRSG 5220	Introduction to Research Methods and Application for Healthcare	4
<b>Semester 4</b>		
NRSG 2150	Ethical Healthcare: Genetics and Genomics	4
NRSG 4604	Public Health Community Nursing	3
NRSG 4605	Clinical for NRSG 4604	2
NRSG 4610	Managing and Leading in Healthcare	4
NRSG 4995	Comprehensive Nursing Practicum	3
NRSG 4996	Clinical for NRSG 4995	2

**Nursing, BSN—Accelerated Program for Second-Degree Students**

The Accelerated Bachelor of Science in Nursing (ABSN) hybrid program, which comprises 16 months of full-time study, combines online didactic coursework and hands-on learning involving both clinical placements and experience in the skills laboratory. The program offers students an opportunity to work closely with nursing faculty to master the core skills necessary to excel in their nursing career. The program also seeks to prepare students to successfully take and pass the National Council Licensure Examination for Registered Nurses (NCLEX-RN) and earn an RN license.

The ABSN curriculum includes 67 credits of undergraduate courses with online learning modules incorporating lectures and learning activities. The majority of these credits are completed online through an e-learning platform that allows students to listen to lectures, submit assignments, complete interactive learning modules, and engage in discussion with faculty and classmates.

The Bouvé College of Health Sciences School of Nursing has an extensive network of clinical affiliations at health centers, major teaching hospitals, and community hospitals that allow students to engage in clinical experiences covering a wide range of nursing specialties that include adult health, maternal-newborn, pediatrics, behavioral and mental health, acute care, and public health.

The baccalaureate degree program in nursing at Northeastern University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791, and is also approved by the Board of Registration in Nursing of the Commonwealth of Massachusetts and by the North Carolina Board of Nursing. Accreditation and approval indicate that the program meets educational standards for faculty, curriculum design, student quality, and overall university support.

The school subscribes to the standards established by the American Association of Colleges of Nursing (AACN), of which it is a member.

**Academic Standards for Nursing Majors****ACADEMIC DISMISSAL FROM MAJOR**

Students in the Bouvé College of Health Sciences will be dismissed from their major effective the following academic semester for any of the reasons noted below:

- Students who do not meet the required minimum grade in two professional courses, including labs and clinical, will be dismissed from the program. Only one professional course can be remediated.
- Remediation of a failed professional course is a requirement for progression in the program.
- Students who do not meet the minimum grade requirement within two attempts of the course will be dismissed from the program.

### ACADEMIC APPEALS

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Additional details about the process may be found in the Bouvé College of Health Sciences Academic Affairs Appeals Process (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/appeals-process/>) and in *Appeals Policies and Procedures* in the university Undergraduate Student Handbook (<http://www.northeastern.edu/osccr/code-of-student-conduct/>).

### Program Policies and Standards

Students are expected to adhere to the policies and standards of their program major to progress through their curriculum as planned. Students seeking any exceptions to the program policies and standards specified for their program major will be brought before the School of Nursing Academic Standing Committee to present their petitions.

Students are required to attend all scheduled nursing classes, clinical experiences, and clinical labs on campus and in clinical agencies. If the student fails to meet attendance requirements, the student will fail the associated class, clinical, and/or lab.

Students enrolled in the clinical courses will need access to a car to travel to assigned agencies. Students are responsible for their own transportation costs.

### CLINICAL REQUIREMENTS

Clinical settings require criminal background checks. Additionally, international students require curricular practical training (CPT) clearance to meet federal requirements for all clinical and co-op experiences.

All students must receive a health clearance from University Health and Counseling Services (UHCS). Health clearance is based on specific documentation of immunity from infectious disease and a physical examination (this may be done by the student's own healthcare provider). In addition, nursing students need a clinical clearance in order to participate in clinical courses. Clinical clearance, managed by the School of Nursing's Clinical Placement Office, includes verification of certification of Healthcare Provider cardiopulmonary resuscitation (CPR); recent negative tuberculosis screening (PPD); positive titers for MMR, varicella, and hepatitis B; vaccines including TDAP and influenza; and additional health screenings as may be required by the program. It is the responsibility of the student to stay current and to provide documentation required for clinical clearance throughout the entire nursing program.

Beginning six weeks prior to the start of a clinical course, students must show:

- Evidence of immunizations and health clearance by University Health and Counseling Services.
- Documentation of Healthcare Provider CPR certification.

- Completion of a Criminal Offender Record Information (CORI) background check to be eligible for clinical placement.
- Students will not be allowed to start the clinical course, and may be dropped from the clinical course, if these processes are not satisfactorily completed.

Students should refer to Clinical Course Requirements, Health Clearance Requirements for Clinical Rotations, and the Professional Conduct statement here (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/practicum-internship-policies/>) for additional details.

### CLINICAL WARNING

A nursing student may be placed on clinical warning, or fail the clinical course, at any time during the semester for the following reasons:

- Failing to meet the clinical objectives at a satisfactory level.
- Failing to demonstrate safe practice. Students may be removed from the clinical area, before completion of the clinical rotation, if the instructor determines that the student is unsafe. This will result in the student failing the clinical course.
- Failing to meet the attendance requirement.

#### Conditions

- Students on clinical warning must develop an academic plan with the clinical instructor to address clinical performance.
- Students will be expected to improve clinical performance by adhering to the plan.
- Failure to adhere to the terms of the plan will result in the student failing the course and being placed on academic probation. All conditions of academic probation will then apply.

#### Notification

- The clinical instructor will issue the student a clinical warning via the Faculty and Advisor Communication Tool (FACT) identifying the problem.
- The student and the instructor should then develop a plan together to address the deficiency.
- Copies of the warning will be forwarded to the program director and/or the assistant dean for undergraduate programs if needed.
- This is an administrative warning and will not be posted on the transcript.
- Satisfactory completion of the clinical experience component of the course will result in removal of the warning from the student's file.

### BLOOD-BORNE PATHOGEN EXPOSURE AND INJURY

Any student who sustains any kind of injury and/or exposure to blood-borne, respiratory, or other pathogens or hazardous materials while on a clinical rotation should seek immediate treatment. They must also immediately follow the procedures listed below:

#### Procedures

- Students must follow the affiliate site's protocol for exposure reporting, testing, counseling, and follow-up.
- Students can present their clinical accident insurance identification card to arrange billing at the site or a suitable nearby hospital or urgent care clinic. If students do not know a local provider, they can call the resource



number on their identification card for aid in finding a local provider

- Within **24 hours** of the accident, students must also inform their program's director of clinical education (or unit designee responsible for clinical placements) of the accident and submit, in writing, a description of the incident and injury or exposure using the BCHS Accident Report form, linked here (<https://northeastern.sharepoint.com/sites/BouveCurrentStudentResources/SitePages/Clinical-Accident-Report-Form.aspx>). *If a student is incapacitated and unable to file their own report within the 24-hour time frame, a NU faculty or staff person familiar with the incident may file on their behalf. The student should file their own report as soon as possible thereafter.*
- Submission of the Accident Report form will automatically notify:
  - The program's director of clinical education or clinical placement office (or unit designee responsible for clinical placements)
  - The program director and medical director (if applicable)
  - The department chair or school dean
  - BCHS dean's office
  - Office of Environmental Health and Safety
  - Risk Services
- If for any reason a student is not able to receive immediate medical treatment, there is the resource of postexposure counseling through the university's partner, OEHN (Occupational & Environmental Health Network). They can be reached at 1-866-360-8100. OEHN is open 24 hours a day, 7 days a week 365 days a year. OEHN will collect appropriate information and engage the doctor on call who can help to direct appropriate care depending on exposure and circumstances.

## Technical Standards for Admission, Academic Progression, and Graduation

The primary mission of the School of Nursing is to educate our students to provide evidence-based, culturally and linguistically competent, ethical healthcare that is high quality, safe, and accessible to diverse local, national, and global communities. Our programs are designed to prepare students to become leaders as nurse clinicians, educators, scholars, and researchers. The School of Nursing is also committed to achieving the goals of the university to become an outstanding national research, practice-oriented, student-centered, urban institution.

The goal of the School of Nursing is to prepare students to think critically and to practice nursing competently and compassionately in rapidly changing practice environments. All efforts are designed to build nursing knowledge, enhance nursing practice and patient safety, foster professional integrity, and ultimately improve the health outcomes of patients, families, and communities across the continuum of care.

In addition to classroom learning, students' clinical education experiences occur in settings, like hospitals, in which patient safety is the priority. For this reason, students who, upon enrollment in any of the nursing programs, seek accommodations from the Disability Resource Center (DRC) at NU must also request an assessment of accommodations that would be needed for clinical education.

Certain functional abilities are essential for the delivery of safe, effective nursing care during clinical education activities. Therefore, the School

of Nursing has determined that certain technical standards are requisite for admission, progression, and graduation from the nursing programs. An individual must be able to independently, with or without reasonable accommodation, meet the following technical standards:

1. General abilities (p. 600)
2. Observational ability (p. 600)
3. Communication ability (p. 600)
4. Motor ability (p. 600)
5. Intellectual, conceptual, and quantitative abilities (p. 600)
6. Behavioral and social attributes (p. 601)
7. Ability to manage stressful situations (p. 601)

Individuals unable to meet these technical standards, with or without reasonable accommodation, will not be able to complete the program.

### **General Abilities**

The student is expected to possess functional use of the senses of vision, touch, hearing, and smell so that data received by the senses may be integrated, analyzed, and synthesized in a consistent and accurate manner. A student must be able to respond promptly to urgent situations that may occur during clinical training activities and must not hinder the ability of other members of the healthcare team to provide prompt treatment and care to patients.

### **Observational Ability**

The student must have sufficient capacity to make accurate visual observations and interpret them in the context of laboratory studies, medication administration, and patient care activities. In addition, the student must be able to document these observations and maintain accurate records.

### **Communication Ability**

The student must communicate both verbally and nonverbally in order to elicit information and to convey that information to others. Each student must have the ability to read and write accurately and comprehensively in English. The student must be able to thoroughly comprehend and fluently speak the English language so as to facilitate communication with patients, families, professionals in healthcare settings, instructors, and other students. The student must also be able to present information in a professional, logical manner and to provide counseling and instruction in order to effectively care for patients and their families.

### **Motor Ability**

The student must be able to perform gross and fine motor movements with sufficient coordination needed to perform complete physical examinations utilizing the techniques of inspection, palpation, percussion, auscultation, and other diagnostic maneuvers. A student must develop the skills needed to perform or assist with procedures, treatments, administration of medication, and the management and operation of diagnostic and therapeutic medical equipment. The student must possess the physical and mental stamina to meet the demands associated with extended periods of sitting, standing, moving, and physical exertion required for satisfactory and safe performance in the clinical and classroom settings.

### **Intellectual, Conceptual, and Quantitative Abilities**

The student must be able to develop and refine critical thinking skills that are essential to nursing practice. Critical thinking involves the abilities to measure, calculate, reason,

analyze, and synthesize objective and subjective data, and to make decisions, often in a time-urgent environment, that reflect consistent and thoughtful deliberation and sound clinical judgment.

### **Behavioral and Social Attributes**

Compassion, integrity, motivation, effective interpersonal skills, and concern for others are personal attributes required of those in the nursing programs. The student must be able to work under supervision of a clinical instructor or preceptor; this is essential to ensure patient safety. The student must exercise good judgment and promptly complete all responsibilities in the classroom and clinical settings. The ability to establish culturally competent relationships with individuals, families, and groups, and to respond effectively to patients who have different intellectual capacities, is critical to nursing practice.

### **Ability to Manage Stressful Situations**

The student must be able to adapt to and function effectively in stressful situations in both the classroom and clinical settings, including emergency situations. These stressors include personal, patient care/family, faculty/peer, and/or program-related issues.

### **Disability and Special Needs**

Students with special needs are encouraged to contact the Disability Resource Center (<https://drc.sites.northeastern.edu/>) (DRC) to register and request services. Students must notify the instructor at the beginning of the semester if they plan to use DRC services throughout the course. The staff in that office is available for assistance.

## **State Board Nursing Examination**

In Massachusetts, and several other states, the registering board requires that graduates taking the National Council Licensing Examination (NCLEX-RN) meet standards of "good moral character" (GMC). Students may review the GMC requirement specified at Massachusetts General Laws Chapter 112, sections 74, 74A, and 76; Licensure Policy No. 00-01 under "Rules & Regulations" on the Massachusetts BORN website.

Please visit Bouvé College of Health Sciences Program Learning Outcomes for the specific student learning outcomes for this program.

## **Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, clinicals, or courses where specified beyond specific college and major requirements to satisfy graduation credit requirements.

Students must successfully complete all courses with a grade of C or better.

Code	Title	Hours
<b>SEMESTER 1</b>		
NRSG 2001	Foundations of Professional Nursing Practice	2
NRSG 2220 and NRSG 2221	Health Assessment and Fundamental Nursing Skills and Lab for NRSG 2220	4
NRSG 2350	Integrated Pathophysiology and Pharmaceutical Interventions for Nursing Practice	6

NRSG 3302 and NRSG 3303	Nursing with Women and Families and Clinical for NRSG 3302	5
<b>SEMESTER 2</b>		
NRSG 2210	Influences on Health and Illness: A Nursing Perspective	3
NRSG 3320 and NRSG 3321	Nursing Care of Adults 1 and Clinical for NRSG 3320	6
NRSG 3400 and NRSG 3401	Nursing and the Promotion of Mental Health and Clinical for NRSG 3400	5
NRSG 3323 and NRSG 3324	Advanced Assessment and Interventions and Lab for NRSG 3323	2
<b>SEMESTER 3</b>		
NRSG 3420 and NRSG 3421	Nursing Care of Adults 2 and Clinical for NRSG 3420	6
NRSG 4502 and NRSG 4503	Nursing Care of the Child and Clinical for NRSG 4502	6
NRSG 5220	Introduction to Research Methods and Application for Healthcare	4
<b>SEMESTER 4</b>		
NRSG 4604 and NRSG 4605	Public Health Community Nursing and Clinical for NRSG 4604	5
NRSG 4610	Managing and Leading in Healthcare	4
NRSG 4995 and NRSG 4996	Comprehensive Nursing Practicum and Clinical for NRSG 4995	5
NRSG 2150	Ethical Healthcare: Genetics and Genomics	4

### **Progression within Nursing**

- Students who either fail or withdraw from a professional course (any course with a prefix of NRSG, HLTH) in nursing will need to successfully remediate that course before continuing in their approved curriculum plan.
- Students who incur an incomplete grade in a prerequisite course must obtain approval from their academic advisor, upon consultation with the department faculty and, when appropriate, the School of Nursing Academic Standing Committee, prior to progression into the subsequent course(s).
- Students may not change their graduation date more than twice.

## **Program Requirement**

67 total semester hours required

### **Wellness Studies, Minor**

The wellness studies minor provides a holistic approach to the study of the human wellness experience. Offering interdisciplinary enrollment, this minor includes foundational wellness courses, as well as a range of interdisciplinary electives that embrace evidence-based science and education vis-à-vis selected domains of wellness. A cross-cultural, life span approach to individual and population wellness and well-being is offered as an experiential learning initiative.

As Northeastern University guides students in the ways of self-managing (life-long learning), an understanding of the nature and practices of wellness may inform deliberative decision-making processes that lead to the attainment of wellness-informed lifestyle choices. Over time, these choices may inform the design and crafting of a life well lived.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Courses

Code	Title	Hours
NRSG 1205	Wellness	4
or NRSG 1206	Wellness Abroad	
NRSG 5000	Advanced Perspectives in Wellness	4

## Electives

Code	Title	Hours
Complete two of the following:		
COMM 2135	Sex and Interpersonal Communication	7-8
COMM 2555	Games for Change	
COMM 3230	Interpersonal Communication	
ENGL 2770	Writing to Heal	
EXSC 1120	Introduction to Exercise, Fitness, and Health	
HLTH 2302	Alternative Medicine	
HLTH 5002	Mindfulness: Theory and Practice	
or NRSG 2206	Global Perspectives in the Science and Practice of Mindfulness	
HSCI 1105	Human Nutrition	
HSCI 2350	Advanced Nutrition in Health and Disease	
SOCL 1246	Environment and Society	
WMNS 2800	Sexual Orientation and Gender Expression	

## GPA Requirement

Minimum 2.000 GPA required in all minor courses

## Credit Requirement

A minimum of 15 hours is required.

## School of Pharmacy and Pharmaceutical Sciences

Website (<http://www.northeastern.edu/bouve/pharmacy/>)

**Tatiana K. Bronich, PhD**

Dean

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The School of Pharmacy and Pharmaceutical Sciences is dedicated to excellence in pharmacy-related education, research, and service, including the provision of patient care. The school seeks to prepare students with knowledge, skills, and values for careers in pharmacy practice and the pharmaceutical sciences. School of Pharmacy and Pharmaceutical Sciences programs promote intellectual growth, professionalism, and lifelong learning. Through the generation and dissemination of new knowledge and through scholarship and community service, the school contributes to improved individual and population health.

The school offers two programs for undergraduate students: the pharmacy program, leading to the Doctor of Pharmacy degree, and the Bachelor of Science in Pharmaceutical Sciences program. These programs allow students interested in pharmacy practice or the pharmaceutical sciences to choose the pathway most suited to their professional goals. The Doctor of Pharmacy degree is the entry-level professional degree earned by pharmacists. The Bachelor of Science in Pharmaceutical Sciences degree is designed for students interested in research in the area of drug design and delivery, pharmacology, pharmaceuticals, or interdisciplinary research collaborations. The bachelor's degree does not qualify a graduate for the pharmacist licensure exam.

## Programs

### Bachelor of Science (BS)

- Pharmaceutical Sciences (p. 610)
- Pharmacy Studies (p. 607)

### Doctor of Pharmacy (PharmD)

- Pharmacy (p. 602)

### Minor

- Health Sciences Entrepreneurship (p. 612)
- Pharmaceutical Sciences (p. 612)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 613)

## Pharmacy, PharmD

To earn the Doctor of Pharmacy degree (PharmD), students must complete four years of professional courses preceded by two years of pre-professional studies at Northeastern University. The PharmD fully integrates campus-based learning with experiential learning, including the university's signature cooperative education (co-op) program, to provide students with the knowledge, skills, and abilities necessary to succeed in the pharmacy profession. Our students promote and ensure the safe and effective use of drugs and provide medication therapy management services. In addition to preparing and dispensing prescribed medications, our students provide information to patients about medications and their uses; advise physicians, other prescribers, and other healthcare practitioners on medication selection, dosages, interactions, and adverse effects; and monitor patient responses to drug therapy.

Our students are well equipped to provide patient care services in a variety of settings. Most of our graduates work in community pharmacies or in healthcare facilities such as hospitals and ambulatory clinics. Additional practice opportunities exist in health maintenance organizations, private practice groups, long-term-care facilities, home healthcare, the Public Health Service, the armed services, and law enforcement and regulatory agencies such as the Federal Drug Administration (FDA) or Drug Enforcement Administration (DEA). Graduates may also find employment in drug development, marketing and research within the pharmaceutical industry, colleges of pharmacy, and professional association management. In addition, many of our graduates go on to pharmacy practice residencies, fellowships, and leading graduate programs.

Doctor of Pharmacy students are admitted with the expectation that by working with faculty, staff, and each other, they will develop the knowledge, skills, and attitudes necessary for academic and professional success. Students follow academic progression plans for their respective years of graduation. Any deviation from the prescribed curriculum will

require faculty/staff permission and an approved plan of study from the School of Pharmacy Academic Standing Committee.

The curriculum includes both Introductory Pharmacy Practice Experiences (IPPEs, fulfilled by cooperative education) and Advanced Pharmacy Practice Experiences (APPEs). These pharmacy practice experiences are provided primarily under the direct supervision of qualified pharmacist preceptors and occasionally with other qualified healthcare professionals. The school is affiliated with many world-class practice sites throughout the United States, providing students with access to experienced clinicians and scholars. Although every effort is made to accommodate individual circumstances and requests, students should be prepared to travel outside the Boston area to complete some of their pharmacy practice experiences. Availability of a car may be required, as some sites are not accessible by public transportation. All expenses associated with pharmacy practice experiences, including travel and housing, are the responsibility of the student.

IPPEs are competitive placements that are based on job availability in a geographic region. The placements are facilitated by School of Pharmacy cooperative education coordinators. Students are required to earn satisfactory (S) grades on one IPPE in a community setting and on one IPPE in an institutional/hospital practice setting.

APPE placements are provided based on site/preceptor availability and the final approval of the School of Pharmacy Office of Experiential Education (OEE). Students may be able to petition the OEE for special arrangement APPEs; however, availability for such requests is limited.

To be eligible for a Doctor of Pharmacy degree, a student must successfully complete all courses in the curriculum including the IPPEs (co-op) and APPEs; meet the academic progression standards of the program; meet the technical standards of the program; and satisfy all other requirements as stated. The pharmacy program is fully accredited by the Accreditation Council for Pharmacy Education (ACPE) (<https://www.acpe-accredit.org/>) and adheres to the standards established by ACPE.

Pharmacy graduates must meet specific requirements to qualify for professional licensure in the state where they plan to practice as a registered pharmacist. These requirements include graduating from an accredited school of pharmacy, passing national and state board examinations, and completing internship hours. The internship is a period of practical experience conducted under the supervision of a registered pharmacist. Massachusetts requires 1,500 internship hours, all of which are satisfied through completion of IPPEs (co-op) and APPEs.

Professional and/or legal exigencies arise from time to time, which may necessitate changes in a pharmacy course, progression, and/or graduation requirements. Students should review their status with academic advisors on a timely basis and refer to current publications for updated information.

### PROGRAM PROGRESSION

To progress into the first professional year of the PharmD program (P1), students must demonstrate good verbal and written communication skills, understanding of the pharmacy profession, and commitment to patient care through an interview process based on criteria set by the School of Pharmacy.

All students entering P1 in fall 2022 and beyond are required to complete the PharmCAS application. The PharmCAS application process is considered a formality in the progression process and will not jeopardize the student's preferred or guaranteed enrollment status.

### Requirements for the PharmD Pharmacy Practice Experiences (PPEs)

Requirements for the successful completion of the PharmD PPEs include:

1. Evidence of health clearance from University Health and Counseling Services before placements at any PPE site.
2. Satisfactory completion of any additional site-specific requirements including, but not limited to, criminal record information (CORI), urine drug screens, and verification of immunization status. All fees associated with these requirements are the responsibility of the student. Please see below for management of positive urine drug screens.
3. Adherence to the school's code of professional conduct and university's code of conduct policies while off-campus.
4. Maintenance of an active pharmacy intern license in every state where the student completes an experience.
5. Compliance with site-specific requirements (via site descriptions) and completion of site requests within specified deadlines. Students who fail to complete these requirements as directed will likely incur grade penalties and may experience a delay of graduation or dismissal from the pharmacy program.

#### **Management of Positive Urine Drug Screens**

If the student learns the urine drug screen (test #1) is positive, the student will notify the OEE ([pharmacyoee@northeastern.edu](mailto:pharmacyoee@northeastern.edu)) and immediately complete a second urine screen (test #2). A professional concern form will be completed based on test #1 results.

- If urine screen test #2 is negative (-), the student will be allowed to continue the PPEs. However, the student will be asked to complete a random urine screen (test #3) at a time determined by the OEE. If this urine screen (test #3) is positive (+), the student will be administratively removed from the active PPEs and graduation may be delayed. A second professional concern form will be completed, based on test #3 results. The return to PPEs will occur once a repeat urine test is negative. That repeat negative test will be followed up by a random urine screen at a time determined by the OEE.
- If the urine screen (test #2) is positive (+), the student will be administratively removed from the PPEs and graduation may be delayed. The return to PPEs will occur once a repeat urine screen is negative. That negative screen will be followed up by a random urine screen at a time determined by the OEE. A second professional concern form will be completed based on a positive test #3 result.

#### **PROGRAM POLICIES**

Students are expected to adhere to the policies and standards of their program major, as stated, to progress through their curriculum as planned. Students seeking any exceptions to the program policies and standards specified for their program major must present a petition before the School of Pharmacy Academic Standing Committee.

Given programmatic requirements, coupled with concerns over the loss of therapeutic knowledge, requests for a General Leave of Absence (p. 32), other than Medical or Emergency Leave of Absence:

- Must comply with all stated Northeastern University general policies, regardless of the academic year.
- May be made at any time period during the P1 or P2 years.
- During the P3 academic year, any request for a general leave must be made no later than February 1 of the given academic year. Requests after this date will not be permitted.
- During the P4 academic year, requests for a general leave cannot be made at any time.

**SOP PROFESSIONAL CODE OF CONDUCT**

Pre-professional and professional year students are expected to adhere to the SOP - Professional Code of Conduct (<https://bouve.northeastern.edu/assets/uploads/sites/5/2014/08/sop-code-professional-conduct.pdf>).

**TECHNICAL STANDARDS FOR THE DOCTOR OF PHARMACY PROGRAM**

The PharmD program at Northeastern University is a rigorous and challenging academic program that requires students to possess specific characteristics and abilities within the cognitive, affective, and psychomotor domains, referred to here as technical standards. To successfully progress in and ultimately complete the didactic, laboratory, and experiential components of the PharmD program, students must meet the standards described below.

***Intellectual Abilities***

Students must have well-developed problem-solving and critical-thinking skills. Cognitive function must be appropriate to integrate, evaluate, and apply information gained through measurement, analysis, calculation, and reasoning. Students must have the capacity to learn efficiently in classroom, laboratory, small group and experiential settings, and through independent study. Students are required to demonstrate the ability to integrate course content knowledge with clinical practice applications to optimize medication therapy management.

***Communication Skills***

Students must be able to communicate effectively with colleagues, professors, patients, families, and healthcare providers. This includes efficiently comprehending, speaking, reading, and writing in English. Students must be able to process and use appropriate nonverbal cues and be proficient in the use of electronic communication media.

***Behavioral and Social Attributes***

Students must demonstrate professionalism, maturity, integrity, honesty, compassion, and respect when relating to others. Students must have sufficient mental and emotional health to complete work and responsibilities using good judgment. Students must be able to tolerate and adapt to stressful workloads and situations and modify behavior based on constructive criticism. Students must be able to function in accordance with the legal, ethical, and professional standards of practice.

***Observation and Motor Skills***

Students must have functional use of visual, auditory, and tactile senses. Students must be able to observe and perform experiments, physical assessments, patient interviews, and medication order processing. Students must be able to distinguish physical characteristics of medications by inspection. Students must have coordination of gross and fine muscular movements sufficient to perform pharmacy-related tasks including compounding and dispensing medications, administering medications, and using computers and other technology necessary for learning and professional practice

**ACADEMIC DISMISSAL FROM MAJOR**

PharmD students in the Bouvé College of Health Sciences will be dismissed from their major effective the following academic semester for any of the reasons noted below:

- Failure to earn a grade of C or better in three professional courses, regardless of remediation. Within the PharmD program, each specific professional course (with separate registration number) will be counted as a separate failure even if content is related.
- Failure to earn the minimum required grade in the same course twice.
- Failure to maintain a GPA of 3.000 after two semesters of probation.
- The expected graduation date may not change more than twice.

The PharmD program monitors and promotes the development of professional behaviors in its students to ensure appropriate professionalism in the classroom, local and global communities, and clinical settings. Breach of adherence to these standards may result in dismissal from the program.

**ACADEMIC APPEALS**

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Refer to the Bouvé College of Health Sciences Academic Affairs Appeals Process and the Northeastern University Appeals Policies and Procedures.

**PROGRESSION TO THE 4TH PROFESSIONAL YEAR (P4) OF THE PHARMD PROGRAM**

Students enrolled in the PharmD program will be awarded a Bachelor of Science in Pharmacy Studies after successful completion of all didactic and laboratory courses in semesters 1 through 13 of the pharmacy curriculum. To earn the PharmD degree, students must complete an additional 36 semester hours of APPEs with an overall GPA of 3.000 or higher. The PharmD degree is required to pursue licensure or registration as a pharmacist; graduates with the Bachelor of Science in Pharmacy Studies degree only are not eligible for pharmacist licensure.

**PROGRAM STUDENT LEARNING OUTCOMES**

Please visit Bouvé College Learning Outcomes for the specific student learning outcomes for this program.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

Some NUpath requirements are not explicitly satisfied by required courses. Students are responsible for satisfying these requirements with an elective. Students who incur an incomplete grade in a prerequisite course may not progress into the subsequent courses(s). Any exceptions will be determined by protocols established by the program, after consultation with the student's academic advisor.

Code	Title	Hours
<b>SEMESTER 1</b>		
PHMD 1000	College: An Introduction	1
<b>SEMESTER 2</b>		
PHMD 1001	Introduction to the Profession of Pharmacy	1
<b>SEMESTER 3</b>		
PHSC 2301 and PHSC 2302	Human Physiology 1 and Human Anatomy Lab	4
<b>SEMESTER 4</b>		
PHMD 1201 and PHMD 1202	Introduction to Pharmacy Practice and Lab for PHMD 1201	3

PHSC 2303 and PHSC 2304	Human Physiology 2 and Human Physiology Lab	4
<b>SEMESTER 5</b>		
COOP 3945	Co-op Work Experience <sup>1</sup>	0
<b>SEMESTER 6</b>		
PHMD 2350	Healthcare Systems	3
PHSC 2320	Biochemistry	4
PHSC 4501	Pharmacology/Medicinal Chemistry 1	5
PHSC 3411	Pharmaceutics 1	4
<b>SEMESTER 7</b>		
COOP 3945	Co-op Work Experience <sup>1</sup>	0
<b>SEMESTER 8</b>		
PHMD 2310 and PHMD 2311	Professional Communication in Pharmacy Practice and Lab for PHMD 2310	2.5
PHMD 5250	Pharmacy Care Management	4
PHSC 4502	Pharmacology/Medicinal Chemistry 2	5
PHSC 3412	Pharmaceutics 2	4
PHSC 3419	Pharmaceutics Laboratory	1
<b>SEMESTER 9</b>		
COOP 3945	Co-op Work Experience <sup>1</sup>	0
<b>SEMESTER 10</b>		
PHSC 3430	Pharmacokinetics and Biopharmaceutics	3
PHSC 2330	Immunology	3
PHMD 4611	Comprehensive Disease Management 1	6
PHMD 4612	Comprehensive Disease Management 1 Seminar	1
PHMD 3450	Research Methodology and Biostatistics	3
<b>SEMESTER 11, 12, or 13</b>		
PHMD 5600	Pharmacy Capstone	4
<b>SEMESTER 11</b>		
PHMD 5330	Jurisprudence	3
PHSC 5360	Anti-Infectives	4
PHMD 4621	Comprehensive Disease Management 2	6
PHMD 4622	Comprehensive Disease Management 2 Seminar	1
PHMD 4623	Comprehensive Disease Management 2 Skills Lab	0.5
<b>SEMESTER 12</b>		
PHMD 5560	Applied Drug Information	2
PHMD 4631	Comprehensive Disease Management 3	6
PHMD 4632	Comprehensive Disease Management 3 Seminar	1
PHMD 4633	Comprehensive Disease Management 3 Skills Lab	0.5
<b>SEMESTER 13</b>		
PHMD 4641	Comprehensive Disease Management 4	6
PHMD 4642	Comprehensive Disease Management 4 Seminar	1
PHMD 4643	Comprehensive Disease Management 4 Skills Lab	0.5
PHMD 5270	Economic Evaluation of Pharmaceuticals and Pharmacy Practice	2

PHMD 5450	Advanced Pharmacy Practice Experience Preparatory Seminar	1
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*Students are eligible to begin Advance Pharmacy Practice Experiences (APPEs) following successful completion of didactic coursework. Completing didactic coursework during P4 year is prohibited.<sup>2</sup>*

<sup>1</sup> For pharmacy students, an unsatisfactory grade (U) in a co-op will be counted as a professional course deficiency.

<sup>2</sup> After completion of Semester 13, students who meet program requirements will earn the Bachelor of Science in Pharmacy Studies degree and progress into the final professional year of the program. This consists of one year of graduate study and 36 hours of Advanced Pharmacy Practice Experience coursework. See the PharmD program in the Northeastern University Graduate Catalog (<http://catalog.northeastern.edu/graduate/health-sciences/pharmacy/pharmd/#programrequirements>) for details.

## Elective Requirements

Code	Title	Hours
<b>Open Electives</b>		
A minimum of 16 semester hours of open electives is required. Additional electives may be required to fulfill the total semester hours required for your program.		16
Students must use open electives to fulfill the NUpath Interpreting Culture and Exploring Creative Expression and Innovation attributes (if not already fulfilled through prior coursework).		
<b>Professional Electives</b>		
Complete at least 2 semester hours during the professional phase of the program (after semester 5) from the following:		2
CAEP 3480	Counseling Theories and Practice	
CAEP 5200	Motivational Interviewing in a Healthcare Setting	
CAEP 6203	Understanding Culture and Diversity	
HINF 5101	Introduction to Health Informatics and Health Information Systems	
HINF 5407	Business Application of Decision Support in Healthcare	
HINF 6205	Creation and Application of Medical Knowledge	
HINF 6404	Patient Engagement Informatics and Analytics	
HLTH 1510	Introduction to Healthcare Ethics	
HLTH 2100	Interprofessional Ethics for Individual and Population Health	
HLTH 2302	Alternative Medicine	
HLTH 5002	Mindfulness: Theory and Practice	
HLTH 5135	Developing an Interdisciplinary Approach to Health Management for Older Adults	
HLTH 5280	The (in)Visibility of (dis)Ability in Society	
HLTH 5730	Global Perspectives in Disability and Health	
HSCI 1105	Human Nutrition	
HSCI 2350	Advanced Nutrition in Health and Disease	

HSCI 2500	Public Health Nutrition in the Community
HSCI 5230	Clinical Nutrition Applications in Health and Disease
NRSG 1205	Wellness
PHMD 3600	Leadership and Advocacy in Health Professions
PHMD 4350	Exploring Academic Careers
PHMD 4581	Cancer Chemotherapy
PHMD 4585	Research Methods in Health Systems
PHMD 4700	Principles in General Medicine
PHMD 4890	Contemporary Issues in Geriatric Pharmacy
PHMD 4991	Research
PHMD 4992	Directed Study
PHMD 5223	Evidence-Based Medicine
PHMD 5575	Pharmaceutical Industry
PHMD 5675	Ambulatory Care Pharmacy Practice in Urban Health
PHMD 5900	Self-Care and Nonprescription Medications: A Team-Based Approach
PHSC 4991	Research
PHSC 4992	Directed Study
PHSC 5100	Concepts in Pharmaceutical Science
PHSC 5400	Principles of Drug Design
PHSC 5500	Repurposing Drugs for Cancer Immunotherapies
PHSC 5555	Pharmaceutical Toxicology
PHSC 6218	Biomedical Chemical Analysis
PHSC 6222	The Chemistry and Biology of Drugs of Abuse
PHSC 6224	Behavioral Pharmacology and Drug Discovery
PHSC 6290	Biophysical Methods in Drug Discovery
PHTH 1270	Introduction to Global Health
PHTH 5222	Health Advocacy
PHTH 5226	Strategic Management and Leadership in Healthcare
PHTH 5230	Global Health
PHTH 5232	Evaluating Healthcare Quality
PHTH 5234	Economic Perspectives on Health Policy
PHTH 5300	Project Management in Public Health
PHTH 5310	Budget Principles in Public Health
PHTH 5320	Grant Writing in Public Health
PHTH 6320	Qualitative Methods in Health and Illness
PMST 6250	Advanced Physical Pharmacy
PMST 6254	Advanced Drug Delivery Systems
SLPA 1101	Introduction to Communication Disorders
SLPA 1555	Communication Disorders in Movies

## Supporting Courses

Code	Title	Hours
<b>SEMESTER 1</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
PSYC 1101	Foundations of Psychology	4
ENGW 1111	First-Year Writing	4
<i>The university requires a minimum grade of C for First-Year Writing (ENGW 1111). The university's minimum passing grade for the course will be accepted for all other courses.</i>		
Elective		2-4
<b>SEMESTER 2</b>		
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161	General Chemistry for Science Majors	4
CHEM 1162	Lab for CHEM 1161	1
CHEM 1163	Recitation for CHEM 1161	0
MATH 1245	Calculus with Applications	4
NUpath Elective		4
<b>SEMESTER 3</b>		
PHYS 1149 and PHYS 1150	Physics for Pharmacy and Lab for PHYS 1149	5
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	5
NUpath Elective		4
<b>SEMESTER 4</b>		
CHEM 2313 and CHEM 2314 and CHEM 2320	Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313	5
ENGW 3306	Advanced Writing in the Health Professions	4

*The university requires a minimum grade of C for Advanced Writing in the Health Professions (ENGW 3306). The university's minimum passing grade for the course will be accepted for all other courses.*

## Program Requirement

To progress into the subsequent semester of professional courses, students must receive a grade of C or better in all PHMD and PHSC courses, as well as in any course completed to fulfill the professional elective requirement.

Pharmacy (PharmD-U) students must maintain an overall GPA of 3.000 or higher during the professional years (P1–P4) of the Doctor of Pharmacy program.

Pharmacy students with a cumulative GPA of 3.200 or less and/or science prerequisite GPA of 3.000 or less following the fall semester of the sophomore year may experience a delayed start as a registered pharmacy intern for the first co-op (IPPE), as the School of Pharmacy will not submit intern licensure documentation to the Massachusetts Board of registration in Pharmacy until satisfactory spring grades are verified.

204 total semester hours required

## Plan of Study

### Sample Plan of Study

Year 1					
Fall	Hours	Spring	Hours	Summer Full Semester	Hours
BIOL 1111		4 CHEM 1161		4 Vacation	
BIOL 1112		1 CHEM 1162		1	
PSYC 1101		4 CHEM 1163		0	
PHMD 1000		1 BIOL 1113		4	
ENGW 1111		4 BIOL 1114		1	
Elective	2-4	MATH 1245		4	
		PHMD 1001		1	
		Elective		4	
	16-18		19		0
Year 2					
Fall	Hours	Spring	Hours	Summer Full Semester	Hours
CHEM 2311		4 CHEM 2313		4 COOP 3945	0
CHEM 2312		1 CHEM 2314		1	
CHEM 2319		0 CHEM 2320		0	
PHSC 2301		3 ENGW 3306		4	
PHSC 2302		1 PHSC 2303		3	
PHYS 1149		4 PHSC 2304		1	
PHYS 1150		1 PHMD 1201		2.5	
Elective	4	PHMD 1202		0.5	
	18		16		0
Year 3					
Fall	Hours	Spring	Hours	Summer Full Semester	Hours
PHSC 2320		4 COOP 3945		0 PHMD 2310	2
PHSC 4501		5		PHMD 2311	0.5
PHMD 2350		3		PHMD 5250	4
PHSC 3411		4		PHSC 3412	4
				PHSC 3419	1
				PHSC 4502	5
	16		0		16.5
Year 4					
Fall	Hours	Spring	Hours	Summer Full Semester	Hours
COOP 3945		0 PHSC 3430		3 PHSC 5360	4
		PHSC 2330		3 PHMD 5330	3
		PHMD 3450		3 PHMD 4621	6
		PHMD 4611		6 PHMD 4622	1
		PHMD 4612		1 PHMD 4623	0.5
				Elective/ capstone	4
	0		16		18.5
Year 5					
Fall	Hours	Spring	Hours		
PHMD 4631		6 PHMD 4641		6	
PHMD 4632		1 PHMD 4642		1	
PHMD 4633		0.5 PHMD 4643		0.5	
PHMD 5560		2 PHMD 5270		2	

Elective/ capstone	2-4 PHMD 5450	1
Elective/ capstone	4 Elective/ capstone	2-4
	Elective/ capstone	4
	15.5-17.5	16.5-18.5

Total Hours: 168-174

### Pharmacy Studies, BS

Students enrolled in the Doctor of Pharmacy (PharmD) program will be awarded a Bachelor of Science in Pharmacy Studies after successful completion of all requirements in semesters 1 through 10 of the pharmacy curriculum (i.e., all requirements except for Advanced Pharmacy Practice Experiences). Pharmacy students must maintain an overall GPA of 3.000 or higher during the professional years (P1 – P4) of the Doctor of Pharmacy program. Please see the PharmD page (p. 602) in the Northeastern University Catalog for policies that apply to this program.

#### ACADEMIC APPEALS

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Refer to the Bouvé College of Health Sciences Academic Affairs Appeals Process and the Northeastern University Appeals Policies and Procedures.

#### PROGRAM STUDENT LEARNING OUTCOMES

See Bouvé College Learning Outcomes for the specific student learning outcomes for this program.

#### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

Some NUpath requirements are not explicitly satisfied by required courses. Students are responsible for satisfying these requirements with an elective.

Students who incur an incomplete grade in a prerequisite course may not progress into the subsequent courses(s). Any exceptions will be determined by protocols established by the program, after consultation with the student's academic advisor.

Code	Title	Hours
<b>SEMESTER 1</b>		
PHMD 1000	College: An Introduction	1
<b>SEMESTER 2</b>		
PHMD 1001	Introduction to the Profession of Pharmacy	1



**SEMESTER 3**

PHSC 2301 and PHSC 2302	Human Physiology 1 and Human Anatomy Lab	4
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**SEMESTER 4**

PHMD 1201 and PHMD 1202	Introduction to Pharmacy Practice and Lab for PHMD 1201	3
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PHSC 2303 and PHSC 2304	Human Physiology 2 and Human Physiology Lab	4
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**SEMESTER 5**Co-op/Introductory Pharmacy Practice Experience <sup>1</sup>**SEMESTER 6**

PHMD 2350	Healthcare Systems	3
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PHSC 2320	Biochemistry	4
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PHSC 4501	Pharmacology/Medicinal Chemistry 1	5
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PHSC 3411	Pharmaceutics 1	4
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**SEMESTER 7**Co-op/Introductory Pharmacy Practice Experience <sup>1</sup>**SEMESTER 8**

PHMD 2310 and PHMD 2311	Professional Communication in Pharmacy Practice and Lab for PHMD 2310	2.5
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PHMD 5250	Pharmacy Care Management	4
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PHSC 4502	Pharmacology/Medicinal Chemistry 2	5
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PHSC 3412	Pharmaceutics 2	4
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PHSC 3419	Pharmaceutics Laboratory	1
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**SEMESTER 9**Co-op/Introductory Pharmacy Practice Experience <sup>1</sup>**SEMESTER 10**

PHSC 3430	Pharmacokinetics and Biopharmaceutics	3
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PHSC 2330	Immunology	3
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PHMD 4611	Comprehensive Disease Management 1	6
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PHMD 4612	Comprehensive Disease Management 1 Seminar	1
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PHMD 3450	Research Methodology and Biostatistics	3
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**SEMESTER 11**

PHMD 5330	Jurisprudence	3
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PHSC 5360	Anti-Infectives	4
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PHMD 4621	Comprehensive Disease Management 2	6
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PHMD 4622	Comprehensive Disease Management 2 Seminar	1
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PHMD 4623	Comprehensive Disease Management 2 Skills Lab	0.5
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**SEMESTER 12**

PHMD 5560	Applied Drug Information	2
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PHMD 4631	Comprehensive Disease Management 3	6
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PHMD 4632	Comprehensive Disease Management 3 Seminar	1
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PHMD 4633	Comprehensive Disease Management 3 Skills Lab	0.5
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**SEMESTER 13**

PHMD 4641	Comprehensive Disease Management 4	6
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PHMD 4642	Comprehensive Disease Management 4 Seminar	1
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PHMD 4643	Comprehensive Disease Management 4 Skills Lab	0.5
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PHMD 5270	Economic Evaluation of Pharmaceuticals and Pharmacy Practice	2
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PHMD 5450	Advanced Pharmacy Practice Experience Preparatory Seminar	1
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<sup>1</sup> For pharmacy students, an unsatisfactory grade (U) in a co-op will be counted as a professional course deficiency.

**Elective and Capstone Requirements**

Code	Title	Hours
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**Electives**  
A minimum of 16 semester hours of open electives is required. Additional electives may be required to fulfill the total semester hours required for your program.

Students must use open electives to fulfill the NUPath Interpreting Culture and Exploring Creative Expression and Innovation attributes (if not already fulfilled through prior coursework).

**Professional Elective**

Complete at least 2 semester hours during the professional phase of the program (after semester 5) from the following:

CAEP 3480	Counseling Theories and Practice	2
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CAEP 6203	Understanding Culture and Diversity	
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HINF 5101	Introduction to Health Informatics and Health Information Systems	
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HINF 5407	Business Application of Decision Support in Healthcare	
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HINF 6205	Creation and Application of Medical Knowledge	
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HINF 6404	Patient Engagement Informatics and Analytics	
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HLTH 1510	Introduction to Healthcare Ethics	
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HLTH 2100	Interprofessional Ethics for Individual and Population Health	
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HLTH 2302	Alternative Medicine	
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HLTH 5002	Mindfulness: Theory and Practice	
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HLTH 5135	Developing an Interdisciplinary Approach to Health Management for Older Adults	
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HLTH 5280	The (in)Visibility of (dis)Ability in Society	
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HLTH 5730	Global Perspectives in Disability and Health	
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HSCI 1105	Human Nutrition	
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HSCI 2350	Advanced Nutrition in Health and Disease	
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HSCI 2500	Public Health Nutrition in the Community	
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HSCI 5230	Clinical Nutrition Applications in Health and Disease	
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NRSG 1205	Wellness	
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PHMD 3600	Leadership and Advocacy in Health Professions	
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PHMD 4350	Exploring Academic Careers	
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PHMD 4581	Cancer Chemotherapy	
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PHMD 4585	Research Methods in Health Systems	
PHMD 4700	Principles in General Medicine	
PHMD 4890	Contemporary Issues in Geriatric Pharmacy	
PHMD 4991	Research	
PHMD 4992	Directed Study	
PHMD 5575	Pharmaceutical Industry	
PHMD 5675	Ambulatory Care Pharmacy Practice in Urban Health	
PHMD 5900	Self-Care and Nonprescription Medications: A Team-Based Approach	
PHSC 4991	Research	
PHSC 4992	Directed Study	
PHSC 5100	Concepts in Pharmaceutical Science	
PHSC 5400	Principles of Drug Design	
PHSC 5500	Repurposing Drugs for Cancer Immunotherapies	
PHSC 5555	Pharmaceutical Toxicology	
PHSC 6218	Biomedical Chemical Analysis	
PHSC 6222	The Chemistry and Biology of Drugs of Abuse	
PHSC 6224	Behavioral Pharmacology and Drug Discovery	
PHSC 6290	Biophysical Methods in Drug Discovery	
PTH 1270	Introduction to Global Health	
PTH 5222	Health Advocacy	
PTH 5226	Strategic Management and Leadership in Healthcare	
PTH 5230	Global Health	
PTH 5232	Evaluating Healthcare Quality	
PTH 5234	Economic Perspectives on Health Policy	
PTH 5300	Project Management in Public Health	
PTH 5310	Budget Principles in Public Health	
PTH 5320	Grant Writing in Public Health	
PTH 6320	Qualitative Methods in Health and Illness	
PMST 6250	Advanced Physical Pharmacy	
PMST 6252	Pharmacokinetics and Drug Metabolism	
PMST 6254	Advanced Drug Delivery Systems	
SLPA 1101	Introduction to Communication Disorders	
SLPA 1555	Communication Disorders in Movies	
<b>Capstone</b>		
PHMD 5600	Pharmacy Capstone	4

## Supporting Courses

Code	Title	Hours
<b>SEMESTER 1</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
PSYC 1101	Foundations of Psychology	4
ENGW 1111	First-Year Writing	4

The university requires a minimum grade of C for First-Year Writing (ENGW 1111). The university's minimum passing grade for the course will be accepted for all other courses.

Elective		2-4
<b>SEMESTER 2</b>		
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161	General Chemistry for Science Majors	4
CHEM 1162	Lab for CHEM 1161	1
CHEM 1163	Recitation for CHEM 1161	0
MATH 1245	Calculus with Applications	4
NUPath Elective		4
<b>SEMESTER 3</b>		
PHYS 1149 and PHYS 1150	Physics for Pharmacy and Lab for PHYS 1149	5
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	5
NUPath Elective		4
<b>SEMESTER 4</b>		
CHEM 2313 and CHEM 2314 and CHEM 2320	Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313	5
ENGW 3306	Advanced Writing in the Health Professions	4

The university requires a minimum grade of C for Advanced Writing in the Health Professions (ENGW 3306). The university's minimum passing grade for the course will be accepted for all other courses.

## Program Requirement

If the Bachelor of Science in Pharmacy Studies degree is the terminal degree (i.e., the student does not plan to continue on to the fourth professional year), an overall grade-point average (GPA) of 2.000 or greater is considered acceptable. Students who earn the Bachelor of Science in Pharmacy Studies as the terminal degree are not eligible for pharmacist licensure.

Pharmacy students with a cumulative GPA of 3.200 or less and/or science prerequisite GPA of 3.000 or less following the fall semester of the sophomore year may experience a delayed start as a registered pharmacy intern for the first co-op (IPPE), as the School of Pharmacy will not submit intern licensure documentation to the Massachusetts Board of Registration in Pharmacy until satisfactory spring grades are verified.

To progress into the subsequent semester of professional courses, students must receive a grade of C or better in all PHMD and PHSC courses, as well as in any course completed to fulfill the professional elective requirement.

To progress into the first professional year of the PharmD program (P1), students must demonstrate good verbal and written communication skills, understanding of the pharmacy profession, and commitment to patient care through an interview process based on criteria set by the School of Pharmacy.

All students entering P1 in fall 2022 and beyond are required to complete the PharmCAS application. The PharmCAS application process is considered a formality in the progression process and will not jeopardize the student's preferred or guaranteed enrollment status.

164 total semester hours required

## Plan of Study

Please see the PharmD page (p. 607) in the Northeastern University Catalog for plan of study.

### Pharmaceutical Sciences, BS

The Bachelor of Science in Pharmaceutical Sciences is geared toward highly motivated students who are strongly focused on careers in a number of competitive areas:

- Research: biomedical/pharmaceutical research, biomedicine, and/or the pharmaceutical/biotech industries
- Healthcare: curriculum provides opportunities to meet the core requirements requested by medical, veterinary and dental schools, while providing an immersive background in research and the pharmaceutical sciences

The educational approach is an innovative paradigm that immerses students into undergraduate research at the earliest possible time and promotes graduate-style mentorship and experiential learning in the context of an intensive curriculum with specialized educational opportunities. Pharmaceutical sciences are by nature highly interdisciplinary: pharmacology; physiology; structural biology; medicinal chemistry; pharmaceuticals and the allied fields of toxicology, chemical biology, and nanomedicine; and a spectrum of emerging health science disciplines that span classical life sciences, engineering, and biotechnology. All students take courses in basic chemistry, basic biology, organic chemistry, physiology, pharmacology, medicinal chemistry, and pharmaceutical sciences. Students can then further specialize their program of study with elective courses in interest areas aligned with their developing career trajectories.

Graduates of the Bachelor of Science in Pharmaceutical Sciences program will have a solid foundation in the science of drug discovery, delivery, evaluation, and development, as well as specialized training at the undergraduate level in research labs.

The program prepares students to pursue graduate studies, enroll in professional programs such as medical, veterinary or dental school, or enter the biopharmaceutical industry. The BS degree requires a minimum of four years of study and at least one co-op experience. Graduates are positioned to pursue MS and PhD programs in the biomedical sciences, medical schools, and other health professional degree programs.

## Bachelor of Science in Pharmaceutical Sciences—Progression Standards

The Bachelor of Science in Pharmaceutical Sciences requires students to satisfy a set of academic standards that include maintaining an overall GPA of 3.000 or better. A grade of C is the minimal passing grade for any of the required courses in the major.

Bachelor of Science Students in this program are expected to maintain a cumulative GPA of 3.000 each semester to remain in good academic standing and to progress towards graduation. If a student's cumulative GPA falls below the required 3.000, a student may be on probation for only two semesters, or until the course is offered again, unless the advisor approves an action plan that specifies a longer (but definite) period. A student may only be placed on probation twice during enrollment in the program and must correct all deficiencies, as specified, in each respective action plan during the applicable probationary period.

Failure to remediate the deficiency within the agreed time may result in dismissal from the program.

The program also requires students to seek out and establish, with program support, research opportunities with a faculty-level mentor. It is advised that students get involved in laboratory research during their first year in the program. Each student must secure a laboratory research opportunity by the fall semester of the second year and complete a course to develop lab based research skills.

## Securing a Laboratory Research Experience

The Bachelor of Science in Pharmaceutical Sciences requires students to earn a minimum of 12 credits for laboratory research through participation in a research rotation (Lab Research Rotation (PHSC 2100)) and the writing and completion of an undergraduate thesis (comprised of Senior Thesis (PHSC 4997) and Senior Thesis Continuation (PHSC 4998)). Each student must take the initiative to seek out opportunities for undergraduate laboratory research either on campus, off campus at a neighboring university, or in an industry setting accessible to the student, under the direction of a faculty-level mentor. Students are assisted with securing laboratory research experiences through participation in Introduction to Health Science Research (PHSC 2650) and, as needed, through work with a faculty advisor within the Bachelor of Science Pharmaceutical Sciences program. A variety of university resources are also available to assist students in finding opportunities, including the Bouvé College Office of Research, the Northeastern University Office of Undergraduate Research and Fellowships, the Northeastern University Integrated Initiative for Global Health, and various other departmental and college resources across Northeastern University.

## Change of Major

Students are eligible to transfer into the program at any point prior to the third year of the program. Students must have an overall GPA of 3.000 or better.

## Academic Appeals

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Refer to the Bouvé College of Health Sciences Academic Affairs Appeals Process and the Northeastern University Appeals Policies and Procedures.

## Program Learning Outcomes

Please visit Bouvé College Program Learning Outcomes (<https://bouve.northeastern.edu/bchs/about/learning-outcomes/>) for the specific student learning outcomes for this program.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Pharmaceutical Sciences Major Requirements**

Code	Title	Hours
<b>SEMESTER 1</b>		
PHMD 1000	College: An Introduction	1
PHSC 1001	Introduction to Contemporary Pharmaceutical Sciences	1
<b>SEMESTER 2</b>		
PHSC 2650	Introduction to Health Science Research	4
<b>SEMESTER 3</b>		
PHSC 2320	Biochemistry	4
PHSC 2100	Lab Research Rotation	4
<b>SEMESTER 4</b>		
PHSC 2000	Professional Development for Pharmaceutical Sciences Co-op	1
<b>SEMESTER 5</b>		
PHSC 2301 and PHSC 2302	Human Physiology 1 and Human Anatomy Lab	4
PHSC 2400	Research Ethics for Beginning Health Scientists	4
<b>SEMESTER 6</b>		
PHSC 2330	Immunology	3
PHSC 3411	Pharmaceutics 1	4
PHSC 3419	Pharmaceutics Laboratory	1
PHSC 3801	Principles of Pharmacology and Medicinal Chemistry 1	4
PHSC 4995	Practicum	4
<b>SEMESTER 7</b>		
Elective		4
Elective		4
<b>SEMESTER 8</b>		
Elective		4
Elective		4
<b>SEMESTER 9</b>		
PHSC 3802	Principles of Pharmacology and Medicinal Chemistry 2	4
PHSC 4997	Senior Thesis	4
<b>SEMESTER 10</b>		
PHSC 3430	Pharmacokinetics and Biopharmaceutics	3
PHSC 4998	Senior Thesis Continuation	4

**Supporting Courses**

Code	Title	Hours
<b>SEMESTER 1</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
<b>SEMESTER 2</b>		
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
MATH 1245	Calculus with Applications	4
<b>SEMESTER 3</b>		

CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5

<b>SEMESTER 4</b>		
CHEM 2313 and CHEM 2314 and CHEM 2320	Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313	5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	5
PHTH 2210 and PHTH 2211	Foundations of Biostatistics and Recitation for PHTH 2210	4

**Writing Requirement**

Code	Title	Hours
<b>SEMESTER 1</b>		
ENGW 1111	First-Year Writing	4
<b>SEMESTER 9</b>		
ENGW 3306	Advanced Writing in the Health Professions	4

**Program Requirements**

Some NUPATH requirements are not explicitly satisfied by required courses. Students are responsible for satisfying these requirements with open electives.

Premed students have the opportunity to complete all necessary coursework via required and elective courses in the BS in Pharmaceutical Sciences program. Please refer to premed course requirements (<https://undergraduate.northeastern.edu/prehealth/academics/coursework/>).

Minimum of 145 semester hours required

**Plan of Study**

<b>Year 1</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1111	4	BIOL 1113	4	Vacation or volunteer research experience	4	Vacation or volunteer research experience	4
BIOL 1112	1	BIOL 1114	1				
ENGW 1111	4	CHEM 1161	4				
PHMD 1000	1	CHEM 1162	1				
PHSC 1001	1	CHEM 1163	0				
Elective	4	MATH 1245	4				
Elective	4	PHSC 2650	4				
		19			18		
						0	

<b>Year 2</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2311	4	CHEM 2313	4	PHSC 2301	3	CO-OP	
CHEM 2312	1	CHEM 2314	1	PHSC 2302	1		
CHEM 2319	0	CHEM 2320	0	PHSC 2400	4		
PHYS 1145	4	PHYS 1147	4				
PHYS 1146	1	PHYS 1148	1				
PHSC 2320	4	PHTH 2210	4				
PHSC 2100	4	PHTH 2211	0				
		PHSC 2000	1				

		Elective	4		
		18	19	8	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
CO-OP	PHSC 2330	3 Elective	4 Elective	4	
	PHSC 3801	4 Elective	4 Elective	4	
	PHSC 3411	4			
	PHSC 3419	1			
	PHSC 4995	4			
		0	16	8	8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
PHSC 4997	4 PHSC 3430	3			
PHSC 3802	4 PHSC 4998	4			
ENGW 3306	4 Elective	4			
Elective	4 Elective	4			
		16	15		

Total Hours: 145

### Health Sciences Entrepreneurship, Minor

The health sciences entrepreneurship minor is for undergraduate students from any major, in any college at the university, who have an interest in developing skills in the creation and management of health sciences companies. The minor builds on currently offered courses within and outside of Bouvé College of Health Sciences. This minor allows students to apply the entrepreneurial mindset to develop marketable and applicable skills conversant in the unique regulatory, reimbursement, and promotion of products and services in the health sciences. Providing opportunities to develop these skills will benefit students pursuing positions within healthcare organizations and medical technology businesses, as well as students wishing to be entrepreneurs or innovators in the companies that employ them.

#### Minor Requirements

The minor consists of three required courses and one elective course. Up to *two courses* from other major and minor requirements may apply to this minor.

#### Required Courses

Code	Title	Hours
PHMD 2350 or PHTH 1260	Healthcare Systems The American Healthcare System	3-4
PHMD 2100	Entrepreneurship in Health Sciences	4
PHMD 2550	Innovation, Entrepreneurship, and Drug and Medical Device Development	4

#### Elective Courses

Code	Title	Hours
Complete one of the following:		3-4
ENTR 2206	Global Social Enterprise	
ENTR 2301	Innovation!	
ENTR 2303	Marketing Strategies for Startups	
ENTR 2304	Industry Disruption and Corporate Transformation	

ENTR 3305	Business Model Innovation for Entrepreneurs
ENTR 3330	Lean Design and Rapid Prototyping
ENTR 4505	Entrepreneurial Growth Strategy for Technology Ventures
PHTH 2515	Healthcare Policy and Administration
PHTH 4515	Critical Issues in Health and Public-Health Policy
PHTH 5234	Economic Perspectives on Health Policy

#### GPA Requirement

Students are required to have an overall grade-point average of 2.000 or higher.

#### Credit Requirement

15 hours required

### Pharmaceutical Sciences, Minor

The minor in pharmaceutical sciences is open to all majors at the university with the exception of Bouvé PharmD and BS Pharmaceutical Sciences students. The minor is designed for undergraduate students from a variety of disciplines who wish to explore key aspects of the pharmaceutical sciences, including pharmacology, medicinal chemistry, and pharmaceuticals. It is comprised of three required courses and one elective for a minimum of 15 hours. Students who believe that additional exposure to these topics will integrate effectively with their major (particularly students in biology and chemistry majors, as well as those in chemical and bioengineering programs and health sciences) are encouraged to pursue this minor.

#### Minor Requirements

Successful completion of the minor requires that all coursework be completed with a minimum grade of D and courses may not be taken as pass/fail. The minor consists of three required courses and one elective course. Up to *two courses* from other major and minor requirements may apply to this minor.

#### Required Courses

Code	Title	Hours
PHSC 3411	Pharmaceutics 1	4
PHSC 3801	Principles of Pharmacology and Medicinal Chemistry 1	4
PHSC 3802	Principles of Pharmacology and Medicinal Chemistry 2	4

#### Elective Courses

Code	Title	Hours
Complete one of the following:		3-4
PHSC 2301 and PHSC 2302	Human Physiology 1 and Human Anatomy Lab	
PHSC 2303 and PHSC 2304	Human Physiology 2 and Human Physiology Lab	
PHSC 2330	Immunology	
PHSC 3412	Pharmaceutics 2	
PHSC 3430	Pharmacokinetics and Biopharmaceutics	

PHSC 5400	Principles of Drug Design
CHEM 5676	Bioorganic Chemistry

## GPA Requirement

Minimum 2.000 GPA required in the minor

## Credit Requirement

15 hours required

### Accelerated Bachelor/Graduate Degree Programs

Bouvé College of Health Science offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

### College of Science

Website (<http://www.northeastern.edu/cos/>)

**Hazel Sive, PhD**, Dean

**Brent D. Nelson, PhD**, Senior Associate Dean, Undergraduate Affairs

**Erin Cram, PhD**, Associate Dean, Research

**Oyinda Oyelaran, PhD**, Associate Dean, Faculty Affairs, Diversity and Inclusion

**Sam Inman**, Associate Dean, Administration and Finance

**Kevin Thompson**, Associate Dean, Development

**Lauren Machunis**, Assistant Dean for Undergraduate Advising and Enrollment Management

**Kellie Melchin**, Assistant Dean for Graduate Administration

Dean's Office  
617.373.5085  
[cos@northeastern.edu](mailto:cos@northeastern.edu)

Student Services Office  
617.373.4475  
[COsAdvising@northeastern.edu](mailto:COsAdvising@northeastern.edu)

The College of Science (COS) offers instructional programs that are at the forefront of discovery, invention, and innovation in the physical sciences, life sciences, linguistics, and mathematics. Our programs are designed to give students a deep understanding and hands-on experience in traditional and emerging interdisciplinary fields such as chemical biology, cognition and neuroscience, marine science, biochemistry, nanoscience, and network science.

The college places a strong emphasis on the experiential learning model and seeks to provide students with a wide array of opportunities to explore innovative, interdisciplinary collaborations through cooperative educational work assignments, service-learning, undergraduate research, internships, study-abroad programs, and active participation in our award-winning student chapters of professional associations. The college seeks to provide students with the best possible foundation for achieving their goals, whether they seek to attend graduate school, professional school, or immediately pursue a career upon graduation.

The college offers Bachelor of Arts (BA), Bachelor of Science (BS), and Bachelor of Science/Master of Science (BS/MS) (PlusOne programs) degrees in a number of majors and emphasizes the value of a solid general education through NUpath. Students may choose a four- or five-year experiential learning plan in most programs. Either plan offers co-op opportunities, often in an area related to the student's chosen academic area.

Many programs are flexible enough to allow students to pursue a double major, a major and a minor, or one of the college's specific combined majors. The college also offers students the opportunity to create an independent major in cases where their interests and goals are not met by a specific major program.

### PlusOne Programs

Many programs and departments offer academically strong students the option of obtaining their BS and MS degree in five years.

### College Requirements

All students in the College of Science must successfully complete the university requirements of NUpath (p. 46). In addition, students pursuing a Bachelor of Arts degree must fulfill the BA requirements (p. 49).

### Academic Advising

The College of Science has an academic advising system that consists of professional advisors and faculty advisors located in the college's department and program offices. Detailed advising information is available on the college website (<http://www.northeastern.edu/cos/>). Prelaw (<http://www.northeastern.edu/prelaw/>) advising and prehealth (<http://www.northeastern.edu/prehealth/>) advising are also available.

### Graduation Clearance Process

Students in the College of Science are required to meet with an academic advisor in the College of Science to determine their remaining graduation requirements. This should be completed in the junior year to ensure ample time to complete any outstanding requirements.

### Academic Progression Standards

In addition to meeting university progression standards, it is expected that full-time science students enroll in four (3- or 4-credit) courses with appropriate labs and recitations and successfully complete at least 12 semester hours each academic semester with an acceptable GPA as noted below. Any exceptions to the course load requirement must be approved in writing by the student's academic advisor prior to the start of each semester. Pass/fail courses are restricted to electives outside of the major, minor, and NUpath requirements.

### Graduation Requirements

A minimum cumulative GPA requirement of 2.000 in major courses and a minimum cumulative GPA requirement of 2.000 overall are required for graduation. *Note:* The university requires a minimum grade of C for First-Year Writing and Advanced Writing requirements.

### Criteria for Academic Probation

Full-time students in the College of Science will be placed on academic probation effective for the following academic semester for any of the reasons noted below. A notation of the academic probation action will appear on the internal record but not on the permanent transcript.

**First-year Students:**

- Not maintaining a semester GPA of at least a 1.800 at the end of each full-term semester (fall, spring) of the first-year curriculum
- Not earning at least 12 semester hours at the end of each fall and spring semester of the first-year curriculum
- Not earning at least 24 semester hours at the end of the two full-term semesters (fall, spring) of the first-year curriculum
- Accumulating three outstanding course deficiencies (grades of F, I, W, NE, U, or missing grades)

**Upper-class and Transfer Students:**

- Not earning at least 12 semester hours in the academic full-term semester (fall, spring) just completed
- Not maintaining an overall cumulative GPA of at least 2.000 at the end of each full-term academic semester (fall, spring)
- Accumulating three outstanding course deficiencies (grades of F, I, W, NE, U, or missing grades)
- Not following a program of study approved by the student's academic advisor

**Academic Dismissal from Major**

Students can be dismissed from their major for not maintaining a GPA of at least a 2.000 in the major at the end of the second academic full-term semester of the curriculum and at the end of each full-term academic semester (fall, spring) thereafter. Students dismissed from their major, but otherwise eligible to remain an active student within the university, are allowed to continue within the College of Science as a transitional student for up to two semesters.

**Academic Dismissal from University**

Students who remain on probation after two full-term academic semesters may be dismissed from the university. This action may appear on the transcript at the end of the second probationary semester. In addition, students who have below a 1.000 GPA or fewer than 4 earned semester hours in any semester or cumulatively may be dismissed at the discretion of their college. Students may appeal this decision to the Academic Standing Committee. International students must consult with an advisor in the Office of Global Services (OGS) (<http://www.northeastern.edu/ogs/>) to discuss the impact of an academic dismissal as it relates to nonimmigrant visa status.

**Behavioral Neuroscience**

Website (<https://cos.northeastern.edu/behavioral-neuroscience/>)

**Jennifer Ingemi, PhD**

Assistant Teaching Professor and Interim Director

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Behavioral neuroscience is a broad and dynamic interdisciplinary field that focuses on understanding physiological brain mechanisms and how they give rise to behavioral functions in humans and animals. The relationship between the brain's activity and an organism's behavior, both normal and pathological, is examined at multiple levels of analysis, from how a cell functions to how a facial expression conveys trust or fear.

As a behavioral neuroscience major, you will take courses across multiple departments to acquire foundational knowledge and strong critical

thinking skills in the realms of biology, psychology, physical sciences, and mathematics. Through our combined majors, you can explore the intersection of behavioral neuroscience with complementary disciplines including philosophy, design, computer science, and data science. For some of our majors, we offer an accompanying PlusOne Master of Science in Bioinformatics or Applied Behavior Analysis.

Ample opportunities exist for students to put theory into practice while acquiring valuable hands-on research and clinical experience at renowned institutions across the world through Northeastern's co-op program. Faculty-mentored directed studies and honors projects are guided by investigators with shared interests from academic units, centers, and institutes throughout campus.

Our rigorous and comprehensive curriculum is designed to prepare students for employment in clinical settings or the biotech and pharmaceutical industry or for further graduate training in a plethora of science disciplines or in healthcare professions. Our graduates are qualified for a wide variety of careers including nonprofits, law, science writing, big data, artificial intelligence, and more.

**Programs****Bachelor of Science (BS)**

- Behavioral Neuroscience (p. 614)
- Behavioral Neuroscience and Design (p. 88)
- Behavioral Neuroscience and Philosophy (p. 619)
- Computer Science and Behavioral Neuroscience (p. 331)
- Data Science and Behavioral Neuroscience (p. 400)

**Minor**

- Behavioral Neuroscience (p. 627)

**Accelerated Programs**

See Accelerated Bachelor/Graduate Degree Programs (p. )

**Behavioral Neuroscience, BS**

The behavioral neuroscience curriculum focuses on the biological bases underlying behavior under normal and pathological states. The program combines the disciplines of biology and psychology with a strong background in basic physical sciences and mathematics to understand how the behavior of humans and animals is controlled by physiological systems. Students gain a solid foundation in the anatomical and functional specializations of the brain and neural mechanisms from neurons to circuits to networks. Students then choose from a range of advanced electives, including those that make up the behavioral neuroscience core, to delve deeply into diverse specializations and current topics in the field.

*Note:* Due to overlap in course content, double majoring in behavioral neuroscience with any of the following majors is not permitted: psychology, biology, cell and molecular biology, or biochemistry.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Behavioral Neuroscience Core Requirements

Code	Title	Hours
Complete five of the following courses. At least three must be numbered in the 4000–5999 range:		20-21

Code	Title	Hours
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5587 or BIOL 3405	Comparative Neurobiology Neurobiology	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	
PSYC 4510	Psychopharmacology	
PSYC 4512	Neuropsychology	
PSYC 4514	Clinical Neuroscience	
PSYC 4570	Behavioral Genetics	
PT 5410 and PT 5411	Functional Human Neuroanatomy and Lab for PT 5410	
One course may be a research or experiential course:		
BIOL 4991	Research	
BIOL 4994	Internship	
BIOL 4970	Junior/Senior Honors Project 1	
BIOL 4971	Junior/Senior Honors Project 2	
BNSC 4994	Internship	
BNSC 4970	Junior/Senior Honors Project 1	
BNSC 4971	Junior/Senior Honors Project 2	
PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience	
PSYC 4550	Basic Principles of Magnetic Resonance Physics and Applications in Neuroscience	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4991	Directed Study Research	
PSYC 4994	Internship in Psychology	
PSYC 4965	Undergraduate Teaching Experience	
PSYC 4970	Junior/Senior Honors Project 1	
PSYC 4971	Junior/Senior Honors Project 2	

## Behavioral Neuroscience Advanced Courses

Code	Title	Hours
<b>Psychology Elective</b>		
An additional behavioral neuroscience core course may be used to fulfill this requirement.		
Complete one of the following:		4
PSYC 3358	Behavior Therapies	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	
<b>Biology Elective</b>		
Complete one of the following:		4-5
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3409	Current Topics in Biology	
BIOL 3411	Current Topics in Cell and Molecular Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 3603	Mammalian Systems Physiology	
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	
BIOL 4707	Cell and Molecular Biology	
BIOL 5306	Biological Clocks	
BIOL 5543	Stem Cells and Regeneration	
BIOL 5569	Advanced Microbiology	
BIOL 5573	Medical Microbiology	
BIOL 5581	Biological Imaging	
BIOL 5591	Advanced Genomics	
BIOL 5593	Cell and Molecular Biology of Aging	
<b>Capstone Course</b>		
Complete one of the following:		4
BIOL 4701	Biology Capstone	
PSYC 4654 to PSYC 4678		
<b>Behavioral Neuroscience Major Requirements</b>		
Code	Title	Hours
<b>Foundation Courses</b>		
BNSC 1000	Behavioral Neuroscience at Northeastern	1
PSYC 1101	Foundations of Psychology	4
PSYC 3458	Biological Psychology	4
PSYC 3200	Clinical Neuroanatomy	4
ENVR 2500 and ENVR 2501 or PSYC 2320	Biostatistics and Lab for ENVR 2500 Statistics in Psychological Research	4-5
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4



BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4
<b>Breadth Courses</b>		
MATH 1251 or MATH 1241	Calculus and Differential Equations for Biology 1 Calculus 1	4
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
Complete one of the following:		5
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
PHYS 1171 and PHYS 1172 and PHYS 1173	Physics 1 for Bioscience and Bioengineering and Lab for PHYS 1171 and Interactive Learning Seminar for PHYS 1171	

**Behavioral Neuroscience Major Credit/GPA Requirement**

Complete 90 semester hours in the major with a minimum 2.000 GPA.

Due to overlap in course content, double majoring in behavioral neuroscience with any of the following majors is not permitted: psychology, biology, cell and molecular biology, or biochemistry.

**Program Requirement**

132 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BNSC 1000	1 ENGW 1111	4 BIOL 2301 and BIOL 2302	5 Vacation	0
MATH 1251	4 PSYC 3458	4 Adv PSYC elective	4	
PSYC 1101	4 BIOL 2299	4		
BIOL 1107 and BIOL 1108	5 CHEM 2311 and CHEM 2312	5		

CHEM 1161 and CHEM 1162 and CHEM 1163	5				
	19	17	9	0	
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
PSYC 3200	4 BIOL 2309	4 PSYC 2320	4 Co-op	0	
CHEM 2313 and CHEM 2314	5 DS 2000 and DS 2001	4 Elective	4		
BNS core course 1	4 BNS core course 2	4			
Elective	4 Elective	4			
	EESC 2000	1			
	17	17	8	0	
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	0 Adv BIOL elective	5 ENGW 3307	4 Co-op	0	
	BNS core course 3	4 Elective	4		
	BNS core course 4	4			
	Elective	4			
	0	17	8	0	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	0 BNS core course 5	4			
Elective (online)	4 Capstone	4			
	Elective	4			
	Elective	4			
	4	16			

Total Hours: 132

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BNSC 1000	1 ENGW 1111	4 Vacation	0 Vacation	0
MATH 1251	4 PSYC 3458	4		
PSYC 1101	4 BIOL 2299	4		
BIOL 1107 and BIOL 1108	5 Elective	4		
CHEM 1161 and CHEM 1162 and CHEM 1163	5			
	19	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 2301 and BIOL 2302	5 Co-op	0 Co-op	0 CHEM 2313 and CHEM 2314	5
CHEM 2311 and CHEM 2312	5		PSYC 2320	4
PSYC 3200	4			
Elective	4			
EESC 2000	1			
	19	0	0	9

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 2309	4 Co-op	0 Co-op	0 Vacation	0
BNS core course 1	4			
Adv PSYC elective	4			
Elective	4			
	16	0	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
DS 2000 and DS 2001	4 Co-op	0 Co-op	0 Elective	4
BNS core course 2	4			
BNS core course 3	4			
Elective	4			
	16	0	0	4

**Year 5**

Fall	Hours Spring	Hours
BNS core course 4	4 BNS core course 5	4
Adv BIOL elective	5 Capstone course	4
ENGW 3307	4 Elective	4
Elective	4 Elective	4
	17	16

Total Hours: 132

**Behavioral Neuroscience and Design, BS**

The behavioral neuroscience and design combined major engages students in an interdisciplinary study across the biology, psychology, and Art + Design departments to integrate fundamental design courses with a strong foundation in the physiological brain mechanisms that give rise to behavioral functions. The latest research in neuroscience and psychology enables designers to maximize the impact of their designs and, conversely, complex neuroscientific concepts can be made intelligible to a wider public through creative visual works. Students in this major have the opportunity to learn about the inner workings of the brain and how its various structures interact to enhance their approach to design methodologies. Students can then apply these principles to biomimetic medical devices as well as data and network visualization.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Behavioral Neuroscience Requirements**

Code	Title	Hours
<b>Behavioral Neuroscience Overview</b>		
BNSC 1000	Behavioral Neuroscience at Northeastern <sup>1</sup>	1
EESC 2000	Professional Development for Co-op <sup>2</sup>	1
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
	or MATH 1341	Calculus 1 for Science and Engineering
<b>Statistics Foundation</b>		
Complete one of the following:		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	4-5
	or PSYC 2320	Statistics in Psychological Research
<b>Behavioral Neuroscience Foundations</b>		
PSYC 3200	Clinical Neuroanatomy	4
PSYC 3452	Sensation and Perception	4
PSYC 3458	Biological Psychology	4
<b>Behavioral Neuroscience Core Courses</b>		
Complete two of the following:		
BIOL 3403	Animal Behavior	8
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5595	Cell and Molecular Neuroscience	

BIOL 5601	Multidisciplinary Approaches in Motor Control
PSYC 3506	Neuropsychology of Fear
PSYC 3508	Behavioral Endocrinology
PSYC 3510	Brain, Behavior, and Immunity
PSYC 4510	Psychopharmacology
PSYC 4512	Neuropsychology
PSYC 4514	Clinical Neuroscience
PSYC 4570	Behavioral Genetics

<sup>1</sup> Students entering through CAMD may take Art and Design at Northeastern (ARTF 1000).

<sup>2</sup> Students entering through CAMD may take Professional Development for Co-op (EEAM 2000).

## Design Requirements

Code	Title	Hours
<b>Foundations</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
Complete one of the following:		4-5
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
<b>Design Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 3350	Typography 2	4
ARTG 3451 or ARTG 5330	Information Design 1 Visualization Technologies 1: Fundamentals	4

### Art + Design History

Complete one of the following:		4
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2210	Modern Art and Design History	
ARTH 2211	Contemporary Art and Design History	
ARTH 2213	Nineteenth-Century Art	

### Degree Capstone Project

ARTG 4550	Design Degree Project 1	4
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## Design Options

Code	Title	Hours
Complete one of the following options:		8
<b>Interaction Design Option</b>		
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3700	Interaction Design 2: Mobile	
<b>Graphic and Information Design Option</b>		
ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	
<b>Experience Design Option</b>		

ARTG 3462 Experience Design 1

ARTG 3463 Experience Design 2

## Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
BIOL 5587	Comparative Neurobiology	4
ARTG 5310	Visual Cognition	4
<b>Upper-Division Elective</b>		
Complete one course that is not already taken as long as prerequisites have been met:		4
Any 2000-level or higher ARTG, ARTE, ARTD, ARTH, or ARTS course		
BNSC 4970 or higher		
BIOL 3403 or higher		
PSYC 3404 or higher		

## Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3307 or ENGW 3314 or ENGW 3315	Advanced Writing in the Sciences Advanced Writing in the Arts, Media, and Design Interdisciplinary Advanced Writing in the Disciplines	4

## Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

## Major Credit Hour Requirement

104 semester hours in the major.

## Program Requirements

133 total semester hours required

## Plan of Study

### SAMPLE PATTERNS: FOUR YEARS, TWO CO-OPS

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000 or ARTF 1000	1	BIOL 2299	4	ARTG 2250	4	PSYC 3452	4
BIOL 1107 and BIOL 1108	5	MATH 1251	4	PSYC 2320	4	General elective	4
CHEM 1161 and CHEM 1162 and CHEM 1163	5	ARTG 1250	4				
PSYC 1101	4	ENGW 1111	4				
ARTF 1122	4						
		19			16		
						8	8

Year 2					Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 3458	4 Co-op	Co-op	ARTG 3350	4	PSYC 3452	4 Co-op	Co-op	PSYC 2320	4
BIOL 2301 and BIOL 2302	5		General elective	4	CHEM 2311 and CHEM 2312	5		ARTG 3350	4
CHEM 2311 and CHEM 2312	5				ARTG 2250	4			
A+D foundations 2	4				A+D foundations 2	4			
EESC 2000 or EEAM 2000	1				EESC 2000 or EEAM 2000	1			
	19	0	0	8		18	0	0	8
Year 3					Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 3200	4 Co-op	Co-op	ENGW 3315	4	PSYC 3200	4 Co-op	Co-op	Vacation	
ARTG 3451 or 5330	4		General elective	4	PSYC 3458	4			
Design option level 1	4				BIOL 2301 and BIOL 2302	5			
BNS core course	4				Design option level 1	4			
	16	0	0	8		17	0	0	0
Year 4					Year 4				
Fall	Hours Spring	Hours			Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 5587	4 ARTG 4550	4			ARTG 3451 or 5330	4 Co-op	Co-op	ENGW 3315	4
ARTG 5310	4 BNS core course	4			Design option level 2	4		General elective	4
Design option level 2	4 Upper-division elective	4			BNS core course	4			
A+D history course	4 General elective	4			General elective	4			
	16	16				16	0	0	8
Total Hours: 134					Total Hours: 134				
FIVE YEARS, THREE CO-OPS					FIVE YEARS, THREE CO-OPS				
Year 1					Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BNSC 1000 or ARTF 1000	1 BIOL 2299	4 Vacation	Vacation		BIOL 5587	4 ARTG 4550	4		
PSYC 1101	4 MATH 1251	4			ARTG 5310	4 BNS core course	4		
BIOL 1107 and BIOL 1108	5 ARTG 1250	4			A+D history course	4 Upper-division elective	4		
CHEM 1161 and CHEM 1162 and CHEM 1163	5 ENGW 1111	4			General elective	4 General elective	4		
ARTF 1122	4					16	16		
	19	16	0	0	Total Hours: 134				

## Behavioral Neuroscience and Philosophy, BS

The behavioral neuroscience and philosophy combined degree program engages students in the interdisciplinary study across the biology, psychology, and philosophy departments. The major provides rigorous training in both disciplines with a specific focus on understanding seminal questions concerning human nature and the mind. Courses

in the basic sciences will lay a strong foundation in biology, chemistry, and data analytics that are relevant to neuroscience. In behavioral neuroscience core courses, students will examine the structure and function of the human nervous system in order to explore brain mechanisms that give rise to behavioral functions, including cognitive processes, as well as pathological states. In philosophy courses, successful students will develop core analytics skills, including ethical reasoning; learn to recognize and question deep theoretical assumptions at the heart of scientific theories and practice; and explore the social and ethical dimensions of neuroscience and scientific practice more broadly. The fields of behavioral neuroscience and philosophy are further bridged with course work that is designed to enable students to apply neuroscientific concepts to philosophical, moral, and ethical questions.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Behavioral Neuroscience Requirements

Code	Title	Hours
<b>Behavioral Neuroscience Overview</b>		
BNSC 1000	Behavioral Neuroscience at Northeastern <sup>1</sup>	1
EESC 2000	Professional Development for Co-op <sup>2</sup>	1
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Statistics Foundation</b>		
Complete one of the following:		4-5
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
or PSYC 2320	Statistics in Psychological Research	
<b>Behavioral Neuroscience Foundation</b>		
PSYC 3200	Clinical Neuroanatomy	4
PSYC 3458	Biological Psychology	4
<b>Psychology Elective</b>		

Complete one of the following:		4
PSYC 1214	The Moral Mind: The Science Underlying Ethical Decision-Making and Virtuous Character	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	

## Behavioral Neuroscience Core Courses

Complete two of the following:		8
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	
PSYC 4510	Psychopharmacology	
PSYC 4512	Neuropsychology	
PSYC 4514	Clinical Neuroscience	
PSYC 4570	Behavioral Genetics	

## Upper-Division Elective

Complete one course that is not already taken as long as pre-requisites have been met:		4
BNSC 4970 or higher		
BIOL 3403 or higher		
PSYC 3404 or higher		

<sup>1</sup> Students entering through CSSH may take Philosophy at Northeastern (PHIL 1000).

<sup>2</sup> Students entering through CSSH may take Professional Development for Co-op (EESH 2000).

## Philosophy Requirements

Code	Title	Hours
<b>Philosophy Foundation</b>		
PHIL 1105	Science and Pseudoscience	4
or PHIL 3050	Information and Uncertainty	
PHIL 1115	Introduction to Logic	4
PHIL 1145	Technology and Human Values	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Philosophy Restricted Electives**

Complete eight credits from the following list, not taken to fulfill other requirements: 8

PHIL 3360	Scientific Approaches to Philosophy
PHIL 3435	Moral Philosophy
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4535	Philosophy of Mind
PHIL 4555	Philosophy of Biology

**Additional Electives**

Complete two additional PHIL courses, not taken to fulfill other requirements. 8

**Integrative Requirements**

Code	Title	Hours
BIOL 4709 or BIOL 5587	Neurobiology of Learning and Memory Comparative Neurobiology	4
PHIL 4535 or PHIL 4555	Philosophy of Mind Philosophy of Biology	4

**Writing Courses**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4

**Advanced Writing in the Disciplines**

ENGW 3307 or ENGW 3308 or ENGW 3309 or ENGW 3315	Advanced Writing in the Sciences Advanced Writing in the Social Sciences Advanced Writing in the Humanities Interdisciplinary Advanced Writing in the Disciplines	4
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**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Behavioral Neuroscience GPA Requirement**

A minimum 2.000 GPA in all behavioral neuroscience courses is required.

**Major Credit Hour Requirement**

96 total semester hours required in major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

130 total semester hours required

**Plan of Study**

**SAMPLE PATTERNS:  
5 YEARS, 3 CO-OPS**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000	1	ENGW 1111	4	Vacation		Vacation	
BIOL 1107 and BIOL 1108	5	BIOL 2299	4				
CHEM 1161 and CHEM 1162 and CHEM 1163	5	MATH 1251	4				
PSYC 1101	4	PSYC 3458	4				
PHIL 1145	4						
		19		16		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	EESC 2000	1	Vacation		Co-op	
BIOL 2301 and BIOL 2302	5	CHEM 2311 and CHEM 2312	5				
PHIL 1105	4	PSYC 2320	4				
PHIL 1115	4	PHIL 2330	4				
		PHIL restricted elective	4				
		17		18		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL restricted elective	4	PHIL 2325	4	Co-op	
		BNS core course	4	General elective	4		
		PSYC elective	4				
		General elective	4				
		0		16		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BIOL 4709 or 5587	4	Vacation		Co-op	
		BNS core course	4			ENGW 3315 (online)	4
		PHIL elective	4				
		General elective	4				
		0		16		0	
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL 4535 or 4555	4				
		PHIL elective	4				

BNS upper-level elective	4
General elective	4
0	16

Total Hours: 130

**4 YEARS, 2 CO-OPS****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000	1	ENGW 1111	4	PHIL 2325	4	Vacation	
BIOL 1107 and BIOL 1108	5	BIOL 2299	4	PSYC elective	4		
CHEM 1161 and CHEM 1162 and CHEM 1163	5	MATH 1251	4				
PSYC 1101	4	PSYC 3458	4				
PHIL 1145	4						
	19		16		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	EESC 2000	1	PSYC 2320	4	Co-op	
BIOL 2301 and BIOL 2302	5	CHEM 2311 and CHEM 2312	5	General elective	4		
PHIL 1115	4	PHIL 2330	4				
PHIL 1105	4	PHIL restricted elective	4				
		BNS core course	4				
	17		18		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BNS core course	4	PHIL elective	4	Co-op	
		PHIL restricted elective	4	General elective	4	ENGW 3315 (online)	4
		PHIL elective	4				
		General elective	4				
	0		16		8		4

**Year 4**

Fall	Hours	Spring	Hours
Co-op		BIOL 4709 or 5587	4
		PHIL 4535 or 4555	4
		BNS upper-level elective	4

General elective	4
0	16

Total Hours: 130

**Computer Science and Behavioral Neuroscience, BS**

The Bachelor of Science in Computer Science and Behavioral Neuroscience underscores how research in neuroscience has become a computational field of study. The combined major is designed for students who are interested in applying mathematical and computational methodologies toward understanding human behavior, artificial intelligence, and the human-machine interface. Courses across multiple science disciplines—including biology, chemistry, and computer science—lay a strong foundation necessary to explore brain mechanisms and how they give rise to behavioral functions and pathological states using computational approaches. Students will have an opportunity to develop skills in software development as they apply algorithms and data structures to brain research and neurotechnology.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Computer Science Requirements**

Code	Title	Hours
<b>Overview</b>		
CS 1200	First Year Seminar <sup>1</sup>	1
CS 1210	Professional Development for Khoury Co-op <sup>2</sup>	1
<b>Computer Science Foundations</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4100	Artificial Intelligence	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
<b>Statistics Foundation</b>		
Complete one of the following:		4-5

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500
PSYC 2320	Statistics in Psychological Research

<sup>1</sup> Students entering through the behavioral neuroscience program may take Behavioral Neuroscience at Northeastern (BNSC 1000).

<sup>2</sup> Students entering through the behavioral neuroscience program may take Professional Development for Co-op (EESC 2000).

## Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Behavioral Neuroscience Requirements

Code	Title	Hours
<b>COS Foundations</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
PSYC 1101	Foundations of Psychology	4
<b>Mathematics Foundation</b>		
MATH 1341 or MATH 1251	Calculus 1 for Science and Engineering Calculus and Differential Equations for Biology 1	4
<b>Behavioral Neuroscience Foundations</b>		
BIOL 3405 or BIOL 5587	Neurobiology Comparative Neurobiology	4
PT 5410 and PT 5411 or PSYC 3200	Functional Human Neuroanatomy and Lab for PT 5410 Clinical Neuroanatomy	4-5
<b>Psychology Elective</b>		
Complete one of the following:		4
PSYC 3358	Behavior Therapies	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	

PSYC 4520	Language and the Brain
PSYC 4524	Cognitive Development
<b>Behavioral Neuroscience Core Courses</b>	
Complete two of the following:	
BIOL 3403	Animal Behavior
BIOL 3415	Current Topics in Behavioral Neuroscience
BIOL 3601	Neural Systems and Behavior
BIOL 3605	Developmental Neurobiology
BIOL 4705	Neurobiology of Cognitive Decline
BIOL 4709	Neurobiology of Learning and Memory
BIOL 5595	Cell and Molecular Neuroscience
BIOL 5601	Multidisciplinary Approaches in Motor Control
PSYC 3506	Neuropsychology of Fear
PSYC 3508	Behavioral Endocrinology
PSYC 3510	Brain, Behavior, and Immunity
PSYC 4510	Psychopharmacology
PSYC 4512	Neuropsychology
PSYC 4514	Clinical Neuroscience
PSYC 4570	Behavioral Genetics

## Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
IS 4300 or CS 4120 or CS 4180	Human Computer Interaction Natural Language Processing Reinforcement Learning	4
PSYC 4540 or BINF 6308	Quantitative Topics in Psychology and Behavioral Neuroscience Bioinformatics Computational Methods 1	4
<b>Upper-Division Elective</b>		
Complete four credits from the following list, not taken to fulfill previous requirements:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
BNSC 4970 or higher		
BIOL 3400 or higher		
BINF 6309	Bioinformatics Computational Methods 2	
PSYC 3200 or higher		

## Supporting Courses

Code	Title	Hours
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	



INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

### Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Computer Science and Behavioral Neuroscience Major Credit Requirement

102 SH required in the major

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Five Years, Three Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	5	Vacation	5
CS 1800 and CS 1802	5	BIOL 2299	4				
CS 2500 and CS 2501	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
BIOL 1107 and BIOL 1108	5	MATH 1341	4				
ENGW 1111	4						
		20		18		0	0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 and CS 3501	5	CS 3000	4	Vacation	4	Co-op	4
BIOL 3405 or 5587	4	CHEM 2311 and CHEM 2312	5				
PSYC 1101	4	PSYC 3200	4				
BIOL 2301 and BIOL 2302	5	General elective	4				
		CS 1210	1				
		18		18		0	0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3200	4	General elective	4	Co-op	4

	CS 4500	4	PSYC elective	4		
	Statistics requirement	4				
	BNS core	4				
		0	16	8		0
Year 4						
Fall	Hours	Spring	Hours	Summer 2	Hours	
Co-op		CS 4100	4	Co-op		
		CS integrative course	4	ENGW 3302 (online)	4	
		BNS core	4			
		General elective	4			
		0	16			4

Year 5						
Fall	Hours	Spring	Hours	Summer 2	Hours	
Co-op		Upper-division elective	4			
		BNS integrative course	4			
		Computing and social issues	4			
		General elective	4			
		0	16			

Total Hours: 134

#### Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Vacation	5
CS 1800 and CS 1802	5	MATH 1341	4	PSYC 1101	4		
CS 2500 and CS 2501	5	BIOL 2299	4				
BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
ENGW 1111	4						
		20		18		9	0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3200	4	CS 1210	1	PSYC elective	4	Co-op	4
CS 3000	4	CHEM 2311 and CHEM 2312	5	General elective	4		
BIOL 3405 or 5587	4	PSYC 3200	4				

BIOL 2301 and BIOL 2302	5 General elective	4		
	Statistics course	4		
	17	18	8	0
<b>Year 3</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Co-op	CS 4500	4 General elective	4 Co-op	
	BNS core	4 Upper- division elective	4 ENGW 3302 (online)	4
	CS integrative course	4		
	BNS core	4		
	0	16	8	4
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	CS 4100	4		
	Computing and social issues	4		
	BNS integrative course	4		
	General elective	4		
	0	16		

Total Hours: 134

## Data Science and Behavioral Neuroscience, BS

The data science and behavioral neuroscience major combines the disciplines of biology, psychology, computer science, and data science into an integrated curriculum. The human brain is a complex information processing system requiring scientists to analyze, integrate, and share large data sets garnered from multiple techniques that image and record the activity of the brain at work. Students investigate the anatomy and physiology of neural circuits that underlie brain mechanisms and pathological states that give rise to behavioral functions. Students have an opportunity to develop skills in large-scale data manipulation and storage, machine learning, data mining, and information visualization necessary to execute big brain-mapping initiatives including human neuroconnectivity maps.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar <sup>1</sup>	1
CS 1210	Professional Development for Khoury Co-op <sup>2</sup>	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Statistics Foundation</b>		
Complete one of the following:		4-5
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
PSYC 2320	Statistics in Psychological Research	
<sup>1</sup> Students entering through the behavioral neuroscience program may take Behavioral Neuroscience at Northeastern (BNSC 1000). <sup>2</sup> Students entering through the behavioral neuroscience program may take Professional Development for Co-op (EESC 2000).		
<b>Writing Requirements</b>		
Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	

ENGW 3307	Advanced Writing in the Sciences
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines

## Behavioral Neuroscience Requirements

Code	Title	Hours
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1341 or MATH 1251	Calculus 1 for Science and Engineering or Calculus and Differential Equations for Biology 1	4
<b>Behavioral Neuroscience Foundations</b>		
BIOL 3405 or BIOL 5587	Neurobiology or Comparative Neurobiology	4
PT 5410 and PT 5411 or PSYC 3200	Functional Human Neuroanatomy and Lab for PT 5410 or Clinical Neuroanatomy	4-5
<b>Psychology Elective</b>		
Complete one of the following:		4
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3358	Behavior Therapies	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	
<b>Behavioral Neuroscience Core Courses</b>		
Complete two of the following:		8
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	

PSYC 4510	Psychopharmacology
PSYC 4512	Neuropsychology
PSYC 4514	Clinical Neuroscience
PSYC 4570	Behavioral Genetics

## Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
PSYC 4540 or BINF 6308	Quantitative Topics in Psychology and Behavioral Neuroscience or Bioinformatics Computational Methods 1	4
CS 4100	Artificial Intelligence	4
<b>Upper-Division Elective</b>		
Complete four credits from the following list, not taken to fulfill previous requirements:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
BNSC 4970 or higher		
BIOL 3400 or higher		
BINF 6309	Bioinformatics Computational Methods 2	
PSYC 3200 or higher		

## Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## Program Requirement

130 total semester hours required

## Plan of Study

### Sample Patterns:

#### Five Years, Three Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	BIOL 2299	4				
CS 2500 and CS 2501	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
BIOL 1107 and BIOL 1108	5	MATH 1341	4				
ENGW 1111	4						
		20			18		
						0	
						0	

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 DS 3000	4 Vacation	Co-op	
BIOL 3405 or 5587	4 CS 3200	4		
PSYC 1101	4 CHEM 2311 and CHEM 2312	5		
BIOL 2301 and BIOL 2302	5 CS 1210	1		
	PSYC 2320	4		
	18	18	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4200	4 General elective	4 Co-op	
	BNS foundation	4 PSYC elective	4	
	General elective	4		
	PSYC 3200	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4300	4 Vacation	Co-op	
	BNS integrative course	4	ENGW 3315 (online)	4
	BNS foundation	4		
	General elective	4		
	0	16	0	4

**Year 5**

Fall	Hours Spring	Hours
Co-op	DS 4400	4
	CS 4100	4
	Integrative advanced elective	4
	General elective	4
	0	16

Total Hours: 134

**Four Years, Two Co-ops****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 MATH 1341	4 PSYC 1101	4	
CS 2500 and CS 2501	5 BIOL 2299	4		

BIOL 1107 and BIOL 1108	5 CHEM 1161 and CHEM 1162 and CHEM 1163	5		
ENGW 1111	4			
	20	18	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3200	4 CS 1210	1 PSYC elective	4 Co-op	
DS 3000	4 DS 4200	4 General elective	4	
BIOL 3405 or 5587	4 CHEM 2311 and CHEM 2312	5		
BIOL 2301 and BIOL 2302	5 BNS foundation	4		
	PSYC 2320	4		
	17	18	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4300	4 General elective	4 Co-op	
	BNS foundation	4 Integrative advanced elective	4 ENGW 3315 (online)	4
	PSYC 3200	4		
	General elective	4		
	0	16	8	4

**Year 4**

Fall	Hours Spring	Hours
Co-op	DS 4400	4
	CS 4100	4
	BNS integrative course	4
	General elective	4
	0	16

Total Hours: 134

**Behavioral Neuroscience, Minor**

The behavioral neuroscience minor allows all students, including those majoring in biology and psychology, the opportunity to complement their major plans of study with an interdisciplinary minor in behavioral neuroscience.

**Minor Requirements**

Students are required to take one intermediate course followed by four behavioral neuroscience core courses, two from each of the parent departments of the discipline (i.e., psychology and biology).

## Intermediate Course

Code	Title	Hours
PSYC 3458	Biological Psychology	4
or BIOL 3405	Neurobiology	

## Psychology Core Courses

Code	Title	Hours
Complete two of the following:		8
PSYC 3200	Clinical Neuroanatomy	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	
PSYC 4510	Psychopharmacology	
PSYC 4512	Neuropsychology	
PSYC 4514	Clinical Neuroscience	
PSYC 4570	Behavioral Genetics	

## Biology Core Courses

Code	Title	Hours
Complete two of the following:		8
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5587	Comparative Neurobiology	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	

## Credit/GPA Requirement

20 total semester hours required  
2.000 GPA required in the minor

### Biochemistry

Website (<http://www.northeastern.edu/biochemistry/>)

Advising website (<http://tinyurl.com/bioadv/>)

#### Kirsten Fertuck, PhD

Associate Teaching Professor and Director

203 Mugar Life Sciences Building  
617.373.2852

Biochemistry focuses on the chemical processes occurring in the wide variety of living systems and touches essentially all aspects of our own lives. Our Northeastern program engages you in two integrated paths to a career in biochemistry: rigorous coursework that is designed to prepare you to interpret the ever-expanding knowledge base and hands-on learning that positions you to leverage cutting-edge technology to solve fundamental problems in the chemistry of life.

After required basic coursework in biochemistry, biology, chemistry, physics, and mathematics, our majors select elective courses that reflect many areas of biochemistry including neuroscience, bioorganic

chemistry, stem cell and regenerative biology, microbial biotechnology, and systems biology and engineering.

In our interdisciplinary program, students take advantage of faculty-mentored research guided by investigators from bioengineering, biology, chemical engineering, chemistry, pharmaceutical sciences, physics, psychology, and other academic units.

Northeastern's signature co-op program provides complementary opportunities in world-class biotechnology companies, hospitals, and research facilities as close as Boston and as far as your global interest takes you.

Our biochemistry program is designed to prepare students to enter the job market directly or to go on to graduate, medical, veterinary, dental, law, or business school. Our graduates are qualified for a wide range of careers that span academics, industry, government, and medicine, working in laboratory or clinical research, regulation and quality control, production, marketing, or information systems.

## Programs

### Bachelor of Science (BS)

- Biochemistry (p. 628)
- Data Science and Biochemistry (p. 396)

### Bachelor of Science in Bioengineering (BSBioE)

- Bioengineering and Biochemistry (p. 439)

### Bachelor of Science in Chemical Engineering (BSCHE)

- Chemical Engineering and Biochemistry (p. 450)

## Minor

- Biochemistry, Minor (p. 641)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Biochemistry, BS

Website (<http://www.northeastern.edu/biochemistry/>)

Advising website (<https://docs.google.com/document/pub?id=1cqRF5bhSThPoBQESScNoqZbGnbbDI4aGFaul89fMBco>)

Biochemistry focuses on the chemical processes occurring in the wide variety of living systems and touches essentially all aspects of our own lives. Our Northeastern program engages you in two integrated paths to a career in biochemistry: rigorous course work that is designed to prepare you to interpret the ever-expanding knowledge base and hands-on learning that positions you to leverage cutting-edge technology to solve fundamental problems in the chemistry of life.

After required basic course work in biochemistry, biology, chemistry, physics, and mathematics, our majors select elective courses that reflect many areas of biochemistry including neuroscience, bioorganic chemistry, stem cell and regenerative biology, microbial biotechnology, and systems biology and engineering.

In our interdisciplinary program, students take advantage of faculty-mentored research guided by investigators from bioengineering, biology, chemical engineering, chemistry, pharmaceutical sciences, physics, psychology, and other academic units.

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## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

## Biochemistry Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOC 1000	Biochemistry at Northeastern	1
<b>Biology Foundations</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Techniques</i>		
BIOL 2309	Biology Project Lab	4
<b>Genetics and Molecular Biology</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<b>General Chemistry</b>		
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
<b>Organic Chemistry 1</b>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Organic Chemistry 2</b>		
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Physical Chemistry</b>		
CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	5
<b>Biochemistry Courses</b>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
BIOL 4707	Cell and Molecular Biology	4
Complete one of the following:		3-5

CHEM 3331 and CHEM 3332	Bioanalytical Chemistry and Lab for CHEM 3331	
CHEM 5620	Protein Chemistry	
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1
<b>Capstone</b>		
Please complete one of the following options to fulfill the capstone requirement:		4-5
BIOC 4971	Junior/Senior Honors Project 2	
BIOC 4991 and BIOC 4900	Research and Biochemistry Capstone	
BIOL 4701	Biology Capstone	
BIOL 4991 and BIOC 4900	Research and Biochemistry Capstone	
CHEM 4750	Senior Research	
CHEM 4901 and BIOC 4900	Undergraduate Research and Biochemistry Capstone	

## Biology and Chemistry Advanced Electives

Code	Title	Hours
Complete 3 courses for a total of at least 10 semester hours. One must be a lecture-based BIOL course and one must be a lecture-based CHEM course. The third may be BIOL, CHEM, or Research.		10

<b>Biology</b>		
BIOL 2311 to BIOL 5999		
<b>Chemistry</b>		
CHEM 2310 to CHEM 5999		
<b>Research Option</b>		
Up to 4 semester hours may be biochemistry-related research for credit:		
BIOC 4991	Research	
BIOC 4970	Junior/Senior Honors Project 1	
BIOC 4971	Junior/Senior Honors Project 2	
BIOC 4994	Internship	
BIOL 4991	Research	
BIOL 4970	Junior/Senior Honors Project 1	
CHEM 4901	Undergraduate Research	
CHEM 4750	Senior Research	
CHEM 4970	Junior/Senior Honors Project 1	

## Biochemistry Breadth Courses

A minimum GPA of 2.000 is required for the biochemistry breadth courses.

Code	Title	Hours
<b>Mathematics Courses</b>		
Complete one of the following options:		8
<i>Option 1</i>		
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	
<i>Option 2</i>		
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342	Calculus 2 for Science and Engineering	

**Physics Courses***Physics 1*

Complete a lecture and lab set for Physics 1: 5

PHYS 1171 and PHYS 1172 and PHYS 1173	Physics 1 for Bioscience and Bioengineering and Lab for PHYS 1171 and Interactive Learning Seminar for PHYS 1171	5
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PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
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PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
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PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
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*Physics 2*

Complete a lecture and lab set for Physics 2: 5

PHYS 1175 and PHYS 1176 and PHYS 1177	Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175	5
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PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
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PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	
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PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
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**Intermediate or Advanced Science**

Complete one course from the following: 4-5

BIOL 2301 to BIOL 5999

CHEM 2311 to CHEM 5999

EEMB 2290 to EEMB 5999

ENVR 2310 to ENVR 5999

MATH 2280 to MATH 5999

PHYS 2303 to PHYS 5999

PSYC 2290 to PSYC 5999

**Biochemistry Major Credit/GPA Requirements**

Complete 82 semester hours in the major with a cumulative GPA of 2.000.

Due to overlap in course content, double majoring in biochemistry and biology, biochemistry and cell and molecular biology, biochemistry and behavioral neuroscience, or biochemistry and chemistry is not permitted.

**Program Requirement**

136 total semester hours required

**Plan of Study**

Please note that these are sample plans of study. While the requirements are the same for all students, individual schedules may vary.

**Four Years, Two Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1107	4 BIOL 2299	4 BIOL 2301	4 Elective 3	4
BIOL 1108	1 CHEM 2311	4 BIOL 2302	1 Elective 4	4
CHEM 1161	4 CHEM 2312	1 Elective 2	4	
CHEM 1162	1 MATH 1252	4		
CHEM 1163	0 ENGW 1111	4		
MATH 1251	4			
Elective 1	4			
BIOC 1000	1			
	19	17	9	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 2309	4 BIOL 3611	4 BIOL 4707	4 Co-op	
CHEM 2313	4 BIOL 3612	1 Elective 8	4	
CHEM 2314	1 PHYS 1155	3		
PHYS 1151	3 PHYS 1156	1		
PHYS 1152	1 PHYS 1157	1		
PHYS 1153	1 Elective 6	4		
Elective 5	4 Elective 7	4		
	EESC 2000	1		
	18	19	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CHEM 3431	4 Elective 10	4 Co-op	
	CHEM 3432	1 COS adv elective	4	
	CHEM 4620 (or CHEM 2331 and CHEM 2332)	4		
	ENGW 3307	4		
	Elective 9	4		
	0	17	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	BIOL or CHEM advanced elective	5
	BIOL or CHEM advanced elective	5
	BIOL or CHEM advanced elective	5

CHEM 4750 (or BIOL 4701 or BIOC 4971 or xxxx4991+BIC 4900)	4	
	0	19

Total Hours: 142

### Four Years, Two Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1107	4 BIOL 2299	4 BIOL 2301	4 Elective 3	4
BIOL 1108	1 CHEM 2311	4 BIOL 2302	1 Elective 4	4
CHEM 1161	4 CHEM 2312	1 Elective 2	4	
CHEM 1162	1 ENGW 1111	4		
CHEM 1163	0 MATH 1252	4		
MATH 1251	4			
Elective 1	4			
BIOC 1000	1			
	19	17	9	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 2309	4 Co-op	Co-op	BIOL 3611	4
CHEM 2313	4		BIOL 3612	1
CHEM 2314	1		Elective 6	4
PHYS 1151	3			
PHYS 1152	1			
PHYS 1153	1			
Elective 5	4			
EESC 2000	1			
	19	0	0	9

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COS adv elective	4 Co-op	Co-op	BIOL 4707	4
PHYS 1155	3		Elective 8	4
PHYS 1156	1			
PHYS 1157	1			
ENGW 3307	4			
Elective 7	4			
	17	0	0	8

Year 4		
Fall	Hours Spring	Hours
CHEM 3431	4 BIOL or CHEM advanced elective	5
CHEM 3432	1 BIOL or CHEM advanced elective	5

CHEM 4620 (or CHEM 2331 and CHEM 2332)	4	CHEM 4750 (or BIOL 4701 or BIOC 4971 or xxxx4991+BIOC 4900)	4
BIOL or CHEM advanced elective	5	Elective 10	4
Elective 9	4		
	18		18

Total Hours: 142

### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1107	4 BIOL 2299	4 BIOL 2301	4 Vacation	
BIOL 1108	1 CHEM 2311	4 BIOL 2302	1	
CHEM 1161	4 CHEM 2312	1 Elective 2	4	
CHEM 1162	1 MATH 1252	4		
CHEM 1163	0 ENGW 1111	4		
MATH 1251	4			
Elective 1	4			
BIOC 1000	1			
	19	17	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 2309	4 BIOL 3611	4 COS adv elective	4 Co-op	
CHEM 2313	4 BIOL 3612	1 Elective 6	4	
CHEM 2314	1 PHYS 1155	3		
PHYS 1151	3 PHYS 1156	1		
PHYS 1152	1 PHYS 1157	1		
PHYS 1153	1 Elective 4	4		
Elective 3	4 Elective 5	4		
	EESC 2000	1		
	18	19	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	BIOL 4707	4 Vacation	Co-op	
	CHEM 3431	4		
	CHEM 3432	1		
	ENGW 3307	4		
	Elective 7	4		
	0	17	0	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CHEM 4620 (or CHEM 2331 and CHEM 2332)	4 Vacation	Co-op	



	BIOL or CHEM advanced elective	5		
	Elective 8	4		
	Elective 9	4		
		0	17	0
				0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	BIOL or CHEM advanced elective	5		
	BIOL or CHEM advanced elective	5		
	CHEM 4750 (or BIOL 4701 or BIOC 4971 or xxxx4991+BIOC 4900)	4		
	Elective 10	4		
		0	18	

Total Hours: 142

### Five Years, Three Co-ops in Spring/Summer 1

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1107	4 BIOL 2299	4 BIOL 2301	4 Vacation	
BIOL 1108	1 CHEM 2311	4 BIOL 2302	1	
CHEM 1161	4 CHEM 2312	1 Elective 2	4	
CHEM 1162	1 MATH 1252	4		
CHEM 1163	0 ENGW 1111	4		
MATH 1251	4			
Elective 1	4			
BIOC 1000	1			
	19	17	9	0

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 2309	4 Co-op	Co-op	BIOL 3611	4
CHEM 2313	4		BIOL 3612	1
CHEM 2314	1		Elective 4	4
PHYS 1151	3			
PHYS 1152	1			
PHYS 1153	1			
Elective 3	4			
EESC 2000	1			
	19	0	0	9

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COS adv elective	4 Co-op	Co-op	Vacation	
PHYS 1155	3			

PHYS 1156	1			
PHYS 1157	1			
ENGW 3307	4			
Elective 5	4			
	17	0	0	0

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 4707	4 Co-op	Co-op	Vacation	
CHEM 3431	4			
CHEM 3432	1			
CHEM 4620 (or CHEM 2331 and CHEM 2332)	4			
Elective 6	4			
	17	0	0	0

#### Year 5

Fall	Hours Spring	Hours
BIOL or CHEM advanced elective	5 BIOL or CHEM advanced elective	5
BIOL or CHEM advanced elective	5 CHEM 4750 (or BIOL 4701 or BIOC 4971 or xxxx4991+BIC 4900)	4
Elective 7	4 Elective 9	4
Elective 8	4 Elective 10	4
	18	17

Total Hours: 142

## Bioengineering and Biochemistry, BSBioE

This combined major from the College of Engineering and College of Science serves students who wish to develop both a scientific and an engineering mindset to solve problems in bioengineering and biochemistry. The program includes fundamentals and electives in the science of biochemistry; a complete and rigorous bioengineering core; and a series of molecular, cellular, and tissue engineering courses that allow for synthesis of the two. The curriculum aligns well with the coursework required to apply to medical school or other clinical graduate programs and aims to provide the knowledge, skills, and perspective to pursue careers in academia or industry.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Engineering</b>		
BIOE 2350	Biomechanics	4
BIOE 2355	Quantitative Physiology for Bioengineers	4
BIOE 2365 and BIOE 2366	Bioengineering Measurement, Experimentation, and Statistics and Lab for BIOE 2365	5
BIOE 3210	Bioelectricity	4
BIOE 3310	Transport and Fluids for Bioengineers	4
BIOE 3380	Biomolecular Dynamics and Control	4
BIOE 5410	Molecular Bioengineering	4
BIOE 5420	Cellular Engineering	4
BIOE 5430	Principles and Applications of Tissue Engineering	4
<b>Bioengineering Capstone</b>		
BIOE 4790	Capstone Design 1	4
BIOE 4792	Capstone Design 2	4
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
<b>Mathematics/Science Requirement</b>		
Code	Title	Hours
<b>Required Mathematics/Science</b>		
BIOL 1115 and BIOL 1116 or BIOL 1111 and BIOL 1112	General Biology 1 for Engineers and Lab for BIOL 1115 and Lab for BIOL 1111	5
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1171 and PHYS 1172 and PHYS 1173 or PHYS 1151 and PHYS 1152 and PHYS 1153	Physics 1 for Bioscience and Bioengineering and Lab for PHYS 1171 and Interactive Learning Seminar for PHYS 1171 Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1175 and PHYS 1176 and PHYS 1177 or PHYS 1155 and PHYS 1156 and PHYS 1157	Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175 Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

### Advanced Biology Elective

Complete one course in the following range: BIOL 2311 to BIOL 5999	4
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### Advanced Chemistry Elective

Complete one course in the following range: CHEM 2310 to CHEM 5999	4
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### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement: GE 1501 Cornerstone of Engineering 1 <sup>1</sup>	1
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## Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: GE 1501 Cornerstone of Engineering 1 <sup>1</sup>		1
1 semester hour from the following course counts toward the professional development requirement: GE 1502 Cornerstone of Engineering 2 <sup>1</sup>		1

## Writing Requirements

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302 or ENGW 3307 or ENGW 3315	Advanced Writing in the Technical Professions Advanced Writing in the Sciences Interdisciplinary Advanced Writing in the Disciplines	4

**Required General Electives**

Code	Title	Hours
	Complete 12 semester hours of academic, nonremedial, nonrepetitive courses.	12

**Integrative Course**

Code	Title	Hours
BIOE 4790	Capstone Design 1	4

**Major GPA Requirement**

2.000 minimum required in BIOE courses

**Program Requirement**

139 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, One Co-op in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 PHYS 1155 or 1175 (ND)	3 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 PHYS 1156 or 1176 (AD)	1	
ENGW 1111 (WF)	4 PHYS 1171 or 1151 (ND)	3 PHYS 1157 or 1177	1	
GE 1000	1 PHYS 1172 or 1152 (AD)	1 General elective	4	
GE 1501	4 PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4 General elective	4		
	17	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2355	4 BIOE 2350	4 Vacation	Vacation	
BIOE 2365 (AD, WI)	4 BIOL 2301 (ND)	4		
BIOE 2366	1 BIOL 2302 (AD)	1		
BIOL 1115 or 1111 (ND)	4 CHEM 2311	4		
BIOL 1116 or 1112	1 CHEM 2312	1		
MATH 2341	4 ENCP 2000	1		
	MATH 2321 (FQ)	4		
	18	19	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 3380	4 BIOE 3210	4 BIOE 3310	4 Co-op	

CHEM 2313	4 BIOE 5410, 5420, or 5430	4 BIOE 4790 (EI, CE, WI)	4	
CHEM 2314	1 BIOE 5420, 5410, or 5430	4		
ENGW 3302, 3307, or 3315 (WD)	4 BIOL 3611	4		
General elective	4 BIOL 3612 (WI)	1		
	17	17	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	BIOE 4792 (EI, CE, WI)	4
	BIOE 5430, 5410, or 5420	4
	ENCP 3000	1
	Advanced BIOL elective	4
	Advanced CHEM elective	4
	0	17

Total Hours: 139

**Four Years, One Co-op in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 PHYS 1155 or 1175 (ND)	3 Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4 PHYS 1156 or 1176 (AD)	1	
ENGW 1111 (WF)	4 PHYS 1171 or 1151 (ND)	3 PHYS 1157 or 1177	1	
GE 1000	1 PHYS 1172 or 1152 (AD)	1 General elective	4	
GE 1501	4 PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4 General elective	4		
	17	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2355	4 BIOE 2350	4 Vacation	Vacation	0
BIOE 2365 (AD, WI)	4 BIOL 2301 (ND)	4		
BIOE 2366	1 BIOL 2302 (AD)	1		
BIOL 1115 or 1111 (ND)	4 CHEM 2311	4		
BIOL 1116 or 1112	1 CHEM 2312	1		
ENCP 2000	1 MATH 2321 (FQ)	4		

MATH 2341	4				
	19	18	0		0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
BIOE 3310	4 Co-op	Co-op	BIOE 4790 (EI, CE, WI)		4
BIOE 3380	4		General elective		4
CHEM 2313	4				
CHEM 2314	1				
ENGW 3302, 3307, or 3315 (WD)	4				
	17	0	0		8

<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
BIOE 3210	4 BIOE 5420, 5410, or 5430	4			
BIOE 4792 (EI, CE, WI)	4 BIOE 5430, 5410, or 5420	4			
BIOE 5410, 5420, or 5430	4 Advanced BIOL elective	4			
BIOL 3611	4 Advanced CHEM elective	4			
BIOL 3612 (WI)	1				
ENCP 3000	1				
	18	16			

Total Hours: 139

### Five Years, Three Co-ops in Summer 2/Fall

<b>Year 1</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation		0
CHEM 1153	0 MATH 1342 (FQ)	4			
ENGW 1111 (WF)	4 PHYS 1171 or 1151 (ND)	3			
GE 1000	1 PHYS 1172 or 1152 (AD)	1			
GE 1501	4 PHYS 1173 or 1153	1			
MATH 1341 (FQ)	4 General elective	4			
	17	17	0		0

<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
BIOE 2365 (AD, WI)	4 BIOE 2355	4 Vacation	0 Co-op		0
BIOE 2366	1 BIOL 2301 (ND)	4			

BIOL 1115 or 1111 (ND)	4 BIOL 2302 (AD)	1			
BIOL 1116 or 1112	1 CHEM 2311	4			
MATH 2321 (FQ)	4 CHEM 2312	1			
PHYS 1175 or 1155 (ND)	3 ENCP 2000	1			
PHYS 1176 or 1156 (AD)	1 MATH 2341	4			
PHYS 1177 or 1157	1				
	19	19	0		0

<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
Co-op	0 BIOE 2350	4 BIOE 3310	4 Co-op		0
	BIOE 3380	4 BIOL 3611	4		
	CHEM 2313	4 BIOL 3612 (WI)	1		
	CHEM 2314	1			
	ENGW 3302, 3307, or 3315 (WD)	4			
	0	17	9		0

<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
Co-op	0 BIOE 3210	4 BIOE 4790 (EI, CE, WI)	4 Co-op		0
	BIOE 5410, 5420, or 5430	4 General elective	4		
	ENCP 3000	1			
	Advanced BIOL or CHEM elective	4			
	General elective	4			
	0	17	8		0

<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	0 BIOE 4792 (EI, CE, WI)	4			
	BIOE 5420, 5410, or 5430	4			
	BIOE 5430, 5410, or 5420	4			
	Advanced BIOL or CHEM elective	4			
	0	16			

Total Hours: 139

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4		
GE 1000	1 PHYS 1171 or 1151 (ND)	3		
GE 1501	4 PHYS 1172 or 1152 (AD)	1		
ENGW 1111 (WF)	4 PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4 General elective	4		
	17	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2365 (AD, WI)	4 Co-op	Co-op	Vacation	
BIOE 2366	1			
BIOL 1115 or 1111 (ND)	4			
BIOL 1116 or 1112	1			
ENCP 2000	1			
MATH 2321 (FQ)	4			
PHYS 1175 or 1155 (ND)	3			
PHYS 1176 or 1156 (AD)	1			
PHYS 1177 or 1157	1			
	20	0	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 2350	4 Co-op	Co-op	BIOE 3210	4
BIOE 2355	4		CHEM 2313	4
CHEM 2311	4		CHEM 2314	1
CHEM 2312	1			
MATH 2341	4			
	17	0	0	9

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOE 3310	4 Co-op	Co-op	BIOE 4790 (EI, CE, WI)	4
BIOE 3380	4		General elective	4
BIOL 2301 (ND)	4			
BIOL 2302 (AD)	1			

ENGW 3302, 3307, or 3315 (WD)	4			
	17	0	0	8

Year 5			
Fall	Hours Spring	Hours	
BIOE 4792 (EI, CE, WI)	4 BIOE 5420, 5410, or 5430	4	
BIOE 5410, 5420, or 5430	4 BIOE 5430, 5410, or 5420	4	
BIOL 3611	4 Advanced BIOL elective	4	
BIOL 3612 (WI)	1 Advanced CHEM elective	4	
ENCP 3000	1		
General elective	4		
	18	16	

Total Hours: 139

**Chemical Engineering and Biochemistry, BSChE**

This intercollege combined major serves students who would like to explore their interest in biochemistry while earning the benefit of a Bachelor of Science degree in chemical engineering. The program combines the fundamentals of biochemistry with the engineering skills necessary for scale-up of biochemical processes. The curriculum is designed to prepare students well to enter the growing biotechnology industry and be able to converse from the chemistry of organisms to the design of vessels for successful synthesis of cells and pharmaceuticals.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

**Engineering**

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4

CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4

**Chemical Engineering Capstone**

CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	2
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3 semester hours from the following course count toward the engineering requirement:

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	3
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**Mathematics/Science Requirement**

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
BIOL 4707	Cell and Molecular Biology	4
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

**Advanced Biology Elective**

Complete one course in the following range: 4  
BIOL 2311 to BIOL 5999

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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**Advanced Science Requirement**

Code	Title	Hours
BIOL 1115	General Biology 1 for Engineers	4
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
CHEM 2321 and CHEM 2322 and CHEM 2323 or CHEM 3331 and CHEM 3332	Analytical Chemistry and Lab for CHEM 2321 and Recitation for CHEM 2321 and Bioanalytical Chemistry and Lab for CHEM 3331	5

**Advanced Chemistry Elective**

Complete one course in the following range: 4  
CHEM 2310 to CHEM 5999

**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	1
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**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 8 semester hours of academic, nonremedial, nonrepetitive courses.		8

**Major GPA Requirement**

2.000 minimum required in CHME courses

**Program Requirement**

137 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, One Co-op in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 CHME 2308	4 Vacation	0 Vacation	0
CHEM 1153	0 GE 1502 (ER)	4		
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4		
GE 1000	1 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1115 (ND)	4 CHEM 2313	4 BIOL 2301 (ND)	4 Vacation	0
CHEM 2311	4 CHEM 2314	1 BIOL 2302 (AD)	1	
CHEM 2312	1 CHEM 2321 (AD, WI)	4 General elective	4	
CHME 2320	4 CHEM 2322	1		
MATH 2321 (FQ)	4 CHEM 2323	0		
	ENCP 2000	1		
	CHME 2310	4		
	MATH 2341	4		
	17	19	9	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHME 3312	4 CHME 4315 (AD, WI)	4 BIOL 3611	4 Co-op	0
CHME 3315 (AD)	4 CHME 4316	0 BIOL 3612 (WI)	1	
CHME 3316	0 CHME 4510	4 General elective	4	
CHME 3322	4 CHME 4701	4		
ENGW 3302, 3307, or 3315 (WD)	4 Advanced CHEM elective	4		
	16	16	9	0

Year 4				
Fall	Hours Spring	Hours		
Co-op	0 BIOL 4707	4		
	CHME 4512	4		
	CHME 4703 (EI, CE, WI)	4		
	CHME 4705	0		
	ENCP 3000	1		

Advanced BIOL elective	
0	13

Total Hours: 133

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 CHME 2308	4 Vacation	Vacation	0
CHEM 1153	0 GE 1502 (ER)	4		
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4		
GE 1000	1 PHYS 1151 (ND)	3		
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1115 (ND)	4 CHEM 2313	4 BIOL 2301 (ND)	4 Co-op	0
CHEM 2311	4 CHEM 2314	1 BIOL 2302 (AD)	1	
CHEM 2312	1 CHEM 2321 (AD, WI)	4 General elective	4	
CHME 2320	4 CHEM 2322	1		
MATH 2321 (FQ)	4 CHEM 2323	0		
	ENCP 2000	1		
	CHME 2310	4		
	MATH 2341	4		
	17	19	9	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CHME 3312	4 BIOL 3611	4 Co-op	0
	CHME 3315 (AD)	4 BIOL 3612 (WI)	1	
	CHME 3316	0 General elective	4	
	CHME 3322	4		
	ENGW 3302, 3307, or 3315 (WD)	4		
	0	16	9	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 BIOL 4707	4 Vacation	0 Co-op	0
	CHME 4315 (AD, WI)	4		
	CHME 4316	0		
	CHME 4510	4		
	CHME 4701	4		

	ENCP 3000	1		
		0	17	0
				0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
Co-op	0	CHME 4512	4	
		CHME 4703 (EI, WI, CE)	4	
		CHME 4705	0	
		Advanced BIOL elective	4	
		Advanced CHEM elective	4	
	0		16	

Total Hours: 137

## Data Science and Biochemistry, BS

The Data Science and Biochemistry Major combines computer science, biochemistry, biology, information science, mathematics, and statistics into an integrated curriculum. The program engages students in rigorous coursework designed to prepare students to interpret the ever-expanding knowledge base.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	

DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4

<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

<b>Khoury Elective</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
DS 2500 or higher, except DS 4900	
CY 2000 or higher, except CY 4930	
IS 2000 or higher, except IS 4900	

<b>Statistics Foundations</b>		
Complete one of the following:		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	4
MATH 3081	Probability and Statistics	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

### Biochemistry Requirements

Code	Title	Hours
<b>Biology Foundations</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4
<b>Chemistry Foundations</b>		
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5



CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
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**Mathematics Foundations**

MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4

**Biochemistry Foundations**

BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
CHEM 3331 and CHEM 3332 or CHEM 4620 or CHEM 5620	Bioanalytical Chemistry and Lab for CHEM 3331 Introduction to Protein Chemistry Protein Chemistry	3-5

**Intermediate or Advanced Science Elective**

Complete one course from the following	4-5
BIOL 2301 to BIOL 5999	
CHEM 2311 to CHEM 5999	
EEMB 2290 to EEMB 5999	
ENVR 2310 to ENVR 5999	
MATH 2280 to MATH 5999	
PHYS 2303 to PHYS 5999	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Courses</b>		
BINF 6308	Bioinformatics Computational Methods 1	4
BINF 6309	Bioinformatics Computational Methods 2	4
Complete one of the following:	4	
BIOL 4701	Biology Capstone	
CHEM 4750	Senior Research	

**Required General Electives**

Code	Title	Hours
Complete 12 credits of general electives.		12

**Major GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

131 total semester hours required

**Plan of Study****Sample Patterns:****Five Years, Three Co-ops**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 BIOL 2299	4		
CS 2500 and CS 2501	5 MATH 1341	4		
BIOL 1107 and BIOL 1108	5 CHEM 1161 and CHEM 1162	5		

ENGW 1111	4			
	20	18	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 BIOL 2301 and BIOL 2302	5 CS 3200	4 Co-op	
DS 3000	4 DS 4200	4 BIOL 2309	4	
MATH 1342	4 CHEM 2311 and CHEM 2312	5		
Intermediate/ Advanced Science Elective	4 CS 1210	1		
	Statistics Foundation	4		
	17	19	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4300	4 ENGW 3302	4 Co-op	
	CHEM 2313 and CHEM 2314	5 BIOL 3611 and BIOL 3612	5	
	Khoury Elective	4		
	General Elective	4		
	0	17	9	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4400	4 Vacation	Co-op	
	BINF 6308	4		
	CHEM 3331 or 4620	4		
	General Elective	4		
	0	16	0	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	Capstone	4
	BINF 6309	4
	General Elective	4
	0	12

Total Hours: 136

**Four Years, Two Co-ops**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 BIOL 2299	4 MATH 1342	4	
CS 2500 and CS 2501	5 MATH 1341	4		

BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162	5		
ENGW 1111	4				
	20		18	9	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
DS 3000	4	BIOL 2301 and BIOL 2302	5	CS 3200	4	Co-op	
Intermediate/ Advanced Science Elective	4	DS 4200	4	BIOL 2309	4		
Statistics Foundation	4	DS 4300	4				
General Elective	4	CHEM 2311 and CHEM 2312  CS 1210	5  1				
	16		19		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	ENGW 3302	4	Co-op	
		CHEM 2313 and CHEM 2314	5	BIOL 3611 and BIOL 3612	5		
		BINF 6308	4				
		Khoury Elective	4				
	0		17		9		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		BINF 6309	4	General Elective	4
		CHEM 3331 or 4620	4		
		Capstone	4		
		General Elective	4		
	0		16		4

Total Hours: 136

**Biochemistry, Minor**

The biochemistry minor allows students to engage in interdisciplinary study of biochemistry to complement their major plans of study.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

The biochemistry minor is not available to majors in biology, cell and molecular biology, biochemistry, or any combined major that involves biochemistry, due to curricular overlap.

**Required Courses**

Code	Title	Hours
<b>Core Courses</b>		
BIOL 4707	Cell and Molecular Biology	4
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
CHEM 5620	Protein Chemistry	3

**Biology Core Course**

Code	Title	Hours
Complete one of the following course options (other advanced BIOL courses may be accepted at the discretion of the Biochemistry Director):		
BIOL 2327	Human Parasitology	
BIOL 3405	Neurobiology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 3409	Current Topics in Biology	
BIOL 3605	Developmental Neurobiology	
BIOL 5306	Biological Clocks	
BIOL 5307 and BIOL 5308	Biological Electron Microscopy and Lab for BIOL 5307	
BIOL 5541	Endocrinology	
BIOL 5543	Stem Cells and Regeneration	
BIOL 5549	Inventions in Microbial Biotechnology	
BIOL 5573	Medical Microbiology	
BIOL 5581	Biological Imaging	
BIOL 5583	Immunology	
BIOL 5591	Advanced Genomics	
BIOL 5593	Cell and Molecular Biology of Aging	
BIOL 5597	Immunotherapies of Cancer and Infectious Disease	

**Chemistry Core Course**

Code	Title	Hours
Complete one of the following course options (other advanced CHEM courses may be accepted at the discretion of the Biochemistry Director):		
CHEM 3331 and CHEM 3332	Bioanalytical Chemistry and Lab for CHEM 3331	4-5
CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	
CHEM 4621 and CHEM 4622	Introduction to Chemical Biology and Lab for CHEM 4621	
CHEM 4460	Enzymes: Chemistry and Chemical Biology	
CHEM 4628 and CHEM 4629	Introduction to Spectroscopy of Organic Compounds and Identification of Organic Compounds	
CHEM 5550	Introduction to Glycobiology and Glycoprotein Analysis	
CHEM 5611	Analytical Separations	
CHEM 5612	Principles of Mass Spectrometry	
CHEM 5613	Optical Methods of Analysis	

CHEM 5616 Protein Mass Spectrometry  
and CHEM 5617 and Protein Mass Spectrometry  
Laboratory

CHEM 5625 Chemistry and Design of Protein  
Pharmaceuticals

CHEM 5638 Molecular Modeling

CHEM 5676 Bioorganic Chemistry

## GPA Requirement

2.000 GPA required in the minor

## Biology

Website (<http://www.northeastern.edu/biology/>)

### Jonathan Tilly, PhD

Chair and University Distinguished Professor

134 Mugar Life Sciences Building  
617.373.2260

617.373.3724 (fax)

Advising website (<http://www.tinyurl.com/bioadv/>)

The Department of Biology offers two majors, the BS in biology and the BS in cell and molecular biology. Both majors lay the groundwork for strong scientific training with basic coursework in mathematics, chemistry, and physics, relevant to biology. In the biology major, students explore the organization and processes of life, from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. The BS degree in cell and molecular biology offers a more focused program of study emphasizing processes operating at the cellular and molecular levels of biological systems. In both majors, students can select advanced electives to specialize in a subdiscipline of biology such as developmental biology, stem cell biology, microbiology, or physiology.

Our programs provide a wide range of relevant co-op opportunities in the renowned Boston-area biotechnology industry, hospitals, and research institutions, as well as across the country and at international sites.

There are a number of interdisciplinary opportunities involving biology. These include programs in behavioral neuroscience and in biochemistry, as well as combined majors between biology and computer science, data science, English, mathematics, or political science. Due to curricular overlap, combinations of any two of these programs or of any one of these programs with ecology and evolutionary biology, marine biology, or bioengineering are not offered.

Several accelerated bachelor/graduate degree programs are available: BS in Biology/MS in Bioinformatics, BS in Biology/MS in Biotechnology, BS in Computer Science and Biology/MS in Bioinformatics, BS in Cell and Molecular Biology/MS in Bioinformatics, BS in Cell and Molecular Biology/MS in Biotechnology, and BS in Biology/PhD in Biology.

Our degree programs are designed to prepare students to enter the job market directly or to go on to graduate, medical, veterinary, dental, law, or business school. Our graduates are qualified for a wide array of career paths in industrial and clinical research in any of the life sciences, in teaching at all levels, in state or federal government agencies, and in medicine and other healthcare-related professions. Premedical, pre-dental, and other preprofessional students are urged to consult with the prehealth advising program early in their careers at Northeastern.

## Programs

### Bachelor of Science (BS)

- Biology (p. 642)
- Cell and Molecular Biology (p. 646)
- Biology and English (p. 650)
- Biology and Mathematics (p. 652)
- Biology and Political Science (p. 653)
- Computer Science and Biology (p. 334)
- Data Science and Biology (p. 398)

## Minors

- Cell and Molecular Biology (p. 661)
- Biology (p. 662)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Biology, BS

The BS in biology curriculum lays the groundwork for strong scientific training with basic course work in mathematics, chemistry, and physics, relevant to biology. Students explore the organization and processes of life across broad areas of the field, from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. Students can select advanced electives to specialize in a subdiscipline of biology such as developmental biology, stem cell biology, microbiology, or physiology.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Biology Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000	Biology at Northeastern	1
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1
<b>Required Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		

BIOL 2309	Biology Project Lab	4
<i>Biochemistry</i>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

### Biology Capstone

Code	Title	Hours
Please complete one of the following options to fulfill the capstone requirement:		
BIOL 4701	Biology Capstone	1-4
BIOL 4971	Junior/Senior Honors Project 2	
BIOL 4900	Biology Research Capstone ( concurrent with BIOL 4991)	

### Biology Major Electives

Code	Title	Hours
<b>Organismal and Population Biology</b>		
Complete one of the following:		
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	

#### Intermediate and Advanced Biology

Complete three additional 4- or 5-semester-hour courses from the following:		12-15
BIOL 2321 to BIOL 3999		
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4707	Cell and Molecular Biology	
BIOL 5000 to BIOL 5999		
EEMB 2290 to EEMB 5515		
EEMB 5520 to EEMB 5535		
EEMB 5548 to EEMB 5569		
ENVR 5242	Ancient Marine Life	
One of the three intermediate/advanced electives can be a research course:		
BIOL 4991	Research	
BIOL 4994	Internship	
BIOL 4970	Junior/Senior Honors Project 1	
BIOL 4971	Junior/Senior Honors Project 2	

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
<b>Statistics</b>		

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
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### Chemistry

<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5

### Physics

<i>Physics 1</i>		
Complete one of the following lecture/lab pairs. PHYS 1145/ PHYS 1146 is recommended:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
<i>Physics 2</i>		
Complete one of the following lecture/lab pairs. PHYS 1147/ PHYS 1148 is recommended:		5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	

### Intermediate or Advanced Science

Complete one course from the following:		4
BIOL 2301 to BIOL 5999		
CHEM 2311 to CHEM 5999		
EEMB 2290 to EEMB 5999		
ENVR 2310 to ENVR 5999		
MATH 2280 to MATH 5999		
PHYS 2303 to PHYS 5999		
PSYC 2290 to PSYC 5999		

### Biology Major Credit/GPA Requirement

Complete 78 semester hours in the major with a cumulative GPA of 2.000.

Due to overlap in course content, double majoring in biology and cell and molecular biology, biology and biochemistry, biology and behavioral neuroscience, or biology and marine biology is not permitted.

### Program Requirement

136 total semester hours required

### Plan of Study

Please note that these are sample plans of study. While the requirements are the same for all students, individual schedules may vary.

**Four Years, Two Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1107	4 BIOL 2299	4 BIOL 2301	4 Vacation	
BIOL 1108	1 CHEM 2311	4 BIOL 2302	1	
CHEM 1161	4 CHEM 2312	1 Elective	4	
CHEM 1162	1 ENG 1111	4		
MATH 1251	4 Elective	4		
Elective	4			
BIOL 1000	1			
	19	17	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 2500	4 BIOL 2309	4 BIOL 3611	4 Co-op	
ENVR 2501	1 PHYS 1145	4 BIOL 3612	1	
CHEM 2313	4 PHYS 1146	1 Elective	4	
CHEM 2314	1 Elective	4		
Elective	4 Elective	4		
Elective	4 EESC 2000	1		
	18	18	9	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHYS 1147	4 Intermediate/ Advanced Biology Elective	4 Co-op	
ENGW 3307	4 PHYS 1148	1 (Intermediate, Advanced Biology Elective Lab)	1	
	Organismal/ Population Bio Elective	4 Elective	4	
	(Organismal/ Population Bio Elective Lab)	1		
	Intermediate/ Advanced Biology Elective	4		
	(Intermediate, Advanced Biology Elective Lab)	1		
	Elective	4		
	4	19	9	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	Intermediate/ Advanced Biology Elective	4
	(Intermediate, Advanced Biology Elective Lab)	1

Intermediate/  
Advanced  
Science  
Elective

4

(Intermediate,  
Advanced  
Science  
Elective Lab)

1

BIOL 4701

4

Elective

4

0 18

Total Hours: 140

**Four Years, Two Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
AP Credit for Biology	5 BIOL 2301	4 BIOL 2309	4 Vacation	
BIOL 2299	4 BIOL 2302	1 Elective	4	
CHEM 1161	4 CHEM 2311	4		
CHEM 1162	1 CHEM 2312	1		
MATH 1251	4 ENG 1111	4		
Elective	4 Elective	4		
BIOL 1000	1			
	23	18	8	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 2500	4 Co-op	Co-op	PHYS 1147	4
ENVR 2501	1	Elective	4 PHYS 1148	1
CHEM 2313	4		Elective	4
CHEM 2314	1			
PHYS 1145	4			
PHYS 1146	1			
EESC 2000	1			
	16	0	4	9

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Intermediate/ Advanced Biology Elective	4 Co-op	Co-op	Intermediate/ Advanced Science Elective	4
(Intermediate, Advanced Biology Elective Lab)	1		(Intermediate, Advanced Science Elective Lab)	1
BIOL 3611	4		Elective	4
BIOL 3612	1			
ENGW 3307	4			
Elective	4			
	18	0	0	9

**Year 4**

Fall	Hours Spring	Hours
Intermediate/ Advanced Biology Elective	4 Intermediate/ Advanced Biology Elective	4

(Intermediate, Advanced Biology Elective Lab)	1 (Intermediate, Advanced Biology Elective Lab)	1
Organismal/Population Bio Elective	4 BIOL 4701	4
(Organismal/Population Bio Elective Lab)	1 Elective	4
Elective	4 Elective	4
Elective	4	
	18	17

Total Hours: 140

### Five Years, Three Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 1107	4 BIOL 2299	4 BIOL 2301	4 Vacation	0
BIOL 1108	1 CHEM 2311	4 BIOL 2302	1	
CHEM 1161	4 CHEM 2312	1 Elective	4	
CHEM 1162	1 ENGW 1111	4		
MATH 1251	4 Elective	4		
Elective	4			
BIOL 1000	1			
	19	17	9	0

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 2500	4 BIOL 2309	4 Intermediate/Advanced Biology Elective	4 Co-op	0
ENVR 2501	1 PHYS 1145	4 (Intermediate, Advanced Biology Elective Lab)	1	
CHEM 2313	4 PHYS 1146	1 Elective	4	
CHEM 2314	1 Elective	4		
Elective	4 Elective	4		
Elective	4 EESC 2000	1		
	18	18	9	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 BIOL 3611	4 Vacation	Co-op	0
	BIOL 3612	1		
	PHYS 1147	4		
	PHYS 1148	1		
	ENGW 3307	4		
	Elective	4		
	0	18	0	0

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Intermediate/Advanced Biology Elective	4 Vacation	Co-op	0
	(Intermediate, Advanced Biology Elective Lab)	1		
	Organismal/Population Bio Elective			
	(Organismal/Population Bio Elective Lab)	1		
	Elective	4		
	Elective	4		
	0	14	0	0

#### Year 5

Fall	Hours Spring	Hours
Co-op	0 Intermediate/Advanced Biology Elective	4
	(Intermediate, Advanced Biology Elective Lab)	1
	BIOL 4701	4
	Intermediate/Advanced Science Elective	4
	(Intermediate/Advanced Science Elective Lab)	1
	Elective	4
	0	18

Total Hours: 140

### Five Years, Three Co-ops in Spring/Summer 1

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
AP Credit for Biology	5 BIOL 2301	4 BIOL 2309	4 Vacation	
BIOL 2299	4 BIOL 2302	1 Elective	4	
CHEM 1161	4 CHEM 2311	4		
CHEM 1162	1 CHEM 2312	1		
MATH 1251	4 ENGW 1111	4		
Elective	4 Elective	4		
BIOL 1000	1			
	23	18	8	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 2500	4 Co-op	Co-op	PHYS 1147	4
ENVR 2501	1		PHYS 1148	1
CHEM 2313	4		Elective	4
CHEM 2314	1			
PHYS 1145	4			
PHYS 1146	1			
EESC 2000	1			
	16	0	0	9

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 3611	4 Co-op	Co-op	Vacation	
BIOL 3612	1			
ENGW 3307	4			
Elective	4			
Elective	4			
	17	0	0	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Intermediate/ Advanced Biology Elective	4 Co-op	Co-op	Vacation	
(Intermediate, Advanced Biology Elective Lab)	1			
Organismal/ Population Bio Elective	4			
(Organismal/ Population Bio Elective Lab)	1			
Elective	4			
Elective	4			
	18	0	0	0

Year 5				
Fall	Hours Spring	Hours		
Intermediate/ Advanced Biology Elective	4 Intermediate/ Advanced Biology Elective	4		
(Intermediate, Advanced Biology Elective Lab)	1 (Intermediate, Advanced Biology Elective Lab)	1		
Intermediate/ Advanced Science Elective	4 BIOL 4701	4		
(Intermediate, Advanced Science Elective Lab)	1 Elective	4		
Elective	4			

Elective	4	
	18	13
Total Hours: 140		

## Cell and Molecular Biology, BS

The BS in cell and molecular biology curriculum lays the groundwork for strong scientific training with basic course work in mathematics, chemistry, and physics, relevant to biology. Students pursue a focused program of study emphasizing processes operating at the cellular and molecular levels of biological systems, including specialty courses in molecular cell biology and advanced genomics. Students choose from a range of advanced electives that delve deeply into molecular aspects of biology.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Cell and Molecular Biology Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000	Biology at Northeastern	1
<b>Introduction to Experiential Learning</b>		
EESC 2000	Professional Development for Co-op	1
<b>Required Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Biochemistry</i>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<i>Molecular Biology</i>		
BIOL 4707	Cell and Molecular Biology	4
BIOL 5591	Advanced Genomics	4
<b>Intermediate/Advanced Cell and Molecular Biology Electives</b>		
Complete two of the following:		8-9
BIOL 3411	Current Topics in Cell and Molecular Biology	

BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 2329	Bioethics	
BIOL 3601	Neural Systems and Behavior	
BIOL 3603	Mammalian Systems Physiology	
BIOL 3605	Developmental Neurobiology	
BIOL 5306	Biological Clocks	
BIOL 5307	Biological Electron Microscopy	
BIOL 5541	Endocrinology	
BIOL 5543	Stem Cells and Regeneration	
BIOL 5549	Inventions in Microbial Biotechnology	
BIOL 5569	Advanced Microbiology	
BIOL 5573	Medical Microbiology	
BIOL 5581	Biological Imaging	
BIOL 5583	Immunology	
BIOL 5585	Evolution	
BIOL 5587	Comparative Neurobiology	
BIOL 5593	Cell and Molecular Biology of Aging	
BIOL 5597	Immunotherapies of Cancer and Infectious Disease	
EEMB 3001	Genetics and Evolution in Action	
<i>Research</i>		
One of the two Intermediate/Advanced Electives can be a research course:		
BIOL 4991	Research	
BIOL 4994	Internship	
BIOL 4970	Junior/Senior Honors Project 1	
BIOL 4971	Junior/Senior Honors Project 2	

## Biology Capstone

Code	Title	Hours
Please complete one of the following options to fulfill the capstone requirement:		
BIOL 4701	Biology Capstone	1-4
BIOL 4900	Biology Research Capstone (concurrent with BIOL 4991, which may be used toward Intermediate/Advanced Cell and Molecular Biology Electives)	
BIOL 4971	Junior/Senior Honors Project 2	

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
<b>Statistics</b>		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5

CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
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## Physics

<i>Physics 1</i>		
Complete one of the following lecture/lab pairs. PHYS 1145/PHYS 1146 is recommended:		

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	

## *Physics 2*

Complete one of the following lecture/lab pairs. PHYS 1147/PHYS 1148 is recommended:		
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PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	

## Intermediate or Advanced Science

Complete one course from the following:		4-5
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BIOL 2301 to BIOL 5999	
CHEM 2311 to CHEM 5999	
EEMB 2290 to EEMB 5999	
ENVR 2310 to ENVR 5999	
MATH 2280 to MATH 5999	
PHYS 2303 to PHYS 5999	
PSYC 2290 to PSYC 5999	

## Cell and Molecular Biology Major Credit/GPA Requirement

Complete 79 semester hours in the major with a cumulative GPA of 2.000.

Due to overlap in course content, double majoring in cell and molecular biology and biology, biochemistry, marine biology or behavioral neuroscience is not permitted.

## Program Requirement

136 total semester hours required

## Plan of Study

Please note that these are sample plans of study. While the requirements are the same for all students, individual schedules may vary.

## Four Years, Two Co-ops in Summer 2/Fall

Year 1	Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
	BIOL 1107	4	BIOL 2299	4	BIOL 2301	4	Vacation	
	BIOL 1108	1	CHEM 2311	4	BIOL 2302	1		
	CHEM 1161	4	CHEM 2312	1	Elective	4		
	CHEM 1162	1	ENGV 1111	4				
	MATH 1251	4	Elective	4				
	Elective	4						



BIOL 1000	1			
	19	17	9	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 2500	4	BIOL 2309	4	BIOL 3611	4	Co-op	
ENVR 2501	1	PHYS 1145	4	BIOL 3612	1		
CHEM 2313	4	PHYS 1146	1	Elective	4		
CHEM 2314	1	Elective	4				
Intermediate/ advanced CMB elective	4	Elective	4				
(Intermediate, advanced CMB elective lab)	1	EESC 2000	1				
Elective	4						
	19		18		9		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Intermediate/ advanced CMB elective	4	BIOL 4707	4	Co-op	
Elective	4	(Intermediate, advanced CMB elective lab)	1	Elective	4		
		PHYS 1147	4				
		PHYS 1148	1				
		ENGW 3307	4				
		Elective	4				
	4		18		8		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op		BIOL 5591	4
		BIOL 4701	4
		Intermediate/ advanced science elective	4
		(Intermediate, advanced science elective lab)	1
		Elective	4
	0		17

Total Hours: 138

**Four Years, Two Co-ops in Spring/Summer 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AP credit for biology	5	BIOL 2301	4	BIOL 2309	4	Vacation	
BIOL 2299	4	BIOL 2302	1	Elective	4		
CHEM 1161	4	CHEM 2311	4				
CHEM 1162	1	CHEM 2312	1				
MATH 1251	4	ENGW 1111	4				

Elective	4	Elective	4
BIOL 1000	1		
	23		18
			8
			0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 2500	4	Co-op		Co-op		BIOL 3611	4
ENVR 2501	1			Elective	4	BIOL 3612	1
CHEM 2313	4					Elective	4
CHEM 2314	1						
PHYS 1145	4						
PHYS 1146	1						
EESC 2000	1						
	16		0		4		9

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 4707	4	Co-op		Co-op		Intermediate/ advanced science elective	4
PHYS 1147	4					(Intermediate, advanced science elective lab)	1
PHYS 1148	1					Elective	4
ENGW 3307	4						
Elective	4						
	17		0		0		9

**Year 4**

Fall	Hours	Spring	Hours
BIOL 5591	4	BIOL 4701	4
Intermediate/ advanced CMB elective	4	Intermediate/ advanced CMB elective	4
(Intermediate/ advanced science elective lab)	1	(Intermediate/ advanced CMB elective lab)	1
Elective	4	Elective	4
Elective	4	Elective	4
	17		17

Total Hours: 138

**Five Years, Three Co-ops in Summer 2/Fall**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1107	4	BIOL 2299	4	BIOL 2301	4	Vacation	
BIOL 1108	1	CHEM 2311	4	BIOL 2302	1		
CHEM 1161	4	CHEM 2312	1	Elective	4		
CHEM 1162	1	ENGW 1111	4				
MATH 1251	4	Elective	4				
Elective	4						
BIOL 1000	1						
	19		17		9		0

## Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 2500	4 BIOL 2309	4 BIOL 3611	4 Co-op	
ENVR 2501	1 PHYS 1145	4 BIOL 3612	1	
CHEM 2313	4 PHYS 1146	1		
CHEM 2314	1 Elective	4		
Elective	4 Elective	4		
Elective	4 EESC 2000	1		
	18	18	5	0

## Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	BIOL 4707	4 Vacation	Co-op	
	PHYS 1147	4		
	PHYS 1148	1		
	ENGW 3307	4		
	Elective	4		
	0	17	0	0

## Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Intermediate/ advanced CMB elective	4 Vacation	Co-op	
	(Intermediate, advanced CMB elective lab)	1		
	Intermediate/ advanced science elective	4		
	Intermediate/ advanced science elective lab)	1		
	Elective	4		
	Elective	4		
	0	18	0	0

## Year 5

Fall	Hours Spring	Hours
Co-op	BIOL 5591	4
	BIOL 4701	4
	Intermediate/ advanced CMB elective	4
	(Intermediate, advanced CMB elective lab)	1
	Elective	4
	0	17

Total Hours: 138

## Five Years, Three Co-ops in Spring/Summer 1

## Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
AP credit for biology	5 BIOL 2301	4 BIOL 2309	4 Vacation	
BIOL 2299	4 BIOL 2302	1 Elective	4	
CHEM 1161	4 CHEM 2311	4		
CHEM 1162	1 CHEM 2312	1		
MATH 1251	4 ENGW 1111	4		
Elective	4 Elective	4		
BIOL 1000	1			
	23	18	8	0

## Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 2500	4 Co-op	Co-op	BIOL 3611	4
ENVR 2501	1		BIOL 3612	1
CHEM 2313	4		Elective	4
CHEM 2314	1			
PHYS 1145	4			
PHYS 1146	1			
EESC 2000	1			
	16	0	0	9

## Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 4707	4 Co-op	Co-op	Vacation	
PHYS 1147	4			
PHYS 1148	1			
ENGW 3307	4			
Elective	4			
	17	0	0	0

## Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 5591	4 Co-op	Co-op	Vacation	
Intermediate/ advanced CMB elective	4			
(Intermediate/ advanced CMB elective lab)	1			
Elective	4			
Elective	4			
	17	0	0	0

## Year 5

Fall	Hours Spring	Hours
BIOL 4701	4 Intermediate/ advanced science elective	4
Intermediate/ advanced CMB elective	4 (Intermediate, advanced science elective lab)	1

(Intermediate/advanced CMB elective lab)	1 Elective	4
Elective	4 Elective	4
Elective	4	
	17	13

Total Hours: 138

## Biology and English, BS

In the combined biology and English degree, science courses lay the groundwork for strong basic training in mathematics, chemistry, and physics that are relevant to biology. In biology courses, students broadly explore the organization and processes of life—from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. In English courses, students study the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures; analyze writing practices and related media; and practice a variety of approaches to the study of language, rhetoric, writing, and literature. The fields of biology and English are bridged with course work in different forms of science writing, as well as psychology and sociology courses exploring the acquisition of language and reading; the sociology of health and illness; and the environment, technology, and society.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Biology Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000 or ENGL 1000	Biology at Northeastern English at Northeastern	1
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1
<b>Required Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4

<i>Biochemistry</i>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

### Biology Elective

Code	Title	Hours
<b>Intermediate/Advanced Biology</b>		
Complete one of the following:		4-5
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
<b>Organismal and Population Biology</b>		
Complete one of the following:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	

### Supporting Courses for Biology

Code	Title	Hours
<b>Mathematics</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
<b>Statistics</b>		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Physics</b>		
<i>Physics 1</i>		
Complete one of the following lecture/lab pairs. PHYS 1145/ PHYS 1146 is recommended:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
<i>Physics 2</i>		

Complete one of the following lecture/lab pairs. PHYS 1147/ PHYS 1148 is recommended:	5
PHYS 1147 Physics for Life Sciences 2 and PHYS 1148 and Lab for PHYS 1147	
PHYS 1155 Physics for Engineering 2 and PHYS 1156 and Lab for PHYS 1155 and PHYS 1157 and Interactive Learning Seminar for PHYS 1155	
PHYS 1165 Physics 2 and PHYS 1166 and Lab for PHYS 1165	

## English Requirements

Code	Title	Hours
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### English Course-Level Requirement

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

#### Introduction to College

ENGL 1000	English at Northeastern	1
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#### Foundational Courses

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	

#### Diversity

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below.

ENGL 2150	Literature and Digital Diversity	4
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	

#### Pre-Nineteenth-Century Literature

Complete one of the following:

ENGL 1600	Introduction to Shakespeare	4
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	

#### Nineteenth-, Twentieth-, and Twenty-First-Century Literature

Complete one of the following:

ENGL 2330	The American Renaissance	4
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	

ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3140	19th-Century Literatures	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	

#### Theories and Methods

Complete one of the following:

ENGL 1140	Grammar: The Architecture of English	4
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3400	Opening the Archive	
ENGL 3700	Narrative Medicine	
ENGL 4410	Research in Rhetoric and Writing	
LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	

#### Comparative Literature

Complete one of the following:

ENGL 1450	Reading and Writing in the Digital Age	4
ENGL 1502	American Literature to 1865	
ENGL 2150	Literature and Digital Diversity	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
ENGL 3487	Film and Text (Abroad)	
ENGL 3663	The African American Novel	

#### Writing

Complete one of the following:

ENGL 2700	Creative Writing	4
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	

ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**English Electives**

Complete two additional ENGL electives. 8

**Integrative Courses**

Code	Title	Hours
<b>Integrative English Course</b>		
Complete one of the following:		4
ENGL 2770	Writing to Heal	
ENGL 3340	Technologies of Text	
<b>Integrative General Biological Sciences Course</b>		
Complete one of the following:		4
PSYC 3464	Psychology of Language	
PSYC 4520	Language and the Brain	

**Capstone Requirement**

Complete one of the following capstone options:

Code	Title	Hours
<b>Biology Capstone: complete one of the options to fulfill the capstone requirement in biology.</b>		
BIOL 4701	Biology Capstone	1-4
BIOL 4900	Biology Research Capstone (concurrent with BIOL 4991, which may be used toward Intermediate/Advanced Biology)	
BIOL 4971	Junior/Senior Honors Project 2	
<b>English Capstone</b>		
ENGL 4710 or ENGL 4720	Capstone Seminar Capstone Project	4

**Biology and English Combined Major GPA Requirement**

Minimum 2.000 GPA required in all BIOL courses

Minimum 2.000 GPA required in all ENGL courses

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Biology and Mathematics, BS**

In the BS, combined biology and mathematics degree program, science courses lay the groundwork for strong basic training in mathematics, chemistry, and physics that are relevant to biology. In biology courses, students broadly explore the organization and processes of life—from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. In mathematics courses, students pursue

mathematical reasoning, differential equations, and linear algebra, as well as statistics and probability. The fields of biology and mathematics are integrated in a range of course offerings including bioinformatics, applied statistics, advanced genomics, and biological imaging.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 46).

**Biology Requirements**

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000 or MATH 1000	Biology at Northeastern Mathematics at Northeastern	1
<b>Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<b>Chemistry</b>		
<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Biochemistry</b>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<b>Intermediate/Advanced Biology</b>		
Complete one of the following:		4-5
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
<b>Organismal and Population Biology Elective</b>		
Complete one of the following:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	

BIOL 3413	Current Topics in Organismal and Population Biology
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302
EEMB 2400	Introduction to Evolution
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700
EEMB 3460	Conservation Biology

## Mathematics Requirements

Code	Title	Hours
<b>Calculus 1</b>		
MATH 1341 or MATH 1251	Calculus 1 for Science and Engineering or Calculus and Differential Equations for Biology 1	4
<b>Calculus 2 and Calculus 3</b>		
MATH 1342 or MATH 1252	Calculus 2 for Science and Engineering or Calculus and Differential Equations for Biology 2	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Physics</b>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
<b>Required Mathematics Courses</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
<b>Mathematics Electives</b>		
Complete three of the following:		12
MATH 2331	Linear Algebra	
MATH 3001 to MATH 4899		

## Additional Requirements

Code	Title	Hours
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
<b>Capstone</b>		
Complete one of the following to fulfill capstone requirement:		1-4
BIOL 4701	Biology Capstone	
BIOL 4900	Biology Research Capstone (concurrent with BIOL 4991, which may be used toward Intermediate/Advanced Biology)	
BIOL 4971	Junior/Senior Honors Project 2	
MATH 4020	Research Capstone	
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	
<b>Biology/Mathematics Integrative Courses</b>		
Complete two of the following:		8-10
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	

CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510
BIOL 3405	Neurobiology
BIOL 5569	Advanced Microbiology
BIOL 5581	Biological Imaging
BIOL 5591	Advanced Genomics
MATH 4581	Statistics and Stochastic Processes
MATH 7343	Applied Statistics
BINF 6308	Bioinformatics Computational Methods 1
BINF 6309	Bioinformatics Computational Methods 2

## Writing Requirement

ENGW 3307	Advanced Writing in the Sciences	4
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## Biology and Mathematics Combined Major Credit/GPA Requirements

Complete 93 semester hours in the major with a cumulative GPA of 2.000.

## Program Requirements

143 total semester hours required

## Biology and Political Science, BS

In the BS, combined biology and political science degree program, science courses lay the groundwork for strong basic training in mathematics, chemistry, and physics that are relevant to biology. In biology courses, students broadly explore the organization and processes of life—from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. In political science courses, students pursue core concepts of American government, comparative politics, international relations and political thought. Coursework in quantitative techniques is also required. Students choose from a range of advanced subject electives. An appreciation of the intersection of biology and political science is provided through advanced courses in science, technology and public policy, and in environmental politics and policy.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Biology Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000 or POLS 1000	Biology at Northeastern or Political Science at Northeastern	1

## Biology

### Foundations

BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<i>Biochemistry</i>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<b>Intermediate/Advanced Biology</b>		
Complete one of the following:		4-5
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
<b>Organismal and Population Biology Elective</b>		
Complete one of the following:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	
<b>Mathematics</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
<b>Chemistry</b>		
<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Physics</b>		
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	5

## Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4

## Statistics

Complete one of the following:		4-5
POLS 2400	Quantitative Techniques	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	

## Political Thought

Complete one of the following:		4
POLS 2328	Modern Political Thought	
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

## Political Science Elective

Complete five POLS courses 2000 and above.	20
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## Political Science Concentration (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 655)
- Campaigns and Elections (p. 655)
- Comparative Politics (p. 655)
- Identity, Culture, and Politics (p. 655)
- International Relations and Diplomacy (p. 655)
- Law and Legal Studies (p. 655)
- Public Policy (p. 655)
- Security Studies (p. 656)

## Integrative Requirement and Capstone

*Note:* Science, Technology, and Public Policy (POLS 2390) and Environmental Politics and Policy (POLS 2395) cannot be used both as an integrative course and as an elective above.

Code	Title	Hours
<b>Integrative Requirement</b>		
POLS 2390 or POLS 2395	Science, Technology, and Public Policy Environmental Politics and Policy	4
<b>Capstone</b>		
Complete one of the following to fulfill capstone requirement:		1-4
BIOL 4701	Biology Capstone	
BIOL 4900	Biology Research Capstone (concurrent with BIOL 4991, which may be used toward Intermediate/Advanced Biology)	
BIOL 4971	Junior/Senior Honors Project 2	
POLS 4701	Political Science Senior Capstone	

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

136 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12

POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	



**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Computer Science and Biology, BS**

The computer science and biology combined major reflects how research in biology, especially genetics, has become a computational science. The program provides a strong foundation in biology, chemistry, and mathematics, as well as software development and algorithms.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUPATH Requirements**

All undergraduate students are required to complete the NUPATH Requirements (p. 46).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar <sup>1</sup>	
CS 1210	Professional Development for Khoury Co-op <sup>2</sup>	
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3800	Theory of Computation (integrative course)	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
<b>Khoury Elective Courses</b>		

With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

<sup>1</sup> Students entering through the biology department may take Biology at Northeastern (BIOL 1000).

<sup>2</sup> Students entering through the biology department may take Professional Development for Co-op (EESC 2000).

**Biology Courses**

Code	Title	Hours
<b>Foundations of Biology</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<b>Inquiries</b>		
BIOL 2299	Inquiries in Biological Sciences	4
<b>Molecular Biology</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<b>Techniques in Biology</b>		
BIOL 2309	Biology Project Lab	4
<b>Chemistry</b>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Biology Capstone</b>		
Choose one:		4
BIOL 4701	Biology Capstone	
BIOL 4971	Junior/Senior Honors Project 2	
BIOL 4900	Biology Research Capstone	
<b>Intermediate and Advanced Biology Electives</b>		
Complete two biology courses (with corequisite labs if offered). Choose one of these two courses from the following list:		9-10
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	

EEMB 2700 and EEMB 2701 EEMB 3460	Marine Biology and Lab for EEMB 2700 Conservation Biology	
Choose the second elective from the following list:		4-5
BIOL 2311 to BIOL 4999		
EEMB 2290 to EEMB 5515		
EEMB 5548 to EEMB 5569		

**Biology Integrative Course**

Complete one of the following:		4-5
BINF 6308	Bioinformatics Computational Methods 1	
BIOL 4707	Cell and Molecular Biology	
BIOL 5569	Advanced Microbiology	
BIOL 5581	Biological Imaging	
BIOL 5587	Comparative Neurobiology	
BIOL 5591	Advanced Genomics	
EEMB 4548	Sociobiology	

**Supporting Courses**

Code	Title	Hours
<b>Calculus</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
MATH 1252	Calculus and Differential Equations for Biology 2	4
<b>Probability and Statistics</b>		
Complete one of the following:		4-5
MATH 3081	Probability and Statistics	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or HIST 1300	Knowledge in a Digital World Introduction to Health and Humanities	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Intermediate or Advanced Science**

Complete one course from the following:		4
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
CHEM 2311 to CHEM 5999		
EEMB 2290 to EEMB 5999		
ENVR 2310 to ENVR 5999		

MATH 2280 to MATH 5999
PHYS 2303 to PHYS 5999
PSYC 2290 to PSYC 5999

**Writing Requirements**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
or ENGW 3307	Advanced Writing in the Sciences	

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives		16

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Exploring Creative Expression and Innovation
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

141 total semester hours required

**Plan of Study****Sample Patterns:****Four Years, Two Co-ops in Summer 2/Fall**

Year 1	Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CS 1200	1	CS 2510 and CS 2511	5	BIOL 2301	4	Vacation
CS 1800 and CS 1802	5	BIOL 2299	4	BIOL 2302	1	
CS 2500 and CS 2501	5	ENGW 1111	4	Elective	4	
BIOL 1107 and BIOL 1108	5	Elective	4			

CHEM 1161	4			
CHEM 1162	1			
CHEM 1163	0			
	21	17	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 1210	1 Elective	4 Co-op	
CHEM 2311 and CHEM 2312	5 CHEM 2313 and CHEM 2314	5 BIOL 2309	4	
CS 3200	4 CS 3000	4		
MATH 1251	4 BIOL 3611	4		
	BIOL 3612	1		
	MATH 1252	4		
	18	19	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 3800	4 ENGW 3302	4 Co-op	
	Computing and social issues	4 ENVR 2500 and ENVR 2501 (or MATH 3081)	5	
	BIOL elective	5		
	BIOL integrative elective	4		
	0	17	9	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 4500	4 BIOL Elective	4 Co-op	
	BIOL 4701	4 Elective	4	
	BIOL Intermediate/Advanced elective	4		
	Khoury Elective	4		
	0	16	8	0

Total Hours: 142

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 BIOL 2299	4		
BIOL 1107 and BIOL 1108	5 ENGW 1111	4		
CS 1200	1 MATH 1251	4		
CHEM 1161	4			
CHEM 1162	1			

CHEM 1163	0			
	21	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 3000	4 Vacation	0 Co-op	0
CS 3200	4 BIOL 2301	4		
CHEM 2311 and CHEM 2312	5 BIOL 2302	1		
MATH 1252	4 CHEM 2313 and CHEM 2314	5		
	CS 1210	1		
	Elective	4		
	18	19	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 3800	4 ENGW 3302	4 Co-op	0
	BIOL 2309	4 BIOL 3611	4	
	Elective	4 BIOL 3612	1	
	BIOL elective	4		
	0	16	9	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 BIOL elective	5 Elective	4 Co-op	0
	Khoury Elective	4 Elective	4	
	ENVR 2500 and ENVR 2501 (or MATH 3081)	5		
	Computing and social issues	4		
	0	18	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 CS 4500	4
	BIOL integrative elective	4
	BIOL 4701	4
	BIOL Intermediate/Advanced elective	4
	0	16

Total Hours: 142

**Five Years, Three Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0

CS 2500 and CS 2501	5 BIOL 2299	4		
BIOL 1107 and BIOL 1108	5 ENGW 1111	4		
CS 1200	1 MATH 1251	4		
CHEM 1161	4			
CHEM 1162	1			
CHEM 1163	0			
	21	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 2311 and CHEM 2312	5 Co-op	0 Co-op	0 Vacation	0
CS 3500 and CS 3501	5			
CS 1210	1			
MATH 1252	4			
BIOL 2301	4			
BIOL 2302	1			
	20	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 Co-op	0 Co-op	0 Elective	4
CHEM 2313 and CHEM 2314	5		ENGW 3302	4
BIOL 2309	4			
BIOL 3611	4			
BIOL 3612	1			
	18	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3800	4 Co-op	0 Co-op	0 Elective	4
BIOL elective	4		Elective	4
Elective	4			
CS 3200	4			
	16	0	0	8

**Year 5**

Fall	Hours Spring	Hours		
BIOL elective	5 CS 4500	4		
Khoury Elective	4 BIOL 4701	4		
ENVR 2500 and ENVR 2501 (or MATH 3081)	5 BIOL integrative elective	4		
Computing and social issues	4 BIOL Intermediate/ Advanced elective	4		
	18	16		

Total Hours: 142

**Data Science and Biology, BS**

The data science and biology major provides a strong foundation in biology, chemistry, and mathematics, as well as software development and algorithms. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. Students also explore the organization and processes of life across broad areas of the field, from molecules and cells through organs and organ systems to populations, ecosystems, and evolution.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Data Science Requirements**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		14
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4

DS 4400	Machine Learning and Data Mining 1	4
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**Khoury Elective**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four semester hours of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
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CS 2500 or higher, except CS 5010
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CY 2000 or higher, except CY 4930
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DS 2500 or higher, except DS 4900
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IS 2000 or higher, except IS 4900
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**Statistics Foundations**

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
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**Computer Science Writing Requirements**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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**College Writing**

ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
or ENGW 3307	Advanced Writing in the Sciences	

**Biology Requirements**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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**Biology Foundations**

BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

**Chemistry Foundations**

CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5

**Intermediate and Advanced Biology Elective**

Complete one of the following:	4
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BIOL 2327 to BIOL 3999
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BIOL 4705 to BIOL 5999
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EEMB 2290 to EEMB 5515
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EEMB 5520 to EEMB5534
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EEMB 5548 to EEMB 5569
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ENVR 5242	Ancient Marine Life
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Research:

BIOL 4991	Research
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BIOL 4970	Junior/Senior Honors Project 1
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BIOL 4971	Junior/Senior Honors Project 2
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BIOL 4994	Internship
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**Organismal and Population Biology Elective**

Complete one course and its corresponding lab, if indicated:	4-5
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BIOL 2327	Human Parasitology
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BIOL 3401	Comparative Vertebrate Anatomy
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BIOL 3403	Animal Behavior
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BIOL 3413	Current Topics in Organismal and Population Biology
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BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421
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EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302
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EEMB 2400	Introduction to Evolution
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EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700
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EEMB 3460	Conservation Biology
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**Physics Requirement**

Complete one of the following lecture/lab pairs. PHYS 1145/PHYS 1146 is recommended:	5
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PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145
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PHYS 1151 and PHYS 1152	Physics for Engineering 1 and Lab for PHYS 1151
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PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161
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**Mathematics Foundations**

MATH 1251	Calculus and Differential Equations for Biology 1	4
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**Integrative Requirements**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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**Integrative Course**

Complete one of the following:	4
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BIOL 5569	Advanced Microbiology
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BINF 6308	Bioinformatics Computational Methods 1
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BIOL 4707	Cell and Molecular Biology
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BIOL 5581	Biological Imaging
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BIOL 5587	Comparative Neurobiology
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BIOL 5591	Advanced Genomics
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**Capstone**

Choose one:	4
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BIOL 4701	Biology Capstone
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BIOL 4900	Biology Research Capstone
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BIOL 4971	Junior/Senior Honors Project 2
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**Required General Electives**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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Complete 20 semester hours of general electives.	20
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**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## Program Requirement

138 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Five Years, Three Co-ops

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	BIOL 2299	4				
CS 2500 and CS 2501	5	MATH 1251	4				
BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162	5				
ENGW 1111	4						
	20		18		0		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
DS 3000	4	CS 1210	1	Vacation	0	Co-op	0
CS 3500 and CS 3501	5	DS 4200	4				
PHYS 1145 and PHYS 1146	5	BIOL 2301 and BIOL 2302	5				
CHEM 2311 and CHEM 2312	5	ENVR 2500 and ENVR 2501	5				
		CHEM 2313 and CHEM 2314	5				
	19		20		0		0

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 3200	4	BIOL 3611 and BIOL 3612	5	Co-op	0
		DS 4300	4	General elective	4		
		BIOL 2309	4				
		BIOL intermediate/ advanced elective	4				
	0		16		9		0

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4400	4	ENGW 3302	4	Co-op	0
		Khoury Elective	4	General elective	4		
		Integrative course	4				
		General elective	4				
	0		16		8		0

##### Year 5

Fall	Hours	Spring	Hours
Co-op	0	Capstone	4
		Organismal and population biology elective	4
		General elective	4
		General elective	4
	0		16

Total Hours: 142

### Cell and Molecular Biology, Minor

The Department of Biology offers a minor in cell and molecular biology, which involves taking five biology courses, two of which must have a corequisite lab. The minor provides students with a foundation in biology and an emphasis in cell and molecular biology.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

#### Restrictions

This minor is not available for students who major in biology, biochemistry, behavioral neuroscience, cell and molecular biology, marine biology, ecology and evolutionary biology, or any combined major that involves those listed above.

#### Required Biology Courses

Complete five biology courses for a total of at least 22 semester hours. At least two of the five courses must contain a lab corequisite.

Code	Title	Hours
Complete one introductory biology sequence:		9-10
<i>Foundations of Biology</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	
BIOL 2299	Inquiries in Biological Sciences	
<i>General Biology</i>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	
<i>General Biology (for Engineers)</i>		
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	
Complete the following required courses:		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 4707 or BIOL 5591	Cell and Molecular Biology Advanced Genomics	4

**INTERMEDIATE/ADVANCED ELECTIVES**

Code	Title	Hours
Complete at least one of the following course options: 4-5		
BIOL 3405	Neurobiology	
BIOL 3411	Current Topics in Cell and Molecular Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	
BIOL 4705 to BIOL 4709		
BIOL 5301 to BIOL 5306		
BIOL 5499 to BIOL 5583		
BIOL 5587 to BIOL 5597		
EEMB 3001	Genetics and Evolution in Action	

**CREDIT/GPA REQUIREMENT**

Complete 22 semester hours

2.000 GPA required in the minor

**Biology, Minor**

The Department of Biology offers a minor in biology, which involves taking five biology courses, two of which must have a corequisite lab. The minor provides students with a foundation in the five core concepts of biology: evolution, energy transformations, biological structure from the molecular to the ecosystem scale, information flow, and systems biology.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Restrictions**

This minor is not available for students who major in biology, biochemistry, behavioral neuroscience, cell and molecular biology, marine biology, ecology and evolutionary biology, or any combined major that involves those listed above.

**Required Biology Courses**

Complete five biology courses for a total of at least 22 semester hours. Two of the five courses must contain a lab corequisite.

Code	Title	Hours
Complete one introductory biology sequence: 9-10		
<i>Foundations of Biology</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	
BIOL 2299	Inquiries in Biological Sciences	
<i>General Biology</i>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	
<i>General Biology (for Engineers)</i>		
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	

BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	
Complete the following required course:		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5

Complete at least one course from the Systems Biology list. The remaining courses can be selected from either the Systems Biology list or from the list of Intermediate/Advanced Biology Electives.

**SYSTEMS BIOLOGY COURSE LIST**

Code	Title	Hours
Complete at least one of the following courses: 4-10		
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 5585	Evolution	
EEMB 2290 to EEMB 3450		
EEMB 3460 to EEMB 5130		
ENVR 5242	Ancient Marine Life	

**INTERMEDIATE/ADVANCED BIOLOGY ELECTIVES**

Code	Title	Hours
BIOL 2221 and BIOL 2222	Foundations of Microbiology and Lab for BIOL 2221	
BIOL 2329 to BIOL 3990		
BIOL 4705 to BIOL 4709		
BIOL 5301 to BIOL 5597		
EEMB 3001	Genetics and Evolution in Action	

**GPA Requirement**

2.000 GPA required in the minor

**Chemistry and Chemical Biology**

Website (<http://www.northeastern.edu/chemistry/>)

**Penny Beuning, PhD**  
Professor and Chair

617.373.2822

The Department of Chemistry and Chemical Biology provides education in basic chemistry and modern chemistry-related disciplines. The department offers an American Chemical Society–certified program leading to a Bachelor of Science in Chemistry and also offers a Bachelor of Science in Biochemistry jointly with the Department of Biology. In conjunction with the Department of Marine and Environmental Sciences, the department offers a combined Bachelor of Science in Environmental Geology and Chemistry. The overall objective of the Bachelor of Science in Chemistry major program is to provide the fundamental scientific background and laboratory training for students as they prepare for chemically related careers or advanced study in fields including the traditional chemical specialties, as well as biochemistry, materials science, forensic science, medicine, education, law, and other endeavors that draw upon an understanding of the chemical basis of the world around us.

Key general objectives are the development of qualitative and quantitative problem-solving skills and effective communication skills. Specific learning objectives for the chemistry major include developing conceptual understanding and problem-solving abilities in the fundamental chemical subfields of analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, and physical chemistry; gaining a foundation of physics and mathematics and integrating these areas with chemical principles; performing quantitative measurements and analyzing the resulting data; synthesizing and characterizing compounds; learning proper laboratory practices, including safety; developing proficiency with modern instruments and computers for data acquisition and analysis; and making meaning of research results and learning the relevance of chemistry to biology, pharmacology, medicine, manufactured and natural materials, and the environment.

Most of our chemistry majors participate in the cooperative education program and thereby gain invaluable professional experience to augment their classroom and laboratory work. Not only does this experience add immensely to the overall education received, it also has the potential to provide contacts and references for later employment or graduate school admissions. Chemistry majors also undertake a research project for at least one semester under the supervision of a faculty member. A sufficient number of elective courses are available in the program to allow a student to take more advanced courses or additional research in the department or to add courses in an area of special interest, such as criminal justice courses in the case of an interest in forensic science. Qualified students may also participate in a BS/MS program.

## Programs

### Bachelor of Science (BS)

- Chemistry (p. 663)
- Data Science and Chemistry (p. 405)
- Environmental and Sustainability Sciences and Chemistry (p. 667)

### Minor

- Chemistry (p. 669)
- Environmental Chemistry (p. 487)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Chemistry, BS

The Bachelor of Science in Chemistry is designed to give students both breadth and depth in chemistry fundamentals. During their course of study, students have an opportunity to develop qualitative and quantitative problem-solving skills as well as effective communication skills. The overall objective of the program is to provide scientific background and laboratory experience for students as they prepare for chemically related careers or advanced study in fields that include both the traditional chemical specialties and other endeavors that draw upon an understanding of the chemical basis of the world around us such as biochemistry, materials science, forensic science, medicine, education, or law.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Chemistry Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
CHEM 1000	Chemistry/Chemical Biology at Northeastern	1
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1
<b>General Chemistry</b>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2161 and CHEM 2162 and CHEM 2163	Concepts in Chemistry and Lab for CHEM 2161 and Recitation for CHEM 2161	5
<b>Organic Chemistry</b>		
CHEM 2315 and CHEM 2316	Organic Chemistry 1 for Chemistry Majors and Lab for CHEM 2315	6
CHEM 2317 and CHEM 2318	Organic Chemistry 2 for Chemistry Majors and Lab for CHEM 2317	6
<b>Analytical Chemistry</b>		
CHEM 2321 and CHEM 2322 and CHEM 2323	Analytical Chemistry and Lab for CHEM 2321 and Recitation for CHEM 2321	5
<b>Physical Chemistry</b>		
CHEM 3401 and CHEM 3402	Chemical Thermodynamics and Kinetics and Lab for CHEM 3401	5
CHEM 3403 and CHEM 3404	Quantum Chemistry and Spectroscopy and Lab for CHEM 3403	5
<b>Biochemistry</b>		
CHEM 4621 and CHEM 4622	Introduction to Chemical Biology and Lab for CHEM 4621	5
<b>Advanced-Level Chemistry</b>		
Complete one of the following courses:		5
CHEM 3501 and CHEM 3502	Inorganic Chemistry and Lab for CHEM 3501	
CHEM 3505 and CHEM 3506	Introduction to Bioinorganic Chemistry and Lab for CHEM 3505	
Complete two of the following courses:		9-11
CHEM 3331 and CHEM 3332	Bioanalytical Chemistry and Lab for CHEM 3331	
CHEM 4456 and CHEM 4457	Organic Chemistry 3: Organic Chemistry of Drug Design and Development and Lab for CHEM 4456	
CHEM 4620	Introduction to Protein Chemistry	



CHEM 4628 and CHEM 4629	Introduction to Spectroscopy of Organic Compounds and Identification of Organic Compounds
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**Senior Research/Capstone**

CHEM 4750	Senior Research	4
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**Supporting Courses**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
<b>Physics</b>		
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

**Chemistry Major Credit Requirement**

Complete 79 semester hours in the major.

**Program Requirement**

135 total semester hours required

**Plan of Study****Five Years, Three Co-ops in Summer 2/Fall**

Please note that these are sample plans of study. While the requirements are the same for all students, individual schedules may vary.

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1000	1 CHEM 2315	4 Open	0 Open	0
CHEM 1161	4 CHEM 2316	2		
CHEM 1162	1 MATH 1342	4		
CHEM 1163	0 PHYS 1151	3		
MATH 1341	4 PHYS 1152	1		
ENGW 1111	4 PHYS 1153	1		
Elective	4 Elective	4		
	18	19	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 2161	4 EESC 2000	1 Open	Co-op	0
CHEM 2162	1 CHEM 2321	4		
CHEM 2163	0 CHEM 2322	1		
CHEM 2317	4 Elective	4		
CHEM 2318	2 Elective	4		
PHYS 1155	3 Elective	4		
PHYS 1156	1			
PHYS 1157	1			
Elective	4			
	20	18	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CHEM 3401	4	Co-op	0
	CHEM 3402	1 Elective	4	
	CHEM 3505	4 Elective	4	
	CHEM 3506	1		
	ENGW 3307	4		
	Elective	4		
	0	18	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CHEM 3403	4 Open	0 Co-op	0
	CHEM 3404	1		
	Chemistry Elective	4		
	Elective	4		
	Elective	4		
	0	17	0	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 CHEM 4621	4
	CHEM 4622	1
	CHEM 4750	4
	Chemistry Elective	5
	Elective	4
	0	18

Total Hours: 136

**Four Years, Two Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1000	1 CHEM 2315	4 PHYS 1155	3 Open	
CHEM 1161	4 CHEM 2316	2 PHYS 1156	1	
CHEM 1162	1 MATH 1342	4 PHYS 1157	1	
CHEM 1163	0 PHYS 1151	3 Elective	4	
MATH 1341	4 PHYS 1152	1		
ENGW 1111	4 PHYS 1153	1		
Elective	4 Elective	4		
	18	19	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 2161	4 EESC 2000	1 Elective	4 Co-op	
CHEM 2162	1 CHEM 2321	4 Elective	4	
CHEM 2163	0 CHEM 2322	1		
CHEM 2317	4 CHEM 3501	4		
CHEM 2318	2 CHEM 3502	1		
Elective	4 Elective	4		
Elective	4 Elective	4		
	19	19	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CHEM 3401	4 Elective	4 Co-op	
	CHEM 3402	1 Elective	4	
	Chemistry Elective	5		
	Chemistry Elective	4		
	ENGW 3307	4		
	0	18	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	CHEM 3403	4
	CHEM 3404	1
	CHEM 4621	4
	CHEM 4622	1
	CHEM 4750	4
	Elective	4
	0	18

Total Hours: 136

**Data Science and Chemistry, BS**

The data science and chemistry major combines chemistry, information science, and mathematics to give students both breadth and depth in chemistry and data science fundamentals. During their course of study, students have an opportunity to develop qualitative and quantitative problem-solving skills as well as effective communication skills. Students will study the collection, manipulation, storage, retrieval, and computational analysis of chemical and other scientific data in its various forms, including numeric, textual, image, and video data from small to large volumes. The program engages students in rigorous coursework designed to prepare students to interpret the ever-expanding knowledge base.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Data Science Requirements**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

**Programming Sequence Pathways**

Choose one of the two options: 12

**Computer Science Option**

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500

**Data Science Option**

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500
DS 3500	Advanced Programming with Data

**Computer Science Required Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4

**Data Science Foundations**

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

**Khoury Elective**

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

**Statistics Foundations**

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
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**Chemistry Requirements**

Code	Title	Hours
<b>General Chemistry</b>		
Choose one pair of courses:		10
CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211	
CHEM 1214 and CHEM 1215	General Chemistry 2 and Lab for CHEM 1214	

OR

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	
CHEM 2161 and CHEM 2162 and CHEM 2163	Concepts in Chemistry and Lab for CHEM 2161 and Recitation for CHEM 2161	

**Intermediate-Level Chemistry**

CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
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CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
CHEM 2321 and CHEM 2322 and CHEM 2323	Analytical Chemistry and Lab for CHEM 2321 and Recitation for CHEM 2321	5

**Advanced-Level Chemistry**  
Complete one course from the following options: 4

CHEM 3410	Environmental Geochemistry	
CHEM 3501 to CHEM 4628		

**Mathematics Foundations**

MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4

**Supporting Course**

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
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**Integrative Requirements**

Code	Title	Hours
<b>Integrative Course</b>		
CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	5
CHEM 4750	Senior Research	4

**Writing Requirements**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing / First-Year Writing for Multilingual Writers	4

**Advanced Writing in the Disciplines**

Complete one of the following: 4		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 24 credits of general electives.		24

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

130 total semester hours required

**Plan of Study**

**Sample Patterns**

**Five Years, Three Co-ops**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	

CS 1800 and CS 1802	5	CHEM 1214 and CHEM 1215	5		
CS 2500 and CS 2501	5	MATH 1341	4		
CHEM 1211 and CHEM 1212	5	CS 3200	4		
ENGW 1111	4				
		20	18	0	0

Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
CS 3500 and CS 3501	5 CS 1210	1 Vacation	Co-op		
MATH 1342	4 DS 3000	4			
CHEM 2311 and CHEM 2312	5 CHEM 2313 and CHEM 2314	5			
General elective	4 ENVR 2500 and ENVR 2501	5			
	General elective	4			
		18	19	0	0

Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	DS 4200	4 Vacation	Co-op		
	PHYS 1151 and PHYS 1152 and PHYS 1153	5			
	General elective	4			
	CHEM 2321 and CHEM 2322 and CHEM 2323	5			
		0	18	0	0

Year 4					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	DS 4300	4 ENGW 3302	4 Co-op		
	DS 4400	4 General elective	4		
	General elective	4			
	CHEM 3431 and CHEM 3432	5			
		0	17	8	0

Year 5				
Fall	Hours Spring	Hours		
Co-op	CHEM 4750	4		
	Chemistry advanced elective	4		

Khoury elective	4
General elective	4
0	16

Total Hours: 134

## Four Years, Two Co-ops

### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Vacation	0
CS 1800 and CS 1802	5	CHEM 1214 and CHEM 1215	5	General elective	4		
CS 2500 and CS 2501	5	MATH 1341	4				
CHEM 1211 and CHEM 1212	5	General elective	4				
ENGW 1111	4						
	20		18		9		0

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3200	4	CS 1210	1	General elective	4	Co-op	0
DS 3000	4	DS 4200	4	General elective	4		
CHEM 2311 and CHEM 2312	5	CHEM 2313 and CHEM 2314	5				
MATH 1342	4	General elective	4				
		CHEM 2321 and CHEM 2322 and CHEM 2323	5				
	17		19		8		0

### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	ENGW 3302	4	Co-op	0
		DS 4400	4	CHEM 3431 and CHEM 3432	5		
		PHYS 1151 and PHYS 1152 and PHYS 1153	5				
		ENVR 2500 and ENVR 2501	5				
	0		18		9		0

### Year 4

Fall	Hours	Spring	Hours
Co-op		CHEM 4750	4

Khoury elective	4
Chemistry advanced elective	4
General elective	4
0	16

Total Hours: 134

## Environmental and Sustainability Sciences and Chemistry, BS

The Departments of Marine and Environmental Sciences and Chemistry provide education in basic environmental and sustainability sciences (ESS) and chemistry-related disciplines. The overall objective of this combined major is to provide the fundamental scientific background and practical training for students as they prepare for environmental and chemically related careers or advanced study in fields including the traditional specialties such as toxicology, pollution, bioremediation, environmental protection, education, law, and other endeavors that may draw upon an understanding of the chemical basis of the environment and the changes that will likely result from global environmental change.

Key general objectives are the development of qualitative and quantitative problem-solving skills and effective communication skills. This combined major includes the development of conceptual understanding and problem-solving abilities in the fundamental dynamics between the environment and its chemistry, be it analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, and physical chemistry. Students will have the opportunity to perform quantitative measurements; learn proper laboratory practices, including safety; develop proficiency with modern instruments and computers for data acquisition and analysis; and learn the relevance of chemistry within the context of the abiotic and biotic environments.

Students also have the opportunity to participate in the cooperative education program and thereby gain invaluable professional experience to augment their classroom and laboratory work. Not only does that experience add immensely to the overall education received, it also has the potential to provide contacts and references for later employment or graduate school admissions. Students in this major may also undertake research projects for at least one semester under the supervision of a faculty member. Sufficient electives are available in the program either to take more advanced courses or research within the department or to add courses in an area of special interest.

There are a number of interdisciplinary opportunities involving ESS. Due to curricular overlap, combinations of any ESS major, including combined majors, cannot occur with majors or minors in ecology and evolutionary biology or environmental studies or with the minor in geoscience. ESS and chemistry combined majors are also restricted from a minor in environmental chemistry.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Environmental Science and Sustainability Requirements

Code	Title	Hours
<b>Core Courses</b>		
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
ENVR 2200 or ENVR 1200	Earth's Changing Cycles Dynamic Earth	4
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 2515	Sustainable Development	4
Complete one skills course:		4-5
ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3555	Networks and Natural Systems	
Complete four courses from the list below. Three of four must be above the 3000 level:		16
EEMB 2400	Introduction to Evolution	
EEMB 3460	Conservation Biology	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 2340	Earth Landforms and Processes	
ENVR 3125	Global Oceanic Change	
ENVR 3150	Food Security and Sustainability	
ENVR 3200	Water Resources	
ENVR 3410	Environmental Geochemistry	
ENVR 3600	Oceanography	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
ENVR 4505	Wetlands	
ENVR 5150	Climate and Atmospheric Change	
ENVR 5190	Soil Science	
ENVR 5210	Environmental Planning	
ENVR 5220	Ecosystem-Based Management	
ENVR 5350	Sustainable Energy and Climate Solutions	
ENVR 5450	Applied Social-Ecological Systems Modeling	
POLS 2395	Environmental Politics and Policy	
PPUA 5260	Ecological Economics	
SOCL 2485	Environment, Technology, and Society	

## Chemistry Requirements

Code	Title	Hours
<b>General Chemistry</b>		
Complete the following lecture and lab:		
CHEM 1161 or CHEM 1151	General Chemistry for Science Majors General Chemistry for Engineers	4
CHEM 1162	Lab for CHEM 1161	1
<b>Intermediate-Level Chemistry</b>		
CHEM 2161 and CHEM 2162	Concepts in Chemistry and Lab for CHEM 2161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
CHEM 2321 and CHEM 2322	Analytical Chemistry and Lab for CHEM 2321	5
<b>Advanced-Level Chemistry</b>		
Complete two of the following:		10
CHEM 3331 and CHEM 3332	Bioanalytical Chemistry and Lab for CHEM 3331	
CHEM 3401 and CHEM 3402	Chemical Thermodynamics and Kinetics and Lab for CHEM 3401	
CHEM 3403 and CHEM 3404	Quantum Chemistry and Spectroscopy and Lab for CHEM 3403	
<b>Math Requirement</b>		
Complete two of the following:		8-9
MATH 1241 or MATH 1251 or MATH 1341	Calculus 1 Calculus and Differential Equations for Biology 1 Calculus 1 for Science and Engineering	
MATH 1242 or MATH 1252 or MATH 1342	Calculus 2 Calculus and Differential Equations for Biology 2 Calculus 2 for Science and Engineering	
ENVR 2500 and ENVR 2501 or ECON 2350 or POLS 2400 or SOCL 2321	Biostatistics and Lab for ENVR 2500 Statistics Quantitative Techniques Research Methods in Sociology	
<b>Integrative Requirement</b>		
Complete two of the following:		8
CHEM 3410	Environmental Geochemistry	
CHEM 4750	Senior Research	
ENVR 4050	Solving Emerging Environmental Challenges through Capstone	
ENVR 4504	Environmental Pollution	
ENVR 5190	Soil Science	

## Major Credit Requirement

89 total semester hours required in the major

## Program Credit Requirement

137 total semester hours required in the major

## Plan of Study

Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 1200 and ENVR 1201	5 ENVR 2515	4 General elective	4 General elective	4
CHEM 1161 and CHEM 1162	5 CHEM 2161 and CHEM 2162 and CHEM 2163	5 General elective	4 General elective	4
General elective #1	4 General elective #2	4		
ENVR 1400 and ENVR 1401	5 EEMB 2302 and EEMB 2303	5		
	19	18	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 2311 and CHEM 2312	5 CHEM 2313 and CHEM 2314	5 General elective #5	4 Co-op	
General elective #3	4 ENVR elective; 2 of 4	4 Math requirement, 2 of 2	4	
Math requirement; 1 of 2	4 ENVR skills requirement	4		
ENVR elective; 1 of 4	4 General elective #4	4		
	17	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ENVR elective; 3 of 4	4 General elective #7	4 Co-op	
	Advanced CHEM elective 1 of 2	5 General elective #8	4	
	Advanced Chem elective 2 of 2	5		
	General elective #6	4		
	0	18	8	0
Year 4				
Fall	Hours Spring	Hours		
Co-op	ENVR elective; 4 of 4	4		
	Integrative course 1 of 2	4		
	Integrative course 2 of 2	4		

General elective #9	4
0	16

Total Hours: 137

### Chemistry, Minor

The minor in chemistry is designed for the student who would like a sound foundation in the theory and laboratory practice of chemistry. It requires six courses in chemistry with their prerequisites and corequisites.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Due to curricular overlap, the chemistry minor is not available to biochemistry majors.

### Required Courses

Students must take either General Chemistry 1 (CHEM 1211) and General Chemistry 2 (CHEM 1214) or General Chemistry for Science Majors (CHEM 1161).

*Note:* Engineering students may take General Chemistry for Engineers (CHEM 1151) in place of General Chemistry 1 (CHEM 1211) and General Chemistry 2 (CHEM 1214) or General Chemistry for Science Majors (CHEM 1161).

Excluded: Undergraduate Research (CHEM 4901) Junior/Senior Honors Project 1 (CHEM 4970), Junior/Senior Honors Project 2 (CHEM 4971) or other research courses from approved electives.

Code	Title	Hours
<b>General Chemistry</b>		
Choose one option.		4-10
<i>General Chemistry</i>		
CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211	
CHEM 1214 and CHEM 1215	General Chemistry 2 and Lab for CHEM 1214	
<i>Chemistry for Science Majors</i>		
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	
<i>Chemistry for Engineers</i>		
CHEM 1151	General Chemistry for Engineers	
or other Chemistry and Chemical Biology approved course		
<b>Organic Chemistry</b>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Analytical Chemistry</b>		
CHEM 2321 and CHEM 2322	Analytical Chemistry and Lab for CHEM 2321 (Analytical Chemistry)	5
<b>Physical Chemistry</b>		
CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	5

*Engineering students may substitute the following course:*

CHME 2320	Chemical Engineering Thermodynamics 1
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#### Advanced Lab

Complete one of the following: 5

CHEM 3403 and CHEM 3404	Quantum Chemistry and Spectroscopy and Lab for CHEM 3403
CHEM 4456 and CHEM 4457	Organic Chemistry 3: Organic Chemistry of Drug Design and Development and Lab for CHEM 4456

#### GPA Requirement

2.000 GPA required in the minor

### Environmental Chemistry, Minor

The minor in environmental chemistry offers an opportunity for students of any background interested in environmental sciences to better understand the chemistry of the environment. Students completing the minor in environmental chemistry have an opportunity to learn about the chemical processes of natural systems and environmental pollutants, while earning a credential that highlights their interest and expertise. This can be a useful course of study whether their primary degree and career will be in one of the traditional chemical, environmental, or engineering programs, or another allied field. No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

#### Required Courses

Code	Title	Hours
<b>Environmental Chemistry Core</b>		
Complete one of the following:		4
CIVE 2335	Environmental Engineering Chemistry	
ENVR 3410	Environmental Geochemistry	
<b>Chemistry Core</b>		
Complete one of the following:		5
CHEM 2321 and CHEM 2322 and CHEM 2323	Analytical Chemistry and Lab for CHEM 2321 and Recitation for CHEM 2321	
CHEM 3331 and CHEM 3332	Bioanalytical Chemistry and Lab for CHEM 3331	
<b>Research Experience</b>		
Complete one of the following:		4
CHEM 4750	Senior Research	
CHEM 4901	Undergraduate Research	
CHEM 4992	Directed Study	
CIVE 4991	Research	
CIVE 4992	Directed Study	
ENVR 4900	Earth and Environmental Science Capstone	

or ENVR 4997	Senior Thesis
ENVR 4992	Directed Study

#### Electives

Code	Title	Hours
Complete two of the following: 8-9		
CIVE 2335	Environmental Engineering Chemistry (If not used to satisfy Environmental Chemistry Core)	
CIVE 3435	Environmental Pollution Fate and Transport	
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	
ENVR 3125	Global Oceanic Change	
ENVR 3410	Environmental Geochemistry (If not used to satisfy Environmental Chemistry Core)	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
ENVR 4504	Environmental Pollution	
ENVR 4505	Wetlands	
ENVR 5190	Soil Science	

#### GPA Requirement

Minimum 2.000 GPA required in all major courses

#### Credit Requirement

Minimum of 21 hours required

### Linguistics

Website (<http://www.northeastern.edu/linguistics/>)

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Linguistics is the scientific study of human language. A growing and exciting field, it has links to a diverse range of others, including psychology, philosophy, neuroscience, cognitive science, computer science, artificial intelligence, sociology, language teaching, anthropology, and education.

Linguists work to understand the structures and social uses of human language at all levels. Questions about linguistic structures and cognitive structures include: How do children learn to speak? How is language represented in the mind? What do all languages, including sign languages, have in common? How is language different from the communication systems used by whales, bees, and chimpanzees? What linguistic information do computers need in order for us to converse with them? What are the neurological tie-ins of language disorders such as aphasia or Williams Syndrome, and what can such impairments tell us about the brain mechanisms for language? These scientific and technological questions lead us to ask other questions about language and society: How might we think about linguistic controversies, including debates about official languages, Black English, gender bias, and bilingualism in education? Linguistics attempts to answer each of these questions and covers a surprisingly broad range of topics related to language and communication. And cutting-edge work in

cognitive science investigates how natural languages are acquired and processed. Computational linguists apply linguistic theory to build all of the applications that we use that interface with language: grammar checkers, translation programs, search engines, browsers, voice recognition, and speech synthesis. To work in a field that involves language in any way, you will need to know how language works, the core of the field of linguistics.

Linguistics at Northeastern offers courses examining the structure of language (such as phonetics, phonology, morphology, syntax, and semantics), the sociocultural nature of language (such as language and culture, language and gender, and sociolinguistics), and applied fields (such as language acquisition, language change, and historical linguistics).

Students can pursue a major in linguistics or one of a number of combined majors, including linguistics and psychology, linguistics and cultural anthropology, linguistics and English, linguistics and communication studies, computer science and linguistics, data science and linguistics, American Sign Language (ASL) and linguistics, and linguistics and speech-language pathology and audiology. A minor in linguistics is also available.

Linguistics offers a variety of co-ops, including positions at local and national companies involved in speech recognition and production, as well as at Northeastern's own language processing and language acquisition labs in the Department of Psychology. Linguistics majors can also participate in international co-ops—for example, working with researchers at the University of Kaiserslautern in Germany.

Students with backgrounds in linguistics have pursued advanced degrees in fields including law, cognitive science, education, English, interpreting, business, speech-language pathology, computer science, developmental psychology, sociology, and linguistics itself. Other graduates have gone on to work in neurological research, computational linguistics, translation, language software, education, dictionary publishing, robotics, and criminal justice.

## Programs

### Bachelor of Science (BS)

- Linguistics (p. 671)
- American Sign Language and Linguistics (p. 673)
- Computer Science and Linguistics (p. 366)
- Data Science and Linguistics (p. 419)
- Linguistics and Cultural Anthropology (p. 679)
- Linguistics and Psychology (p. 681)
- Linguistics and Speech-Language Pathology and Audiology (p. 555)

### Bachelor of Arts (BA)

- Linguistics and Communication Studies (p. 143)
- Linguistics and English (p. 687)

### Minor

- Linguistics (p. 689)

## Linguistics, BS

The major in linguistics provides students with a strong foundation in the study of linguistics at both the structural and social levels. Course work on the structural side focuses on the internal structures that make up language and the methods and theories used to identify and understand

these core structures (for example, in courses covering phonetics, phonology, morphology, syntax, and semantics), while course work on the social side emphasizes the methods and theories that are used to study and interpret patterns of social interaction at the linguistic level (for example, in courses covering language and culture, sociolinguistics, and language and gender). Additional course work draws from related fields to further develop students' understanding of the broad spectrum of language-related domains (for example, the psychology of language, language acquisition, and historical linguistics, among other topics).

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Linguistics Major Language Requirement

Code	Title	Hours
	Complete two courses in the same language with a grade of C or higher. Proficiency at elementary level 2 or higher is required.	

## Linguistics Major Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
PSYC 3464	Psychology of Language	4
<b>Linguistic Structure</b>		
LING 3420	Phonetics	4
LING 3422	Phonology	4
LING 3424	Morphology	4
LING 3450	Syntax	4
LING 3452	Semantics	4
<b>Laboratory</b>		
<i>Prerequisites</i>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
<i>Laboratory</i>		
Complete one of the following:		4
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
Note: With prior approval, any of the following courses may be used to fulfill the laboratory requirement. Consult your adviser to discuss this option:		
LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
PSYC 4991	Directed Study Research	



Linguistics Seminar		
LING 4654	Seminar in Linguistics	4
or PSYC 4658	Seminar in Psycholinguistics	

Linguistics Electives		
Complete four of the following (not counted above):		16

DEAF 2700	ASL Linguistics
LING 3434	Bilingualism
LING 3442	Sociolinguistics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics
LING 3460	Historical Linguistics
LING 4654	Seminar in Linguistics
LING 4891	Research Seminar in Linguistics
or LING 4970	Junior/Senior Honors Project 1
or LING 4971	Junior/Senior Honors Project 2
or LING 4991	Directed Study Research
or PSYC 4991	Directed Study Research
LING 4993	Independent Study
PHIL 1115	Introduction to Logic
PSYC 3466	Cognition
PSYC 4520	Language and the Brain
PSYC 4522	Psychology of Reading
PSYC 4524	Cognitive Development
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4612	Laboratory in Cognition
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4674	Seminar in Cognitive Neuroscience

**Experiential Learning**

Complete one of the following options. Courses used to satisfy this requirement will also typically satisfy a requirement above. 0-4

Study abroad (not a Dialogue of Civilizations)	
International Co-op	
LING 4891	Research Seminar in Linguistics
LING 4991	Directed Study Research
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2

**Linguistics Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 1150	4 LING 2350	4 Vacation	0 Vacation	0
PSYC 1101	4 PSYC 3464	4		
ENGW 1111	4 NUpath or Elective	4		

MATH 1215	4 Foreign language course	4		
LING 1000	1			
		17	16	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 3412	4 Linguistic structure course	4 Vacation	0 Co-op	0

PSYC 2320	4 Linguistic structure course	4		
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Linguistic structure course	4 Linguistics elective	4		
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Foreign language course	4 NUpath or Elective	4		
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		EESC 2000	1	
		16	17	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Linguistic structure course	4 NUpath or Elective	4 Co-op	0

	Linguistics elective	4 Elective	4	
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	ENGW 3315	4		
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	NUpath or Elective	4		
		0	16	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Laboratory course	4 NUpath or Elective	4 Co-op	0

	Linguistic structure course	4 Elective	4	
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	Linguistics elective	4		
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	NUpath or Elective	4		
		0	16	8

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 Linguistics seminar	4

	Linguistics elective	4
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	NUpath or Elective	4
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	Elective	4	
		0	16

Total Hours: 130

## American Sign Language and Linguistics, BS

The American Sign Language (ASL) & Linguistics combined major is an intensive program of study dedicated to preparing students to interact in a positive and supportive manner with members of the American Deaf Community while simultaneously providing students with an understanding of the theoretical, cultural, and social components of all human language, including ASL, so that they can better understand how ASL is related to spoken languages and other signed languages. This curriculum is designed to assist students in acquiring competence in American Sign Language; and in developing an understanding of the American Deaf Community and its culture, the acquisition and analysis of human languages (signed and spoken), and how human languages work in everyday use (e.g., comprehension, generation, translation).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### American Sign Language Requirements

Code	Title	Hours
<b>Language Requirement</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Interpreting</b>		
INTP 3500	The Interpreting Profession	2
INTP 3510	Interpreting Inquiry Texts	4

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	

### Psychology of Language

PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4

### Linguistics Electives

Complete two courses (not counted elsewhere) from the following:		8
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3442	Sociolinguistics	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	
or LING 4971	Junior/Senior Honors Project 2	
or LING 4991	Directed Study Research	
or PSYC 4991	Directed Study Research	
LING 4993	Independent Study	
PSYC 4520	Language and the Brain	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	

### Seminar Requirement

Complete one course (not counted elsewhere) from the following:		4
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
PSYC 4658	Seminar in Psycholinguistics	

### Integrative Courses

Code	Title	Hours
DEAF 2700	ASL Linguistics	4
INTP 4940	Interpreting Research Capstone	4
LING 3412	Language and Culture	4

### Combined Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses

Minimum 2.500 overall GPA required

### Combined Major Credit Requirement

Complete 90 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirements

128 total semester hours required

## Plan of Study

### Sample, Four Years

Year 1			
Fall	Hours	Spring	Hours
AMSL 1101		4 AMSL 1102	4
DEAF 1500		4 LING 2350	4
LING 1150		4 LING 3412	4
NUpath/Elective		4 NUpath/Elective	4
		16	16
Year 2			
Fall	Hours	Spring	Hours
AMSL 2101		4 AMSL 2102	4
DEAF 2500		4 DEAF 2700	4
PSYC 1101		4 PSYC 2320	4
NUpath/Elective		4 NUpath/Elective	4
		16	16
Year 3			
Fall	Hours	Spring	Hours
AMSL 3101		4 Linguistic Structure course	4
INTP 3500		2 Linguistic Structure course or Linguistics Elective	4
INTP 3510		4 PSYC 3464	4
Linguistic Structure course		4 NUpath/Elective	4
NUpath/Elective		4	
		18	16
Year 4			
Fall	Hours	Spring	Hours
INTP 4940		4 Linguistics Seminar	4
Linguistics Elective or Linguistic Structure course		4 Linguistics Elective	4
NUpath/Elective		4 NUpath/Elective	4
NUpath/Elective		4 NUpath/Elective	4
		16	16

Total Hours: 130

## Computer Science and Linguistics, BS

The computer science and linguistics combined major provides students with extensive background in the formal structures of natural (human) languages, as well as methods and applications of linguistic and psycholinguistic analyses of human language data. This is combined with an emphasis in computer science on artificial intelligence and natural language processing techniques. The major provides excellent preparation for work or more advanced degrees focusing on computational linguistics, natural language processing, speech perception, spoken language interfaces, artificial intelligence, and a wide array of related fields.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3800	Theory of Computation (Integrative course)	4
CS 4100	Artificial Intelligence (Integrative course)	4
CS 4120	Natural Language Processing (Integrative course)	4
CS 4400	Programming Languages (Integrative course)	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

### Khoury Elective Courses

With adviser approval, directed study, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS courses that are not already required. Choose courses within the following range:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis (Integrative course)	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12

LING 3420	Phonetics
LING 3422	Phonology
LING 3424	Morphology
LING 3450	Syntax
LING 3452	Semantics

**Psychology Requirements**

PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4

**Laboratory/Directed Study**

Complete one of the following: 4

LING 4891	Research Seminar in Linguistics
LING 4991	Directed Study Research
PSYC 4610	Laboratory in Psycholinguistics

**Seminar Requirement**

LING 4654	Seminar in Linguistics	4
or PSYC 4658	Seminar in Psycholinguistics	

**Linguistics Elective**

Complete one LING course, not counted elsewhere, numbered 3000-4799, or one of the following: 4

DEAF 2700	ASL Linguistics
PSYC 3466	Cognition
PSYC 4520	Language and the Brain
PSYC 4522	Psychology of Reading
PSYC 4524	Cognitive Development
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4674	Seminar in Cognitive Neuroscience

With prior approval, directed study research, independent study, and Honors Project courses can also be counted:

LING 4891	Research Seminar in Linguistics
LING 4970	Junior/Senior Honors Project 1
LING 4971	Junior/Senior Honors Project 2
LING 4991	Directed Study Research
PSYC 4991	Directed Study Research

**Supporting Courses**

Code	Title	Hours
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**Mathematics Requirement**

MATH 1341	Calculus 1 for Science and Engineering	4
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**Computing and Social Issues**

Complete one of the following: 4

AFAM 2600	Issues in Race, Science, and Technology
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
HIST 2220	History of Technology
ENGL 2150	Literature and Digital Diversity
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300	Knowledge in a Digital World
or PHIL 1300	Knowledge in a Digital World

PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

**Computer Science Writing Requirement**

Code	Title	Hours
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**College Writing**

ENGW 1111	First-Year Writing	4
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**Advanced Writing in the Disciplines**

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
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Complete 20 credits of general electives 20

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Engaging Difference and Diversity
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study****Sample Patterns:****Four Years, One Co-op in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	

CS 1800 and CS 1802	5 LING 2350	4		
CS 2500 and CS 2501	5 Elective	4		
LING 1150	4 PSYC 1101	4		
ENGW 1111	4			
	19	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 1210	1 Elective	4 Co-op	
MATH 1341	4 CS 3000	4 Elective	4	
LING 3412	4 CS 3800	4		
PSYC 3464	4 Linguistic structure	4		
	PSYC 2320	4		
	17	17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 4120	4 Elective	4 Vacation	
	CS 4400	4 Elective	4	
	Linguistic structure	4		
	ENGW 3302	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours
CS 4500 or 4530	4 CS 4100	4
Linguistic structure	4 Khoury elective	4
LING 4654 or PSYC 4658	4 LING elective	4
Computing and social issues	4 LING lab (or directed study)	4
	16	16

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 LING 2350	4		
CS 1800 and CS 1802	5 PSYC 1101	4		
LING 1150	4 Elective	4		
ENGW 1111	4			
	19	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 1210	1 Vacation	0 Co-op	0

MATH 1341	4 CS 3000	4		
LING 3412	4 CS 3800	4		
PSYC 3464	4 Linguistic structure	4		
	PSYC 2320	4		
	17	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 4120	4 Elective	4 Co-op	0
	CS 4400	4 Elective	4	
	Linguistic structure	4		
	ENGW 3302	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 4100	4 Elective	4 Co-op	0
	Khoury elective	4 Elective	4	
	Linguistic structure	4		
	LING lab (or directed study)	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 CS 4500 or 4530	4
	LING 4654 or PSYC 4658	4
	LING elective	4
	Computing and social issues	4
	0	16

Total Hours: 134

**Data Science and Linguistics, BS**

The data science and linguistics combined major provides students with extensive background in the formal structures of natural (human) languages and in the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms. The program teaches the methods and applications of linguistic and psycholinguistic analyses of human language data combined with skills in big data analysis, data science, and data analytics. The major provides excellent preparation for work or more advanced degrees focusing on computational linguistics, natural language processing, machine learning, and a wide array of related fields.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of two options		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4
<b>Khoury Elective Course</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Psychology Requirements</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
<b>Laboratory/Directed Study</b>		
Complete one of the following:		4
LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
PSYC 4610	Laboratory in Psycholinguistics	
<b>Seminar Requirement</b>		
LING 4654 or PSYC 4658	Seminar in Linguistics or Seminar in Psycholinguistics	4
<b>Linguistics Elective</b>		
Complete one LING course, not counted elsewhere, numbered 3000–4799, or one of the following:		4
DEAF 2700	ASL Linguistics	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	
With prior approval, directed study research, independent study, and Honors Project courses can also be counted:		
LING 4891	Research Seminar in Linguistics	
LING 4970	Junior/Senior Honors Project 1	
LING 4971	Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	
PSYC 4991	Directed Study Research	

### Supporting Courses

Code	Title	Hours
<b>Mathematics Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering	4

**Integrative Requirement**

Code	Title	Hours
CS 4120	Natural Language Processing	4

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
	Complete 20 credits of general electives.	20

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

130 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Elective	4
CS 1800 and CS 1802	5 LING 2350	4 PSYC 1101	4 Elective	4
CS 2500 and CS 2501	5 CS 3200	4		
LING 1150	4 MATH 1341	4		
ENGW 1111	4			
	19	17	9	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 3412	4 CS 1210	1 PSYC 2320	4 Co-op	
DS 3000	4 DS 4200	4 Elective	4	
PSYC 3464	4 Linguistic structure	4		
Linguistic structure	4 LING elective	4		
	Elective	4		
	16	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 4120	4 ENGW 3302	4 Co-op	
	DS 4300	4 Elective	4	
	DS 4400	4		

	Linguistic structure	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours		
Co-op	DS 4420	4		
	Khoury elective	4		
	LING lab (or directed study)	4		
	LING seminar	4		
	0	16		

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 3200	4		
CS 1800 and CS 1802	5 LING 2350	4		
LING 1150	4 PSYC 1101	4		
ENGW 1111	4			
	19	17	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 1210	1 Vacation	0 Co-op	0
MATH 1341	4 DS 3000	4		
LING 3412	4 PSYC 2320	4		
PSYC 3464	4 Linguistic structure	4		
	Elective	4		
	17	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Linguistic structure	4 Elective	4 Co-op	0
	DS 4300	4 Elective	4	
	DS 4200	4		
	ENGW 3302	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 DS 4400	4 Elective	4 Co-op	0
	CS 4120	4 Elective	4	
	Linguistic structure	4		

LING lab (or directed study)	4			
0	16	8	0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	DS 4420	4
		LING seminar	4
		LING elective	4
		Khoury elective	4
0		16	

Total Hours: 134

## Linguistics and Cultural Anthropology, BS

The combined major in linguistics and cultural anthropology focuses on the relationship of culture to the institutions, interpersonal relations, and practices that make up their social structure while emphasizing the structure of human language and its involvement in social interaction and culture. Students examine how language both reflects and influences cultural phenomena and how it can be used as a tool to study those phenomena; and they apply their interests across a range of connected courses, co-op opportunities, and potential research projects.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Linguistics Major Language Requirement

Complete two courses in the same language with a grade of C or higher. Proficiency at elementary level 2 or higher is required.

### Linguistics Requirements

*Note:* A grade of C or higher is required for all courses in this section.

Code	Title	Hours
<b>Linguistics Requirements</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3442	Sociolinguistics	4
LING 3456	Language and Gender	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	

LING 3424	Morphology
LING 3450	Syntax
LING 3452	Semantics

### Linguistics Elective

Complete one of the following (not counted elsewhere):		4
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	
PSYC 3464	Psychology of Language	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	

### Linguistics Research

Complete one of the following:		4
LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	

### Anthropology Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 4600	Senior Seminar	4
<b>Anthropology Advanced Area Courses</b>		
Complete three of the following:		12
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

### Anthropology Electives

Complete three ANTH courses not already taken. 12

### Linguistics/Anthropology Integrative Requirement

Code	Title	Hours
<b>Integrative Course</b>		
LING 3412	Language and Culture	4

### Anthropology Major Grade Requirement

A GPA of 2.000 for major courses is required.



## Linguistics/Anthropology Combined Major Credit Requirement

Complete 76 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 1150	4 LING 2350	4 Vacation	Vacation	
ANTH 1101	4 ANTH 2305	4		
ENGW 1111	4 LING 3412	4		
MATH 1215	4 Foreign language course	4		
	16	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Foreign language course	4 LING 3442	4 Vacation	Co-op	
Linguistic structure course	4 Linguistic structure course	4		
Anthropology elective	4 Anthropology elective	4		
Elective	4 Elective	4		
	16	16	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	LING 3456	4 Elective	4 Co-op	
	Linguistic structure course	4 Elective	4	
	Anthropology elective	4		
	Elective	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Linguistics elective	4 Elective	4 Co-op	
	Anthropology advanced area course	4 Elective	4	
	Anthropology advanced area course	4		
	ENGW 3315	4		
	0	16	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	ANTH 4600	4
	Anthropology advanced area course	4
	Linguistics research	4
	Elective	4
	0	16

Total Hours: 128

#### Four Years, No Co-op

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 1150	4 LING 2350	4 Vacation	Vacation	
ANTH 1101	4 ANTH 2305	4		
ENGW 1111	4 LING 3412	4		
MATH 1215	4 Foreign language course	4		
	16	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Foreign language course	4 LING 3442	4 Vacation	Vacation	
Linguistic structure course	4 Linguistic structure course	4		
Anthropology elective	4 Anthropology elective	4		
Elective	4 Elective	4		
	16	16	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Anthropology elective	4 LING 3456	4 Vacation	Vacation	
Anthropology advanced area course	4 Linguistic structure elective	4		
Elective	4 Anthropology advanced area course	4		
ENGW 3315	4 Elective	4		
	16	16	0	0
Year 4				
Fall	Hours Spring	Hours		
Linguistics research	4 ANTH 4600	4		
Anthropology advanced area course	4 Linguistics elective	4		
Elective	4 Elective	4		

Elective	4	Elective	4
	16		16
Total Hours: 128			

## Linguistics and Psychology, BS

This combined major is designed to educate students in psychology, linguistics, and the interface between the two disciplines, which are core areas within the field of cognitive science. Students study the formal structures of human language; sociocultural aspects of language use; and the cognitive aspects of language representations, language acquisition, and language processing. Students receive interdisciplinary training in the methods of experimental psychology, psycholinguistics, and linguistic analysis.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete three of the following (not counted elsewhere):		12
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3442	Sociolinguistics	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	

LING 3460	Historical Linguistics
LING 4654	Seminar in Linguistics
LING 4891	Research Seminar in Linguistics
or LING 4970	Junior/Senior Honors Project 1
or LING 4971	Junior/Senior Honors Project 2
or LING 4991	Directed Study Research
LING 4993	Independent Study
PHIL 1115	Introduction to Logic

### Psychology Requirements

Code	Title	Hours
<b>Introductory and Intermediate Psychology</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
<b>Advanced Psychology</b>		
PSYC 3402	Social Psychology	4
PSYC 3466	Cognition	4
<b>Psychology Lab</b>		
Complete one of the laboratory courses or, with prior approval, a directed study or honors project on a topic related to psycholinguistics or cognition:		4
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4970	Junior/Senior Honors Project 1	
PSYC 4971	Junior/Senior Honors Project 2	
PSYC 4991	Directed Study Research	
<b>Psychology Seminar</b>		
Complete one of the following:		4
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	
<b>Psychology Electives</b>		
A directed study on a topic related to psycholinguistics or cognition may be taken with prior approval.		
Complete two of the following (not counted elsewhere):		8
PSYC 3404	Developmental Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4628	Laboratory in Developmental Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4991	Directed Study Research	

### Integrative Requirements

Code	Title	Hours
PSYC 3464	Psychology of Language	4

#### Experiential Learning

Complete one of the following options. Courses used to satisfy this requirement will also typically simultaneously satisfy a requirement above. 0-8

Study Abroad (not a Dialogue)		
International Co-op		
LING 4891	Research Seminar in Linguistics	
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	
PSYC 4970 and PSYC 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	
PSYC 4991	Directed Study Research	

### Supporting Courses

Code	Title	Hours
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#### Language Requirement

Complete two courses in the same language with a grade of C or higher. Proficiency at elementary level 2 or higher is required. 8

#### Mathematics Requirement

Complete one of the following: 4

CS 1800	Discrete Structures	
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1242	Calculus 2	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342	Calculus 2 for Science and Engineering	

### Linguistics and Psychology Combined Major Credit Requirement

Complete 72 semester hours in the major (excluding supporting courses).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 1150	4 LING 2350	4 Vacation	0 Vacation	0
PSYC 1101	4 PSYC 3464	4		
ENGW 1111	4 Foreign language course	4		

Math requirement	4 NUpath or elective	4		
	16	16	0	0

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 3412	4 Linguistics structure course	4 Vacation	0 Co-op	0

PSYC 2320	4 Linguistics elective	4		
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PSYC 3466	4 PSYC 3402	4		
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Foreign language course	4 Psychology elective	4		
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	EESC 2000	1		
	16	17	0	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Linguistics structure course	4 NUpath or elective	4 Co-op	0

	Linguistics or psychology elective	4 Elective	4	
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	Psychology laboratory	4		
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	ENGW 3315	4		
	0	16	8	0

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Linguistics structure course	4 NUpath or elective	4 Co-op	0

	Linguistics elective	4 Elective	4	
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	Linguistics or psychology elective	4		
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	Psychology seminar	4		
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	0	16	8	0
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#### Year 5

Fall	Hours Spring	Hours
Co-op	0 NUpath or elective	4

	Elective	4
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	Elective	4
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	Elective	4
	0	16

Total Hours: 129

## Sample Four Years, No Co-op

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 1150	4 LING 2350	4 Vacation	0 Vacation	0
PSYC 1101	4 PSYC 3464	4		
ENGW 1111	4 Foreign language course	4		
Math requirement	4 NUpath or elective	4		
	16	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 3412	4 Linguistics structure course	4 Vacation	0 Vacation	0
PSYC 2320	4 Linguistics elective	4		
PSYC 3466	4 PSYC 3402	4		
Foreign language course	4 Psychology elective	4		
	16	16	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Linguistics structure course	4 Linguistics structure course	4 Vacation	Vacation	
Linguistics elective	4 Linguistics or psychology elective	4		
Psychology lab	4 NUpath or elective	4		
ENGW 3315	4 Elective	4		
	16	16	0	0
Year 4				
Fall	Hours Spring	Hours		
Linguistics or psychology elective	4 NUpath or elective	4		
Psychology seminar	4 Elective	4		
NUpath or elective	4 Elective	4		
Elective	4 Elective	4		
	16	16		

Total Hours: 128

### Linguistics and Speech-Language Pathology and Audiology, BS

The combined major in linguistics and speech-language pathology and audiology provides students with extensive background in the formal structures of human language; the methods and applications of linguistic analyses of language data; the biology, neurology, and physics of the human vocal tract; and the nature of both normal and disordered human

speech communication and language development. Students have an opportunity to develop critical thinking, information literacy, and strong oral and written communication skills. While on co-op, students gain clinical experience, including preprofessional training appropriate to pursue a graduate degree in SLPA, related clinical healthcare domains, or education.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
LING 3420	Phonetics (Integrative course)	4
LING 3422	Phonology	4
LING 3450	Syntax	4
LING 3424	Morphology	4
	or LING 3452 Semantics	
<b>Psychology Requirements</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
<b>Linguistics Elective</b>		
Complete one of the following, not counted elsewhere:		4
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3442	Sociolinguistics	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
LING 4970	Junior/Senior Honors Project 1	
LING 4971	Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	
LING 4993	Independent Study	
PSYC 3404	Developmental Psychology	
PSYC 3466	Cognition	

PSYC 4520	Language and the Brain
PSYC 4522	Psychology of Reading
PSYC 4524	Cognitive Development
PSYC 4610	Laboratory in Psycholinguistics

### Speech-Language Pathology and Audiology Requirements

Code	Title	Hours
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All courses in these sections must be completed with a C or better.

Speech-Language Pathology and Audiology		
Code	Title	Hours
SLPA 1101	Introduction to Communication Disorders	4
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4
SLPA 1203	Introduction to Audiology	4
SLPA 1205	Speech and Hearing Science	4
SLPA 4651	Speech Disorders across the Life Span	4
SLPA 5107	Clinical Procedures	4
SLPA 5110	Language Disorders across the Life Span	4
SLPA 6219	Aural Rehabilitation	4

Biology and Physics Requirements		
Code	Title	Hours
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5

### Integrative Requirement

Code	Title	Hours
The following course is taken in another area of the major:		
LING 3420	Phonetics	4

### Supporting Courses

Code	Title	Hours
ENGW 3306	Advanced Writing in the Health Professions	4
HLTH 2100 or PHIL 1165	Interprofessional Ethics for Individual and Population Health Moral and Social Problems in Healthcare	4
PHTH 2300	Communication Skills for the Health Professions	4

### Major Credit Requirement

Complete 104 hours in the major.

### Program Requirements

128 total semester hours required

### Plan of Study

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 2217 and BIOL 2218	5 BIOL 2219 and BIOL 2220	5 Vacation	Vacation	

ENGW 1111	4	LING 2350	4
PSYC 1101	4	SLPA 1101	4
LING 1150	4	SLPA 1205	4
SLPA 1000 or LING 1000	1		

	18	17	0	0
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Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 3420	4 Co-op	Co-op	Elective	4
PHYS 1145 and PHYS 1146	5		Elective	4
SLPA 1103	4			
SLPA 1203	4			
SLPA 2000	1			

	18	0	0	8
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Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3306	4 HLTH 2100 or PHIL 1165	4 Vacation	Elective	4
LING 3422 or 3450	4 LING 3422 or 3450	4	Elective	4
PHTH 2300	4 PSYC 3464	4		
PSYC 2320	4 SLPA 1102	4		

	16	16	0	8
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Year 4				
Fall	Hours Spring	Hours		
LING 3412	4 LING 3424 or 3452	4		
SLPA 5107	4 SLPA 4651	4		
SLPA 5110	4 SLPA 6219	4		
Linguistics elective	4 Elective	4		

	16	16		
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Total Hours: 133

## Linguistics and Communication Studies, BA

In the combined major in linguistics and communication studies, students learn about the formal structures and analysis of human languages across multiple levels (sounds, words, phrases and sentences, meaning) while simultaneously mastering the fundamentals of effective communication and of communication theory and practice. Students receive extensive training in writing and speaking, both for a technical audience and more generally; and they explore the role of language and communication in society, both from a broad theoretical perspective and in narrower, more focused and applied domains.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete two of the following (not counted elsewhere):		8
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	
or LING 4971	Junior/Senior Honors Project 2	
or LING 4991	Directed Study Research	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	
PSYC 3464	Psychology of Language	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	

## Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Required Courses</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
COMM 2301	Communication Research Methods	4

## Foundation Course

Complete one course from the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	

## Cluster Course

Complete one course from the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

## Writing-Intensive Course

Complete one course from the following:		4
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 3610		
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	

## Communication Studies Electives

Complete two additional COMM courses	8
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## Integrative Requirement

Code	Title	Hours
<b>Sociolinguistics</b>		
LING 3442	Sociolinguistics	4

## Communication Studies Integrative Course

Complete one of the following, not used to fulfill above requirements:		4
COMM 3415	Communication Criticism	
COMM 4602	Contemporary Rhetorical Theory	

## Capstone Experience

Complete one of the following, not used to fulfill above requirements:		4
LING 4654	Seminar in Linguistics	
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4533	Consultation Skills	
COMM 4602	Contemporary Rhetorical Theory	
COMM 4608	Strategic Communication Capstone	
COMM 4625	Online Communities	

**Communication Studies Grade Requirement**

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

**Linguistics and Communication Studies Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Summer 2/Fall Co-ops**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 1000	1 LING 2350	4 COMM Studies Elective	4 Elective	4
LING 1150	4 LING 3412	4 Elective	4 Elective	4
COMM 1101	4 COMM Studies Foundation Course	4		
COMM 1112	4 Elective	4		
ENGW 1111	4			
	17	16	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Linguistic Structure or Linguistics Elective	4 Linguistic Structure or Linguistics Elective	4 COMM Studies Elective	4 COOP	
COMM 2301	4 LING 3442 (Or Linguistics Elective)	4 Elective	4	
COMM Studies Cluster Course	4 COMM Studies Elective	4		
Foreign Language Course	4 Foreign Language Course	4		
EEAM 2000 or EESC 2000	1			
	17	16	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COOP	Linguistic Structure or Linguistics Elective	4 COMM Studies Writing Intensive	4 COOP	
	LING 3442 (or Linguistics Elective)	4 Elective	4	
	ENGW 3315	4		

	Foreign Language Course	4		
		0	16	8
				0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COOP	Linguistic Structure or Linguistics Elective	4		
	COMM 3415 or 4602	4		
	COMM Studies Writing Intensive	4		
	Integrative Capstone Experience	4		
		0	16	

Total Hours: 130

**Five Years, Three Summer 2/Fall Co-ops**

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	Hours
LING 1000	1 LING 2350	4 Vacation	0 Vacation	0	0
LING 1150	4 LING 3412	4			
COMM 1101	4 COMM Studies Foundation Course	4			
COMM 1112	4 Elective	4			
ENGW 1111	4				
	17	16	0	0	

Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	Hours
Linguistic Structure or Linguistics Elective	4 Linguistic Structure or Linguistics Elective	4 Vacation	0 COOP	0	0
COMM 2301	4 COMM Studies Elective	4			
COMM Studies Cluster Course	4 Foreign Language Course	4			
Foreign Language Course	4 COMM Studies Elective	4			
	EEAM 2000 or EESC 2000	1			
	16	17	0	0	

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COOP	0 Linguistic Structure or Linguistics Elective	4 COMM Studies Elective	4 COOP	0
	LING 3442 (or Linguistics Elective)	4 Elective	4	
	ENGW 3315	4		
	Foreign Language Course	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COOP	0 Linguistic Structure or Linguistics Elective	4 Elective	4 COOP	0
	LING 3442 (or Linguistics Elective)	4 Elective	4	
	COMM Studies Writing Intensive	4		
	Elective	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
COOP	0 COMM 3415 or 4602	4
	Integrative Capstone Experience	4
	COMM Studies Elective	4
	Elective	4
	0	16

Total Hours: 130

## Linguistics and English, BA

In the combined major in linguistics and English, students learn about the structures and analysis of human languages across multiple levels (sounds, words, phrases and sentences, meaning) and apply this knowledge to understanding how the English language works, its rhetorical forms, how it has changed over time, and its cultural context. Students hone their writing skills, develop substantial language-analysis skills, and apply them particularly to English.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Requirements</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
LING 3442	Sociolinguistics	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete two courses (not used elsewhere) from the following:		8
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	
or LING 4971	Junior/Senior Honors Project 2	
or LING 4991	Directed Study Research	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	



PSYC 4612	Laboratory in Cognition
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4674	Seminar in Cognitive Neuroscience

## English Requirements

Code	Title	Hours
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### English Course-Level Requirement

At least two of the courses chosen from the English Requirements lists below must be numbered 3000–4999.

### Foundational Courses

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	

### Diversity

Complete one of the following courses: 4

ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	

### Pre-Nineteenth-Century Literature

Complete one of the following: 4

ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3618	Milton	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	

### Nineteenth-, Twentieth-, and Twenty-First-Century Literature

Complete one of the following: 4

ENGL 2330	The American Renaissance	
ENGL 3140	19th-Century Literatures	
ENGL 3619	Emerson and Thoreau	
ENGL 3720	19th-Century Major Figure	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	

ENGL 3730	20th- and 21st-Century Major Figure
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### Theories and Methods

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3700	Narrative Medicine
ENGL 4410	Research in Rhetoric and Writing

### Comparative Literature

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

### Writing

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

### Electives

Complete one additional ENGL elective at the 2000 level or higher. 4

## Linguistics/English Combined Major Requirements

Code	Title	Hours
<b>Integrative Course</b>		
LING 3454	History of English	4
<b>Junior/Senior Seminar</b>		
ENGL 4710 or ENGL 4720 or LING 4654	Capstone Seminar Capstone Project Seminar in Linguistics	4
<b>Experiential Learning</b>		
Complete one of the following options. Courses used to satisfy this requirement may simultaneously satisfy a requirement above.		0-8
Study Abroad (not a Dialogue)		
International Co-op		
LING 4891	Research Seminar in Linguistics	
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	

## Linguistics/English Combined Major Credit Requirement

Complete 80 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Five Years, Three Co-ops in Summer 2/Fall

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
LING 1150	4	LING 2350	4	Vacation	0
ENGW 1111	4	ENGL 1400	4		
MATH 1215	4	Foreign language core course	4		
Elective	4	Elective	4		
		16	16	0	0
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
LING 3454	4	Linguistic structure course	4	Vacation	0
Linguistics elective	4	LING 3412 or 3442	4		
ENGL 1410 or 1160	4	Theories and methods course	4		
Foreign language core course	4	Diversity course	4		
		EESC 2000	1		
		16	17	0	0

Year 3				
Fall	Hours	Spring	Hours	Summer 1
Co-op	0	Linguistic structure course	4	Elective
		Pre-19th century literature course	4	Elective
		Comparative literature course	4	
		ENGW 3315	4	
		0	16	8

Year 4				
Fall	Hours	Spring	Hours	Summer 1
Co-op	0	LING 3412 or 3442	4	Elective
		Linguistics structure course	4	Elective
		Writing course	4	
		19th-, 20th-, and 21st-century literature course	4	
		0	16	8

Year 5		
Fall	Hours	Spring
Co-op	0	Linguistics elective
		Junior/senior seminar
		Foreign language core course
		English elective
		0

Total Hours: 129

## Linguistics, Minor

The minor in linguistics provides students with an overview of the field, including exposure to both the structural and socio-cultural aspects of the study of language. Students have an opportunity to learn the methods of linguistic analysis and to obtain more advanced exposure to various subdomains of linguistics.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Linguistics Foundations

Code	Title	Hours
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4

## Linguistic Structure

Code	Title	Hours
Complete two of the following:		8
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	

## Elective

Code	Title	Hours
Complete one course (not counted elsewhere) from the following range:		4
LING 2000 to LING 4996		

## GPA Requirement

2.000 GPA required in the minor

## Marine and Environmental Sciences

Website (<https://cos.northeastern.edu/marine-environmental-sciences/>)

### Geoffrey C. Trussell, PhD

Professor and Chair

### Jennifer Bowen, PhD

Associate Professor and Associate Chair

617.373.3176

617.373.4378 (fax)

The academic programs of the Department of Marine and Environmental Sciences provide students a deep, multidisciplinary understanding of the chemical, physical, geological, socio-ecological, and biological processes that shape Earth's myriad ecosystems. This fundamental understanding, coupled with a focus on the many environmental challenges facing our planet, seeks to yield knowledge and solutions that promote sustainability. Our graduates leave Northeastern prepared to address diverse issues including collapsing fisheries, the impacts of climate change (e.g., sea level rise), coastal erosion, and pollution. To address and solve today's complex environmental problems, environmental professionals are expected to work effectively as part of a multidisciplinary team containing natural and social scientists, engineers, and policymakers. Hence, our undergraduate program emphasizes experiential education in addition to traditional classroom learning. This approach better prepares students to engage in collaborative work and enhances their employment opportunities after Northeastern.

Our Bachelor of Science in Environmental and Sustainability Science degree is designed for students seeking a comprehensive understanding of the scientific implications of environmental problems and the multidisciplinary solutions that environmental scientists can produce to solve them. All students take foundational courses in Earth science, ecology, and sustainability. They then choose from one of four concentrations for deeper learning. For students interested in understanding how physical and geochemical processes shape existing

and emerging environmental threats, they can pursue the Earth, Oceans, and Environmental Change concentration. Students interested in how ecological and evolutionary processes influence our ability to conserve, restore, and manage ecosystems can elect our Conservation, Restoration, and Management concentration. Our concentration in Sustainable Planning and Development is designed for students who want to examine how science informs the nexus of food, water, and energy to promote greater sustainability. Lastly, students interested in leveraging a strong scientific foundation to study coupled human and natural systems that are most threatened by environmental change can focus on our concentration in Environment and Society.

Students interested in merging a scientific foundation in environmental problem solving with skills from sociology, business, public health, law, and the arts might be interested in our Bachelor of Arts in Environmental Studies program. This major provides students a core foundation in both the scientific and human dimensions of environmental problem solving. Students then choose from one of five concentrations developed in connection with other colleges. These concentrations include Environmental and Human Health; Environmental Ethics and Social Justice; Environmental Law, Governance, and Management; Communication and Visualization of Environmental Problems and Solutions; and The Green Economy: Business, Entrepreneurship, and Environmental Sustainability.

Our Bachelor of Science in Marine Biology degree is designed to provide a strong foundation in marine biology and related disciplines. This major is strongly influenced by the Three Seas Marine Biology program that is largely based at Northeastern University's Marine Science Center (MSC) in Nahant, but many courses satisfying this major are also offered on the main campus in Boston. Students in this major study all aspects of marine systems from invertebrate zoology to oceanography. For those students seeking a broader foundation that is not solely focused on marine systems, we also offer a Bachelor of Science in Ecology and Evolutionary Biology (EEB). Students majoring in EEB develop a strong theoretical foundation in ecology and evolution while also building practical skills in data science, genomics, and other areas at the cutting edge of science. Our core curriculum for both marine biology and EEB satisfy the vast majority of requirements for prehealth fields, including veterinary sciences and medical fields.

We offer a number of combined majors in both the BA track and the BS track. Students are also able to create their own combined majors with approval from faculty committees in both departments.

Fieldwork is a critical component of training in our programs, and many of our courses use field sites throughout New England to explore environmental processes or problems in their more complex and natural state. In addition to sponsoring local trips, our students also participate in longer field excursions to places like Iceland, Antarctica, the Florida Keys, the Cascade Mountains of Washington, and many others. Students also have the option to complete undergraduate research experiences with a faculty member. Undergraduate research projects can involve fieldwork and/or lab work guided by faculty mentors, and many projects evolve into senior and honors theses.

Our graduates work across a wide range of disciplines. Student training in the foundations of each major, coupled with extensive training in data science and scientific communication, allows our students to succeed in a range of positions from hydrology to public policy to oceanography. We have graduates working as environmental lawyers; lobbyists; consultants; planners; data analysts; educators; soil, air, and water quality technicians; veterinarians; foresters; geneticists;

bioinformaticians; research divers; aquaculturists; and many more fascinating fields.

### THREE SEAS PROGRAM

Three Seas is an accelerated, research-focused, graduate-level program that allows advanced undergraduate and beginning graduate students in marine biology and related areas to spend a year of field study in three distinct marine environments. As a prime example of Northeastern University's innovative teaching initiative, Three Seas emphasizes experiential learning by providing students with hands-on research experience to develop the critical skills needed to succeed in a career in science.

The program begins with students spending a semester studying the classic rocky intertidal and salt marsh ecosystems at Northeastern University's Marine Science Center (MSC) in Nahant, 12 miles north of the main campus. The following semester, the program travels abroad to both the University of Washington's Friday Harbor Laboratories (FHL) and to the Smithsonian Tropical Research Institute (STRI).

FHL, located on San Juan Island, is 70 miles north of Seattle and part of an archipelago that lies between the mainland and Vancouver Island. In the cold and well-mixed waters of the Puget Sound, students study rocky shores, mudflats, sand beaches, kelp forests, and a range of subtidal environments.

STRI is located in the town of Bocas del Toro, on Isla Colon, an island on the northern Caribbean side of Panama. Students study Panama's tropical ecosystem on both the Caribbean and Pacific coasts, which includes fringing coral reefs, seagrass, and mangrove habitats.

For more information, visit the Three Seas Program website (<https://www.northeastern.edu/threeseas/>).

### MARINE SCIENCE CENTER SUMMER INTERNSHIP PROGRAM

This program provides a monthly stipend during the summer to students while they participate in intensive research with faculty members based at the Marine Science Center (MSC). Although students conduct independent research at the MSC laboratory primarily in the summer, these experiences can also extend throughout the year.

### ACADEMIC PROGRESSION STANDARDS

Same as college standards.

## Programs

### Core Majors

- Ecology and Evolutionary Biology (p. 691) (BS)
- Environmental Studies (p. 698) (BA)
- Environmental and Sustainability Sciences (p. 694) (BS)
- Marine Biology (p. 700) (BS)

### Combined Majors

- Computer Science and Environmental and Sustainability Sciences (p. 357) (BS)
- Data Science and Ecology and Evolutionary Biology (p. 408) (BS)
- Data Science and Environmental and Sustainability Sciences (p. 413) (BS)
- Environmental and Sustainability Sciences and Chemistry (p. 667) (BS)
- Environmental and Sustainability Sciences and Economics (p. 713) (BS)
- Environmental and Sustainability Sciences and Landscape Architecture (p. 65) (BS)

- Environmental Studies and History (p. 717) (BA)
- Environmental Studies and International Affairs (p. 719) (BA)
- Environmental Studies and Philosophy (p. 723) (BA)
- Environmental Studies and Political Science (p. 725) (BA)
- Sociology and Environmental Studies (p. 727) (BA)

### Minors

- Ecology and Evolutionary Biology (p. 729)
- Environmental and Sustainability Sciences (p. 730)
- Environmental Studies (p. 730)
- Geosciences (p. 731)
- Marine Sciences (p. 731)

### Retired Programs

- Computer Science and Environmental Science, BS

*Please see successor program:* Computer Science and Environmental and Sustainability Sciences, BS (p. 357)

- Data Science and Environmental Science, BS

*Please see successor program:* Data Science and Environmental and Sustainability Sciences, BS (p. 413)

- Environmental Science, BS

*Please see successor program:* Environmental and Sustainability Sciences, BS (p. 694)

- Environmental Science and Chemistry, BS

*Please see successor program:* Environmental and Sustainability Sciences and Chemistry, BS (p. 667)

- Environmental Science and Landscape Architecture, BS

*Please see successor program:* Environmental and Sustainability Sciences and Landscape Architecture, BS (p. 65)

- Environmental Studies and Economics, BS

*Please see successor program:* Environmental and Sustainability Sciences and Economics, BS (p. 713)

## Ecology and Evolutionary Biology, BS

The Bachelor of Science in Ecology and Evolutionary Biology (EEB) degree is designed to provide a strong foundation in the fundamentals of ecology and evolutionary biology, including focal points in population, community, and ecosystem ecology; evolutionary ecology and biology; conservation biology; population genetics; behavior; and ecological and evolutionary genomics. Our major provides unique experiential learning opportunities for students interested in the fundamentals of evolution; the ecology of terrestrial, marine, and freshwater systems; and the application of both of these in the pursuit of the conservation and restoration of natural systems. Further, students in our major have the opportunity to focus on cutting-edge techniques in the use of molecular tools to answer fundamental questions in ecology and evolution. The interdisciplinary nature of our major fosters critical thinking and creativity in scientific problem solving while instilling skills that will result in scientifically literate global citizens. The curriculum for this major also satisfies premed and prevet requirements. Courses offered by this major fulfill several core competencies required by the university. Engaging

with the Natural and Designed World, Exploring Created Expression and Innovation, Conducting Formal and Quantitative Reasoning, Analyzing and Using Data, Employing Ethical Reasoning, writing-intensive courses, and capstone.

Fieldwork is a valued component of training in our programs, and several of our courses use field sites, resources, and facilities of the Marine Science Center and throughout the greater Boston area. Students interested in having a foundational education in ecology and evolutionary biology, and also participating in the Northeastern Three Seas Program, will be able to meet the requirements for both programs. All students will also have the option to complete undergraduate research experiences with faculty members in the Department of Marine and Environmental Sciences and can take advantage of our faculty networks of scientists and practitioners for additional co-op and research opportunities.

Students graduating with an EEB major will be prepared for success in pursuing graduate degrees; for working in multiple areas of science and technology, including data science and biotech sectors; and for positions with consulting companies, nonprofits, and government agencies.

**Ecology and evolutionary biology majors and associated combined majors cannot be combined with majors in biology, marine biology, or environmental and sustainability sciences, nor can those students minor in biology, marine science, or environmental and sustainability sciences.**

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

Due to overlap in course content, double majoring in ecology and evolutionary biology and marine biology is not permitted.

### Ecology and Evolutionary Biology Major Requirements

Code	Title	Hours
<b>Ecology and Evolutionary Biology</b>		
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
<b>Ecology and Evolutionary Genomics</b>		
EEMB 1105 and EEMB 1106	Foundations in Ecological and Evolutionary Genomics and Lab for EEMB 1105	5
<b>Genetics</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<b>Evolution</b>		
EEMB 2400	Introduction to Evolution	4
<b>Ecology</b>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5

### Conservation

EEMB 3460	Conservation Biology	4
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### Data Skills

ENVR 1500	Introduction to Environmental, Social, and Biological Data	4
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### Biostatistics

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
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### Communication

ENVR 4000	Science Communication and Professional Development	4
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### Capstone

ENVR 4997 or ENVR 4900	Senior Thesis or Earth and Environmental Science Capstone	4
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### Supporting Courses

Code	Title	Hours
<b>Math</b>		
Complete one of the following:		4
MATH 1241	Calculus 1	
or MATH 1251	Calculus and Differential Equations for Biology 1	
<b>Chemistry</b>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<b>Organic or Environmental Chemistry</b>		
Complete one of the following:		4-5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	
ENVR 3410	Environmental Geochemistry	
<b>Physics 1</b>		
Complete one of the following:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
<b>Ecology and Evolutionary Biology Topical Requirement</b>		
Code	Title	Hours
Complete six of the following (at least one course must be taken from each list):		24
<i>Evolution of Organisms</i>		
EEMB 2290	Ecology and Evolution of Behavior	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3001	Genetics and Evolution in Action	
EEMB 3450	Physiological Adaptations to the Environment	
EEMB 3465	Ecological and Conservation Genomics	
EEMB 3475	Wildlife Ecology	
EEMB 3700	Desert Ecology	
EEMB 4010	Biology of Mammals	

*Ecology and Conservation Biology*

EEMB 3455	Ecosystems Ecology
EEMB 3466	Disease Ecology
EEMB 4000	Applied Conservation Biology
EEMB 4001	Landscape and Restoration Ecology
ENVR 3125	Global Oceanic Change
ENVR 3150	Food Security and Sustainability
ENVR 4505	Wetlands
ENVR 5210	Environmental Planning
ENVR 5220	Ecosystem-Based Management
ENVR 5242	Ancient Marine Life

*Analytical Skills*

BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313
EEMB 3555	Networks and Natural Systems
EEMB 5130	Ecological Dynamics
EEMB 5522	Experimental Design Marine Ecology
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300
ENVR 3410	Environmental Geochemistry
ENVR 5500	Advanced Biostatistics
ENVR 5563	Advanced Spatial Analysis
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147

**Ecology and Evolutionary Biology Credit Requirement**

Complete 88 semester hours in the major.

**Ecology and Evolutionary Biology GPA Requirement**

Complete all major courses with a cumulative GPA of 2.000.

**Program Requirement**

137 total semester hours required

**Plan of Study****Five Years, Three Spring Co-ops****Year 1**

Fall	Hours	Spring	Hours
EEMB 1101 and EEMB 1102	5	EEMB 1105 and EEMB 1106	5
ENVR 1000	1	PHYS 1145 and PHYS 1146	5
MATH 1241 or 1251	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
ENVR 1500 and ENVR 1501	5	Elective	4
Elective	4		
	19		19

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 2500 and ENVR 2501	5	COOP 3945	0	COOP 3945	0	Elective	4
CHEM 2311 or ENVR 3410	4					Elective	4
EESC 2000	1						
BIOL 2301 and BIOL 2302	5						
Elective	4						
	19		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEMB 2400	4	COOP 3945	0	COOP 3945	0	Elective	4
EEMB 2302 and EEMB 2303	5					Elective	4
EEB elective 1	4						
Elective	4						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEB elective 2	4	COOP 3945	0	COOP 3945	0		
EEB elective 3	4						
EEMB 3460	4						
Elective	4						
	16		0		0		

**Year 5**

Fall	Hours	Spring	Hours
EEB elective 4	4	EEB elective 6	4
EEB elective 5	4	Elective	4
Elective	4	Elective	4
Experiential credit (capstone/thesis)	4	ENVR 4000	4
	16		16

Total Hours: 138

**Five Years, Three Fall Co-ops****Year 1**

Fall	Hours	Spring	Hours
EEMB 1101 and EEMB 1102	5	EEMB 1105 and EEMB 1106	5
ENVR 1000	1	PHYS 1145 and PHYS 1146	5

MATH 1241 or 1251	4 Elective	4			
Elective	4 CHEM 1161 and CHEM 1162 and CHEM 1163	5			
ENVR 1500 and ENVR 1501	5				
	19	19			
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
ENVR 2500 and ENVR 2501	5 EEMB 2400	4 Elective	4 COOP 3945	0	
BIOL 2301 and BIOL 2302	5 EEMB 2302 and EEMB 2303	5 Elective	4		
EESC 2000	1 EEB elective 1	4			
CHEM 2311 and CHEM 2312	5 Elective	4			
Elective	4				
	20	17	8	0	
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>	
COOP 3945	0 EEB elective 2	4	COOP 3945	0	
	EEB elective 3	4			
	EEMB 3460	4			
	Elective	4			
	0	16		0	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
COOP 3945	0 EEB elective 4	4 Elective	4 COOP 3945	0	
	EEB elective 5	4 Elective	4		
	Elective	4			
	Experiential credit (capstone/ thesis)	4			
	0	16	8	0	
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
COOP 3945	0 EEB elective 6	4			
	Elective	4			
	Elective	4			
	ENVR 4000	4			
	0	16			

Total Hours: 139

## Environmental and Sustainability Sciences, BS

Our Bachelor of Science in Environmental and Sustainability Sciences is designed to provide students comprehensive and transdisciplinary skills needed to tackle the pressing environmental problems we face. Our core curriculum is grounded in a solid foundation in Earth systems, ecology, sustainable development, and required skills courses in data management and geographic information systems. Students then diverge into one of four concentrations. For students interested in the interface of social and ecological systems and who want to view environmental problem solving through a social science lens, we have a concentration in environment and society. For students interested in the nexus of food, water, and energy, our concentration in sustainable development and planning might be most appropriate. Is the conservation of organisms and their ecosystems the area you are most interested in? Our concentration in conservation, restoration, and management may be the best choice. Lastly, for students interested in understanding environmental problem solving from an Earth systems perspective, courses in our Earth, oceans, and environmental change concentration will satisfy your curiosity. In the final semester, our students build teams that bring the skills developed across the varied concentrations back together to learn from each other and to work with our partners to solve specific environmental challenges presented by our stakeholders. Combined, this degree seeks to prepare students to work across a wide array of disciplines to help solve the environmental challenges of the future.

There are a number of interdisciplinary opportunities involving Environmental and Sustainability Sciences. Due to curricular overlap, combinations of any Environmental and Sustainability Sciences major, including combined majors, cannot occur with majors or minors in Ecology and Evolutionary Biology or Environmental Studies, or with the minor in Geoscience.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Environmental and Sustainability Sciences Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ENVR 1000	Marine and Environmental Sciences at Northeastern	1
<b>Core Curriculum</b>		
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	5

EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 1200 and ENVR 1201 or ENVR 2200	Dynamic Earth and Lab for ENVR 1200 Earth's Changing Cycles	4
ENVR 2515	Sustainable Development	4
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
ENVR 4000	Science Communication and Professional Development	4
ENVR 4050 or ENVR 4971 or ENVR 4997	Solving Emerging Environmental Challenges through Capstone Junior/Senior Honors Project 2 Senior Thesis	4
<b>Mathematics Requirements</b>		
ENVR 2500 and ENVR 2501 or ECON 2350 or POLS 2400 or SOCL 2321	Biostatistics and Lab for ENVR 2500 Statistics Quantitative Techniques Research Methods in Sociology	4
MATH 1241 or MATH 1251 or MATH 1341	Calculus 1 Calculus and Differential Equations for Biology 1 Calculus 1 for Science and Engineering	4

### ENVIRONMENTAL AND SUSTAINABILITY SCIENCES CONCENTRATIONS

Complete one of the following concentrations:

#### CONCENTRATION IN ENVIRONMENT AND SOCIETY

Code	Title	Hours
<b>Required Environment and Society Courses</b>		
ENVR 5450	Applied Social-Ecological Systems Modeling	4
POLS 2395	Environmental Politics and Policy	4
PPUA 5260	Ecological Economics	4
SOCL 1246	Environment and Society	4
SOCL 2485	Environment, Technology, and Society	4
<b>Environment and Society Electives</b>		
Complete five of the following:		20-24
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
EEMB 2420	Fisheries Biology, Policy, and Conservation	
EEMB 3460	Conservation Biology	
EEMB 3470	Coastal Ecology and Sustainability	
EEMB 4000 and ENVR 3151	Applied Conservation Biology and Food Sustainability in the Mediterranean - Abroad	
ENVR 3150	Food Security and Sustainability	
ENVR 3201 and ENVR 3202	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia and Coastal Sustainability: The Blue Economy of the Gulf of Maine	
ENVR 5220	Ecosystem-Based Management	
ENVR 5210	Environmental Planning	
ENVR 5350	Sustainable Energy and Climate Solutions	

INTL 2464	Natural Resources and Sustainable Development	
INTL 5100	Climate and Development	
PPUA 5264	Energy Democracy and Climate Resilience: Technology, Policy, and Social Change	
PPUA 5268	International Environmental Policy	

### CONCENTRATION IN SUSTAINABLE PLANNING AND DEVELOPMENT

Code	Title	Hours
<b>Required Sustainable Planning and Development Courses</b>		
ENVR 3200	Water Resources	4
ENVR 3150	Food Security and Sustainability	4
ENVR 5210	Environmental Planning	4
PPUA 5268	International Environmental Policy	4
ENVR 5350	Sustainable Energy and Climate Solutions	4

#### Sustainable Planning and Development Electives

Complete five of the following:		20-28
EEMB 2420	Fisheries Biology, Policy, and Conservation	
INTL 2464	Natural Resources and Sustainable Development	
EEMB 3460	Conservation Biology	
EEMB 3470	Coastal Ecology and Sustainability	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 5563	Advanced Spatial Analysis	
ENVR 5220	Ecosystem-Based Management	
ENVR 5450	Applied Social-Ecological Systems Modeling	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
PPUA 5260	Ecological Economics	
ENVR 5190	Soil Science	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
ENVR 3201 and ENVR 3202	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia and Coastal Sustainability: The Blue Economy of the Gulf of Maine	
EEMB 4000 and ENVR 3151	Applied Conservation Biology and Food Sustainability in the Mediterranean - Abroad	

### CONCENTRATION IN CONSERVATION, RESTORATION, AND MANAGEMENT

Code	Title	Hours
<b>Required Conservation, Restoration, and Management Courses</b>		
EEMB 2400	Introduction to Evolution	4
EEMB 3455 or CIVE 3430	Ecosystems Ecology Engineering Microbiology and Ecology	4
EEMB 3460	Conservation Biology	4
EEMB 4001	Landscape and Restoration Ecology	4
ENVR 5220	Ecosystem-Based Management	4
<b>Conservation, Restoration, and Management Electives</b>		
Complete five of the following:		20-25



EEMB 2420	Fisheries Biology, Policy, and Conservation
EEMB 3465	Ecological and Conservation Genomics
EEMB 3475	Wildlife Ecology
EEMB 3466	Disease Ecology
EEMB 4000 and ENVR 3151	Applied Conservation Biology and Food Sustainability in the Mediterranean - Abroad
ENVR 3150	Food Security and Sustainability
ENVR 3200	Water Resources
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500
ENVR 5190	Soil Science
ENVR 5350	Sustainable Energy and Climate Solutions
ENVR 5450	Applied Social-Ecological Systems Modeling
ENVR 5563	Advanced Spatial Analysis

### CONCENTRATION IN EARTH, OCEANS, AND ENVIRONMENTAL CHANGE

Code	Title	Hours
<b>Earth Systems</b>		
Complete one of the following:		4-5
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
ENVR 2200	Earth's Changing Cycles	
<b>Earth Materials and Landforms</b>		
Complete one of the following:		5
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
<b>Freshwater</b>		
Complete one of the following:		4-5
ENVR 3200	Water Resources	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
<b>Oceans</b>		
Complete one of the following:		4
ENVR 3600	Oceanography	
ENVR 3125	Global Oceanic Change	
<b>Environmental Change</b>		
Complete one of the following:		4
ENVR 3125	Global Oceanic Change	
ENVR 5150	Climate and Atmospheric Change	
<b>Chemistry</b>		
Complete one of the following:		5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	
<b>Physics</b>		
Complete one of the following:		5

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161

### Earth, Oceans, and Environmental Change Electives

Complete three of the following: 12-15

CIVE 3435	Environmental Pollution Fate and Transport
CIVE 5280	Remote Sensing of the Environment
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340
ENVR 3125	Global Oceanic Change
ENVR 3200	Water Resources
ENVR 3410	Environmental Geochemistry
ENVR 3418	Geophysics
ENVR 3600	Oceanography
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500
ENVR 5190	Soil Science
ENVR 5201 and ENVR 5202	Geologic Field Seminar and Environmental Science Field Seminar Abroad
ENVR 5240 and ENVR 5241	Sedimentary Basin Analysis and Lab for ENVR 5240
ENVR 5242 and ENVR 5243	Ancient Marine Life and Lab for ENVR 5242
ENVR 5270 and ENVR 5271	Glacial and Quaternary History and Lab for ENVR 5270

### Environmental and Sustainability Sciences Major Credit Requirement

Complete 81 semester hours in the major.

### Program Requirement

136 total semester hours required

### Plan of Study

#### Four Years, One Co-op in Spring/Summer 1

##### Year 1

Fall	Hours	Spring	Hours	Summer 2	Hours
ENVR 1000	1	MATH 1241	4	Elective	4
ENVR 1400 and ENVR 1401	5	ENVR 1200 and ENVR 1201	5	Elective	4
ENVR 1500 and ENVR 1501	5	EEMB 2302 and EEMB 2303	5		
ENGW 1111	4	ESS concentration core or elective 1	4		

Elective	4				
	19	18			8
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
EESC 2000	1 Co-op	0 Co-op	0 Elective	4	
ENVR 2515	4		Elective	4	
ENVR 2500 and ENVR 2501	5				
ENVR 3300 and ENVR 3301	5				
ESS concentration core or elective 2	4				
	19	0	0		8

<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
ENGW 3307	4 ESS concentration core or elective 6	4			
ESS concentration core or elective 3	4 ESS concentration core or elective 7	4			
ESS concentration core or elective 4	4 ESS concentration core or elective 8	4			
ESS concentration core or elective 5	4 Elective	4			
	16	16			

<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
ESS concentration core or elective 9	4 Elective	4			
ESS concentration core or elective 10	4 Elective	4			
Elective	4 ENVR 4000	4			
Elective	4 ENVR 4050	4			
	16	16			

Total Hours: 136

**Four Years, One Co-op in Summer 2/Fall**

<b>Year 1</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>	
ENVR 1000	1 MATH 1241	4	Elective	4	
ENVR 1400 and ENVR 1401	5 ENVR 1200 and ENVR 1201	5	Elective	4	

ENVR 1500 and ENVR 1501	5 EEMB 2302 and EEMB 2303	5			
ENGW 1111	4 ESS concentration core or elective 1	4			
Elective	4				
	19	18			8

<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
EESC 2000	1 ESS concentration core or elective 3	4 Elective	4 Co-op	0	
ENVR 2515	4 ESS concentration core or elective 4	4 Elective	4		
ENVR 2500 and ENVR 2501	5 ESS concentration core or elective 5	4			
ENVR 3300 and ENVR 3301	5 Elective	4			
ESS concentration core or elective 2	4				
	19	16	8		0

<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	0 ESS concentration core or elective 6	4			
	ESS concentration core or elective 7	4			
	ESS concentration core or elective 8	4			
	ENGW 3307	4			
	0	16			

<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
ESS concentration core or elective 9	4 ENVR 4000	4			
ESS concentration core or elective 10	4 ENVR 4050	4			
Elective	4 Elective	4			

Elective	4	Elective	4
	16		16
Total Hours: 136			

## Environmental Studies, BA

The Bachelor of Arts in Environmental Studies degree is designed to provide students with a critical foundation in both the scientific and human foundation of environmental systems. It also prioritizes mastery of skills that will position students for future success as environmental professionals. In their first two years, all environmental studies majors complete introductory courses in critical scientific disciplines—including focusing on food, water, and climate resources—and in essential human dimensions—including sustainable development, environmental health, and environmental justice. Lastly, all students take required skill-building courses that are designed to promote success with desired co-op and career opportunities. Students then opt for one of five concentrations that build their training in courses from across the university. These concentrations are specifically designed to cover the breadth of areas where people and the environment intersect, including courses that draw on Northeastern's expertise in public health, environmental justice, environmental law, visualization and storytelling of environmental issues, and the green economy. Students interested in viewing environmental problems specifically through quantitative social and natural science lenses should consider the BS Environmental and Sustainability Sciences (p. 694) program.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Environmental Studies Major Requirements

Code	Title	Hours
<b>College</b>		
ENVR 1000	Marine and Environmental Sciences at Northeastern	1
<b>Core Courses</b>		
Introductory Courses		
ENVR 1101	Environmental Science	4
<i>Complete one of the following:</i>		
SOCL 1246	Environment and Society	4
PHIL 1180	Environmental Ethics	
ANTH 1101	Peoples and Cultures	
ENVR 2401	Food Justice and Community Development	

Scientific Foundations of Environmental Systems		
ENVR 1110	Global Climate Change	4
ENVR 3150	Food Security and Sustainability	4
ENVR 3200	Water Resources	4
Human Dimensions of Environmental Systems		
ENVR 2515	Sustainable Development	4
PHTH 2414	Environmental Health	4
SOCL 4522	Environmental Justice	4
Skills		13-14
<i>Research Methods</i>		
Complete one of the following:		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
ECON 2350	Statistics	
POLS 2400	Quantitative Techniques	
SOCL 2321	Research Methods in Sociology	
ANTH 3410	Ethnographic Field Experience	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
ENVR 4000	Science Communication and Professional Development	4
Capstone		4
<i>Complete one of the following:</i>		
ENVR 4050	Solving Emerging Environmental Challenges through Capstone	
ENVR 4970 or ENVR 4971	Junior/Senior Honors Project 1 Junior/Senior Honors Project 2	
ENVR 4997	Senior Thesis	

### Concentrations

Complete one of the following concentrations:

- Environmental and Human Health (p. 698)
- Environmental Ethics and Social Justice (p. 699)
- Environmental Law, Governance, and Management (p. 699)
- Communication and Visualization: Environmental Problems and Solutions (p. 699)
- The Green Economy: Business, Entrepreneurship, and Environmental Sustainability (p. 700)

### Environmental Studies Major Credit Requirement

Complete 80 semester hours in the major.

### Program Requirement

128 total semester hours required

### CONCENTRATION IN ENVIRONMENTAL AND HUMAN HEALTH

Code	Title	Hours
<b>Required Courses</b>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
EEMB 3466	Disease Ecology	4
PHTH 1270	Introduction to Global Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
<b>Electives</b>		<b>16</b>

Complete four of the following:

COMM 3500	Environmental Issues, Communication, and the Media
EEMB 3460	Conservation Biology
EEMB 3555	Networks and Natural Systems
ENVR 4505	Wetlands
ENVR 5450	Applied Social-Ecological Systems Modeling
INTL 5100	Climate and Development
PHTH 4120	Global Perspectives on Discrimination and Health
or PHTH 5120	Race, Ethnicity, and Health in the United States
PHTH 5214	Environmental Health
POLS 2395	Environmental Politics and Policy
SOCL 2485	Environment, Technology, and Society

### CONCENTRATION IN ENVIRONMENTAL ETHICS AND SOCIAL JUSTICE

Code	Title	Hours
<b>Required Courses</b>		
COMM 3500	Environmental Issues, Communication, and the Media	4
PHIL 1180	Environmental Ethics	4
POLS 2395	Environmental Politics and Policy	4
SOCL 2485	Environment, Technology, and Society	4
<b>Electives</b>		<b>16</b>

Complete four of the following if PHIL 1180 was not taken as part of the core curriculum or five if it was:

BUSN 3110	The Consulting Environment
COMM 3532	Theories of Conflict and Negotiation
EEMB 4000	Applied Conservation Biology
ENVR 3151	Food Sustainability in the Mediterranean - Abroad
ENVR 4504	Environmental Pollution
ENVR 5350	Sustainable Energy and Climate Solutions
ENVR 5450	Applied Social-Ecological Systems Modeling
INTL 5100	Climate and Development
MGMT 2115	Nonprofit Leadership and Social Innovation
PHIL 2001	Ethics and Evolutionary Games
PPUA 5268	International Environmental Policy
PPUA 5270	Food Systems and Public Policy
PPUA 5390	Special Topics in Public Policy and Urban Affairs

### CONCENTRATION IN ENVIRONMENTAL LAW, GOVERNANCE, AND MANAGEMENT

Code	Title	Hours
<b>Required Courses</b>		
LPSC 1101	Introduction to Law	4
LPSC 2301	Introduction to Law, Policy, and Society	4
<i>Complete one of the following:</i> 4		
POLS 2395	Environmental Politics and Policy	
PPUA 5268	International Environmental Policy	
<i>Complete one of the following:</i> 4		
ENVR 5210	Environmental Planning	

EEMB 2420	Fisheries Biology, Policy, and Conservation
EEMB 4000	Applied Conservation Biology
ENVR 5220	Ecosystem-Based Management

**Electives** 16

Complete four of the following:

ENVR 3151	Food Sustainability in the Mediterranean - Abroad
EEMB 3460	Conservation Biology
EEMB 3475	Wildlife Ecology
ENVR 5210	Environmental Planning
ENVR 5220	Ecosystem-Based Management
ENVR 5450	Applied Social-Ecological Systems Modeling
LPSC 3303	Topics in Law and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 3409	Global Governance
POLS 3307	Public Policy and Administration
PPUA 5268	International Environmental Policy

### CONCENTRATION IN COMMUNICATION AND VISUALIZATION: ENVIRONMENTAL PROBLEMS AND SOLUTIONS

Code	Title	Hours
<b>Required Courses</b>		
ARTG 5110	Information Design History	4
COMM 3500	Environmental Issues, Communication, and the Media	4

*Complete one of the following:* 4

JRNL 3650	Science Writing
JRNL 3700	Data Storytelling

Complete one of the following: 4

ARTG 6330	Information Design Mapping Strategies
CIVE 5280	Remote Sensing of the Environment
ENVR 5260	Geographical Information Systems

**Electives** 16

Complete four of the following:

ARTG 3520	Marketing Communications and Cultures 2
ARTG 5130	Visual Communication for Information Design
CIVE 5280	Remote Sensing of the Environment
COMM 2555	Games for Change
COMM 3532	Theories of Conflict and Negotiation
ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia
ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine
EEMB 3555	Networks and Natural Systems
ENVR 5450	Applied Social-Ecological Systems Modeling
ENVR 5563	Advanced Spatial Analysis
GAME 2755	Games and Social Justice
JRNL 3650	Science Writing
JRNL 3700	Data Storytelling

Concentration in the Green Economy: Business, Entrepreneurship, and Environmental Sustainability

Code	Title	Hours
<b>Required Courses</b>		
BUSN 1110	Fundamentals of Business	4
FINA 2720	Sustainability in the Business Environment	4
<i>Complete one of the following:</i>		4
ENVR 5210	Environmental Planning	
ENVR 5220	Ecosystem-Based Management	
<i>Complete one of the following:</i>		4
BUSN 3110	The Consulting Environment	
ENR 2206	Global Social Enterprise	
ENR 3520	Impact Investing and Social Finance	
<b>Electives</b>		<b>16</b>
Complete four of the following:		
BUSN 3110	The Consulting Environment	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
ECON 3423	Environmental Economics	
EEMB 2420	Fisheries Biology, Policy, and Conservation	
ENR 2301	Innovation!	
ENR 3520	Impact Investing and Social Finance	
ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia	
ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine	
ENVR 5210	Environmental Planning	
ENVR 5220	Ecosystem-Based Management	
ENVR 5350	Sustainable Energy and Climate Solutions	
ME 5645	Environmental Issues in Manufacturing and Product Use	
MGMT 3520	Consulting Fundamentals and Frameworks	
MGMT 3530	Project Management	
MKTG 2301	Marketing and Society	

**Plan of Study**

**Four Years, Two Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1000	1	ENVR 1110	4	General elective 1	4	General elective 3	4
ENVR 1101	4	ENVR 3150	4	General elective 2	4	General elective 4	4
PHIL 1180	4	PTH 2414	4				
Elementary language requirement	4	Intermediate language requirement	4				
ENVR 2515	4						
		17	16		8		8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 3200	4	Co-op	0	Co-op	0	General elective 5	4
Concentration required course 1	4					General elective 6	4
Concentration required course 2	4						
ENVR 3300 and ENVR 3301	5						
		17	0		0		8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Concentration required course 3	4	Co-op	0	Co-op	0	Concentration elective course 2	4
SOCL 4522	4					General elective 7	4
Required research methods course	4						
Concentration elective course 1	4						
		16	0		0		8

Year 4					
Fall	Hours	Spring	Hours	Summer	Hours
Concentration required course 4	4	General elective 9	4		
Concentration elective course 3	4	General elective 10	4		
Concentration elective course 4	4	ENVR 4050	4		
General elective 8	4	ENVR 4000	4		
		16	16		

Total Hours: 130

**Marine Biology, BS**

Our Bachelor of Science in Marine Biology aims to provide students with a solid foundation in marine biology, with flexibility to explore ocean and coastal processes, marine biogeochemistry, the ecology and evolution of marine organisms, and the ocean's role and responses in global change. Core, skills-based courses are designed to prepare students for in-depth examination of the contemporary issues facing marine organisms and ecosystems, while helping to develop resumés that are strengthened by experiential learning. This major also provides options for students following a prevet or premed track.

Faculty teaching the courses are experts who are dedicated to marine research and experiential learning, providing students the opportunities to learn new, valuable skills and to expand their professional science

network. Students may actively participate in field and lab work, internships at Northeastern University's Marine Science Center in Nahant, MA, study abroad through Dialogue of Civilizations programs or the long-standing Three Seas Program (see below). Additional opportunities exist for students in this strong, interdisciplinary program that prepares students for direct entry into the job market or a competitive graduate program.

**Students majoring in Marine Biology cannot be combined with majors in Biology, Ecology and Evolutionary Biology, or Environmental and Sustainability Sciences, nor can they minor in Biology, Ecology and Evolutionary Biology, or Environmental and Sustainability Sciences.**

### THREE SEAS PROGRAM

The Three Seas Program, now in its 38<sup>th</sup> year, delivers a unique combination of inquiry-based, global study, fieldwork, and research across three distinct locations: the Gulf of Maine, tropical coastal Panama, and the Pacific Northwest. This optional, two-semester program is designed to teach students to plan and execute marine field research to enhance their future opportunities, whether in top doctoral programs or careers with government agencies or private consulting firms. Students finish the program as active scientists who are certified in scientific diving, have an expanded skill set, and a robust professional network.

For more information, please see the Three Seas Program website (<https://cos.northeastern.edu/marine-environmental-sciences/three-seas/>).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Marine Biology Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ENVR 1000	Marine and Environmental Sciences at Northeastern	1
<b>Foundations Courses</b>		
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
EEMB 1105 and EEMB 1106	Foundations in Ecological and Evolutionary Genomics and Lab for EEMB 1105	5
<b>Genetics</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<b>Ecology</b>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
<b>Evolution</b>		

EEMB 2400	Introduction to Evolution	4
<b>Marine Biology</b>		
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	5
<b>Conservation</b>		
EEMB 3460	Conservation Biology	4
<b>Scientific Communication</b>		
ENVR 4000	Science Communication and Professional Development	4
<b>Capstone</b>		
Complete one of the following:		1-4
BIOL 4701	Biology Capstone	
ENVR 4900	Earth and Environmental Science Capstone	
ENVR 4997	Senior Thesis	

### MARINE BIOLOGY OPTIONS

#### Requirements for Students Not Participating in Three Seas

Code	Title	Hours
ENVR 3125	Global Oceanic Change	4
ENVR 3600	Oceanography	4
Complete four of the following:		16-20
BIOL 5587	Comparative Neurobiology	
EEMB 2420	Fisheries Biology, Policy, and Conservation	
EEMB 2290	Ecology and Evolution of Behavior	
EEMB 3001	Genetics and Evolution in Action	
EEMB 3450	Physiological Adaptations to the Environment	
EEMB 3455	Ecosystems Ecology	
EEMB 3465	Ecological and Conservation Genomics	
EEMB 3466	Disease Ecology	
EEMB 3555	Networks and Natural Systems	
EEMB 5130 and EEMB 5131	Ecological Dynamics and Lab for EEMB 5130	
ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia	
ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
ENVR 4504	Environmental Pollution	
ENVR 4505	Wetlands	
ENVR 5220	Ecosystem-Based Management	
ENVR 5242 and ENVR 5243	Ancient Marine Life and Lab for ENVR 5242	
EEMB 5542	Marine Spatial Planning	
Elective courses available at Nahant campus:		
EEMB 5510	New England Marine Biomes	
EEMB 5522	Experimental Design Marine Ecology	
EEMB 5525	Advanced Field Methods in Marine Ecology	
EEMB 5546	Sustainability of the Land-Sea Interface	

**Three Seas Students**

Code	Title	Hours
Three Seas courses at Nahant/Northeastern campus:		
EEMB 5522 or EEMB 5525	Experimental Design Marine Ecology Advanced Field Methods in Marine Ecology	3-4
EEMB 5546	Sustainability of the Land-Sea Interface	3
EEMB 5510	New England Marine Biomes	4
EEMB 5542	Marine Spatial Planning	4
EEMB 5589	Diving Research Methods	2
Three Seas courses (abroad):		
EEMB 5504 and EEMB 5505	Biology of Corals and Lab for EEMB 5504	3
EEMB 5506 and EEMB 5507	Biology and Ecology of Fishes and Lab for EEMB 5506	3
EEMB 5508	Marine Birds and Mammals	3
EEMB 5538	Conservation and Restoration of Marine Systems	3
EEMB 5518 and EEMB 5519	Ocean and Coastal Processes and Lab for EEMB 5518	3
EEMB 5520	Tropical Marine Ecology	2
Select one of the following:		
EEMB 5533 and EEMB 5535	Marine Invertebrate Zoology and Botany and Lab for EEMB 5533	3
EEMB 5540 and EEMB 5541	Changing Global Oceans and Lab for EEMB 5540	3

**Supporting Courses for Marine Biology**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1251 or MATH 1241 or MATH 1341	Calculus and Differential Equations for Biology 1 Calculus 1 Calculus 1 for Science and Engineering	4
<b>Introduction to Data</b>		
ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	5
<b>Biostatistics</b>		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312 or ENVR 3410	Organic Chemistry 1 and Lab for CHEM 2311 Environmental Geochemistry	4
<b>Physics</b>		
Complete a lecture/lab set for Physics 1:		
<i>Physics 1</i>		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145 (recommended)	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	

PHYS 1161  
and PHYS 1162  
and PHYS 1163

Physics 1  
and Lab for PHYS 1161  
and Recitation for PHYS 1161

PHYS 1171  
and PHYS 1172  
and PHYS 1173

Physics 1 for Bioscience and Bioengineering  
and Lab for PHYS 1171  
and Interactive Learning Seminar for PHYS 1171

**Marine Biology Major Credit/GPA Requirements**

Complete 89 semester hours in the major with a cumulative GPA of 2.000.

**Program Requirement**

137 total semester hours required

**Plan of Study****Four Years, Two Co-ops in Spring/Summer 1**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ENVR 1000	1	EEMB 1105 and EEMB 1106	5	Elective	4
EEMB 1101 and EEMB 1102	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5	Elective	4
ENVR 1500 and ENVR 1501	5	PHYS 1161 and PHYS 1162 and PHYS 1163	5		
MATH 1251 Elective	4	Elective	4		
		19	19	8	8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
BIOL 2301 and BIOL 2302	5	Co-op	0	Co-op	0
EESC 2000	1			Elective	4
ENVR 2500 and ENVR 2501	5				
CHEM 2311 and CHEM 2312	5				
ENGW 3307	4				
		20	0	0	8
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
EEMB 2302 and EEMB 2303	5	Co-op	0	Co-op	0
EEMB 2700 and EEMB 2701	5			Elective	4
EEMB 2400	4				

Marine biology elective	4			
	18	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Marine biology elective	4 BIOL 4701, ENVR 4900, or ENVR 4997	1-4		
EEMB 3460	4 Marine biology elective	4		
ENVR 3600 (Oceanography)	4 ENVR 3125	4		
Marine biology elective	4 ENVR 4000	4		
	16	13-16		

Total Hours: 137-140

**Marine Biology—Three Seas Program, Four Years, One Co-op in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 1000	1 EEMB 1105 and EEMB 1106	5 Vacation	0 Elective	4
MATH 1251	4 CHEM 1161 and CHEM 1162	5	Elective	4
Elective	4 PHYS 1161 and PHYS 1162 and PHYS 1163	5		
EEMB 1101 and EEMB 1102	5 EEMB 2400	4		
ENVR 1500 and ENVR 1501	5			
	19	19	0	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BIOL 2301 and BIOL 2302	5 Co-op	0 Co-op	0 Elective	4
EESC 2000	1			
ENVR 2500 and ENVR 2501	5			
CHEM 2311 and CHEM 2312	5			
ENGW 3307	4			
	20	0	0	4

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Elective	4 Vacation	0 EEMB 5546	3
EEMB 2700 and EEMB 2701	5 Elective	4	EEMB 5525	3
EEMB 2302 and EEMB 2303	5 Elective	4		
EEMB 3460	4 Elective	4		
	18	16	0	6

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EEMB 5504 and EEMB 5505	3 BIOL 4701, ENVR 4900, or ENVR 4997	1-4		
EEMB 5506 and EEMB 5507	3 Elective	4		
EEMB 5508	3 ENVR 4000	4		
EEMB 5538	3 Elective	4		
EEMB 5518 and EEMB 5519	3			
EEMB 5520	2			
EEMB 5540 and EEMB 5541	3			
	20	13-16		

Total Hours: 143-146

**Computer Science and Environmental and Sustainability Sciences, BS**

The computer science and the environmental and sustainability sciences combined major focuses on the major environmental challenges facing our planet and provides broad training to understand how these challenges can be met through advances in computer science and artificial intelligence. Understanding these processes requires both the acquisition and computational analysis of large amounts of data—underscoring the synergistic relationship between computer science and environmental and sustainability sciences.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).



**Computer Science Courses**

Code	Title	Hours
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**Computer Science Overview**

CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

**Computer Science Fundamental Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

**Computer Science Required Courses**

CS 3000 and CS 3001	Algorithms and Data and Recitation for CS 3000	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

**Khoury Elective Courses**

With advisor approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

**Environmental and Sustainability Sciences Courses**

Code	Title	Hours
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**Environmental and Sustainability Sciences Required Courses**

ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
ENVR 2200 or ENVR 1200	Earth's Changing Cycles Dynamic Earth	4
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 2515	Sustainable Development	4

Choose one from each category:

<i>Skills</i>		4-5
ENVR 3300 and ENVR 3301 or EEMB 3555	Geographic Information Systems and Lab for ENVR 3300 Networks and Natural Systems	

*Earth Oceans and Environmental Change* 4-5

ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 3600	Oceanography	
ENVR 3125	Global Oceanic Change	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	

*Conservation, Restoration, and Management* 4

EEMB 2400	Introduction to Evolution	
EEMB 3460	Conservation Biology	
EEMB 4001	Landscape and Restoration Ecology	
EEMB 3465	Ecological and Conservation Genomics	
<i>Sustainable Planning and Development</i>		4
ENVR 3200	Water Resources	
ENVR 3150	Food Security and Sustainability	
ENVR 5210	Environmental Planning	
ENVR 5350	Sustainable Energy and Climate Solutions	
<i>Environment and Society</i>		4
POLS 2395	Environmental Politics and Policy	
PPUA 5260	Ecological Economics	
PPUA 5268	International Environmental Policy	
SOCL 2485	Environment, Technology, and Society	

**Supporting Courses**

Code	Title	Hours
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**Calculus**

MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
MATH 1252	Calculus and Differential Equations for Biology 2	4
or MATH 1342	Calculus 2 for Science and Engineering	
MATH 3081	Probability and Statistics	4

**Chemistry**

CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5

**Computing and Social Issues**

Complete one of the following:	4	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 4528	Computers and Society	

**Computer Science English Requirement**

Code	Title	Hours
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**College Writing**

ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one of the following:	4	
ENGW 3302	Advanced Writing in the Technical Professions	

ENGW 3307	Advanced Writing in the Sciences
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines

ENVR 1400 and ENVR 1401	5			
	20	17	8	8

### Integrative Requirement

Code	Title	Hours
Complete one of the following:		4
ENVR 4050	Solving Emerging Environmental Challenges through Capstone	
ENVR 4971	Junior/Senior Honors Project 2	
ENVR 4997	Senior Thesis	
CS 4991	Research	

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, DS, CY, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

136 total semester hours required

### Plan of Study

#### Sample Patterns

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1					
Fall	Hours	Spring	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4
CS 1800 and CS 1802	5	CS 3200	4	Elective	4
CS 2500 and CS 2501	5	ENVR 2200	4		
ENGW 1111	4	ENVR skills course	4		

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1211 and CHEM 1212 and CHEM 1213	5	CHEM 1214 and CHEM 1215 and CHEM 1216	5	MATH 1252 or 1342	4	Co-op	
EEMB 2302 and EEMB 2303	5	MATH 1251 or 1341	4	Elective	4		
CS 3000	4	ENVR Earth oceans course	4				
ENVR 2515	4	Khoury elective	4				
		CS 1210	1				
	18		18		8		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3800	4	MATH 3081	4	Co-op	
		ENVR conservation course	4	ENGW 3302	4		
		ENVR sustainable course	4				
		Elective	4				
	0		16		8		0

#### Year 4

Fall	Hours	Spring	Hours
Co-op		CS 4500	4
		ENVR society course	4
		Integrative course	4
		Computing and social issues	4
	0		16

Total Hours: 137

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1					
Fall	Hours	Spring	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	
CS 1800 and CS 1802	5	CS 3200	4		
CS 2500 and CS 2501	5	ENVR skills course	4		
ENGW 1111	4	Elective	4		

ENVR 1400 and ENVR 1401	5				
	20	17	0		0
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
CS 3500	4 CHEM 1214 and CHEM 1215 and CHEM 1216	5 Vacation	0 Co-op		
CHEM 1211 and CHEM 1212 and CHEM 1213	5 CS 3000	4			
ENVR 2200	4 ENVR 2515	4			
EEMB 2302 and EEMB 2303	5 Khoury elective	4			
	CS 1210	1			
	18	18	0		0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	MATH 1251 or 1341	4 MATH 3081	4 Co-op		
	ENVR Earth oceans course	4 Elective	4		
	ENVR conservation course	4			
	Elective	4			
	0	16	8		0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	CS 3800	4 Elective	4 Co-op		
	MATH 1252 or 1342	4 Elective	4		
	ENGW 3302	4			
	ENVR sustainable course	4			
	0	16	8		0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	CS 4500	4			
	ENVR society course	4			
	Integrative course	4			
	Computing and social issues	4			
	0	16			

Total Hours: 137

## Data Science and Ecology and Evolutionary Biology, BS

The combined major in data science and ecology and evolutionary biology provides a strong foundation in the fundamentals of ecology and evolutionary biology, including focal points in population, community, and ecosystem ecology; evolutionary ecology and biology; conservation biology; population genetics; behavior; and ecological and evolutionary genomics. Data science allows students to study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. The interdisciplinary nature of the major fosters critical thinking and creativity in scientific problem solving.

Students majoring in Ecology and Evolutionary Biology and associated combined majors cannot be combined with majors in Biology, Marine Biology, or Environmental and Sustainability Sciences, nor can they minor in Biology, Marine Science, or Environmental and Sustainability Sciences.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Data Science Course Work

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4

**Data Science Foundations**

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

**Khoury Elective Courses**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four semester hours of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Ecology and Evolutionary Biology Course Work**

Code	Title	Hours
<b>Ecology and Evolutionary Biology</b>		
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
<b>Ecology and Evolutionary Genomics</b>		
EEMB 1105 and EEMB 1106	Foundations in Ecological and Evolutionary Genomics and Lab for EEMB 1105	5
<b>Genetics</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<b>Evolution</b>		
EEMB 2400	Introduction to Evolution	4
<b>Ecology</b>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
<b>Capstone</b>		
ENVR 4997	Senior Thesis	4

**Ecology and Evolutionary Biology Topical Requirement**

Code	Title	Hours
Complete 16 semester hours of the following. At least one course must be taken from each list.		16

*Evolution of Organisms*

EEMB 2290	Ecology and Evolution of Behavior	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3001	Genetics and Evolution in Action	
EEMB 3450	Physiological Adaptations to the Environment	
EEMB 3700	Desert Ecology	
EEMB 4010	Biology of Mammals	

*Ecology and Conservation Biology*

EEMB 3460	Conservation Biology	
EEMB 3475	Wildlife Ecology	

EEMB 3465	Ecological and Conservation Genomics	
EEMB 3470	Coastal Ecology and Sustainability	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 3125	Global Oceanic Change	
ENVR 3150	Food Security and Sustainability	

*Analytical Skills*

ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3465	Ecological and Conservation Genomics	
EEMB 5130	Ecological Dynamics	
ENVR 5500	Advanced Biostatistics	

**Supporting Courses**

Code	Title	Hours
<b>Calculus</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
<b>Physics</b>		
Complete one of the following:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	

**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
DS 4420	Machine Learning and Data Mining 2	4

**Required General Electives**

Code	Title	Hours
Complete 16 semester hours of general electives.		16

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS,CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 ENVR 2500 and ENVR 2501	5 Physics requirement	5	
CS 2500 and CS 2501	5 EEMB 1105 and EEMB 1106	5		
ENGW 1111	4 CS 3200	4		
EEMB 1101 and EEMB 1102	5			
	20	19	10	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1211 and CHEM 1212 and CHEM 1213	5 MATH 1251 or 1341	4 Elective	4 Co-op	
BIOL 2301 and BIOL 2302	5 DS 4200	4 Elective	4	
DS 3000	4 DS 4300	4		
EEB topical requirement	4 CS 1210	1		
	Elective	4		
	18	17	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	EEMB 2400	4 ENGW 3302	4 Co-op	
	EEB topical requirement	4 Khoury elective	4	
	DS 4400	4		
	EEMB 2302 and EEMB 2303	5		
	0	17	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ENVR 4997	4 Elective	4	
	DS 4420	4		
	EEB topical requirement	4		
	EEB topical requirement	4		
	0	16	4	

Total Hours: 137

### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 1800 and CS 1802	5 CS 3200	4		
CS 2500 and CS 2501	5 EEMB 1105 and EEMB 1106	5		
ENGW 1111	4 MATH 1251 or 1341	4		
EEMB 1101 and EEMB 1102	5			
	20	18	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 DS 3000	4 Vacation	0 Co-op	0
CHEM 1211 and CHEM 1212 and CHEM 1213	5 EEB topical requirement	4		
ENVR 2500 and ENVR 2501	5 CS 1210	1		
BIOL 2301 and BIOL 2302	5 Physics requirement	5		
	20	14	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 DS 4200	4 Elective	4 Co-op	0

	EEB topical requirement	4	Elective	4	
	EEMB 2400	4			
	Khoury elective	4			
		0	16	8	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4300	4	Elective	4	Co-op	0
		DS 4400	4	ENGW 3302	4		
		EEMB 2302 and EEMB 2303	5				
		Elective	4				
		0	17	8		0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		ENVR 4997	4
		DS 4420	4
		EEB topical requirement	4
		EEB topical requirement	4
		0	16

Total Hours: 137

## Data Science and Environmental and Sustainability Sciences, BS

The data science and environmental and sustainability sciences combined major focuses on major environmental challenges facing our planet and provides broad training to understand how these challenges can be met through advances in data science. Understanding these processes requires acquisition and analysis of large amounts of data—an ideal fit with data science, where students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Data Science Courses

Code	Title	Hours
CS 1200	First Year Seminar	1

CS 1210	Professional Development for Khoury Co-op	1
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### Programming Sequence Pathways

Choose one of the two options: 12

#### Computer Science Option

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500	Object-Oriented Design	

#### Data Science Option

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

### Computer Science Required Courses

CS 3200	Database Design	4
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### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4

### Khoury Elective Courses

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Environmental Science and Sustainability Courses

Code	Title	Hours
<b>Environmental and Sustainability Sciences Major Requirements</b>		
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
ENVR 2200 or ENVR 1200	Earth's Changing Cycles Dynamic Earth	4
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 2515	Sustainable Development	4
Choose one course from each category:		
<i>Skills Courses</i> 4-5		
ENVR 3300 and ENVR 3301 or EEMB 3555	Geographic Information Systems and Lab for ENVR 3300 Networks and Natural Systems	
<i>Earth Oceans and Environmental Change</i>		4-5

ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 3600	Oceanography	
ENVR 3125	Global Oceanic Change	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
<i>Conservation, Restoration, and Management</i>		4
EEMB 2400	Introduction to Evolution	
EEMB 3460	Conservation Biology	
EEMB 4001	Landscape and Restoration Ecology	
EEMB 3465	Ecological and Conservation Genomics	
<i>Sustainable Planning and Development</i>		4
ENVR 3200	Water Resources	
ENVR 3150	Food Security and Sustainability	
ENVR 5210	Environmental Planning	
ENVR 5350	Sustainable Energy and Climate Solutions	
<i>Environment and Society</i>		4
POLS 2395	Environmental Politics and Policy	
PPUA 5260	Ecological Economics	
PPUA 5268	International Environmental Policy	
SOCL 2485	Environment, Technology, and Society	

### Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1251 or MATH 1341	Calculus and Differential Equations for Biology 1 Calculus 1 for Science and Engineering	4
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Integrative Requirement

Code	Title	Hours
Complete one of the following:		
ENVR 4050	Solving Emerging Environmental Challenges through Capstone	4
ENVR 4971	Junior/Senior Honors Project 2	
ENVR 4997	Senior Thesis	
CS 4991	Research	

### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

134 total semester hours required

### Plan of Study

#### Sample Patterns

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500	4 Elective	4
CS 1800 and CS 1802	5 ENVR 2515	4 CS 3200	4 Elective	4
CS 2500 and CS 2501	5 ENVR 1400 and ENVR 1401	5		
ENVR 2200	4 EEMB 2302 and EEMB 2303	5		
ENGW 1111	4			
19		19	8	8

Year 2					Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1211 and CHEM 1212 and CHEM 1213	5 CHEM 1214 and CHEM 1215 and CHEM 1216	5 MATH 1341 or 1251	4 Co-op		CS 3500	4 CHEM 1214 and CHEM 1215 and CHEM 1216	5 Vacation	Co-op	
DS 3000	4 DS 4200	4 Elective	4		CHEM 1211 and CHEM 1212 and CHEM 1213	5 DS 3000	4		
ENVR skills course	4 ENVR 2500	4			ENVR 2515	4 ENVR 2500	4		
ENVR Earth oceans course	4 DS 4300	4			ENVR skills course	4 ENVR Earth oceans course	4		
	CS 1210	1				CS 1210	1		
	17	18	8	0		17	18	0	0
Year 3					Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4400	4 ENGW 3302	4 Co-op		Co-op	0 MATH 1251 or 1341	4 Elective	4 Co-op	
	ENVR conservation course	4 Elective	4			DS 4200	4 Elective	4	
	ENVR sustainable course	4				ENVR conservation course	4		
	ENVR society course	4				ENVR sustainable course	4		
	0	16	8	0		0	16	8	0
Year 4					Year 4				
Fall	Hours Spring	Hours			Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Integrative course	4			Co-op	0 DS 4300	4 Elective	4 Co-op	
	DS 4420	4				DS 4400	4 ENGW 3302	4	
	Khoury elective	4				ENVR society course	4		
	Elective	4				Elective	4		
	Elective	4				0	16	8	0
	0	20				0	16	8	0
Total Hours: 141					Total Hours: 141				
Five Years, Three Co-ops in Summer 2/Fall					Year 5				
Year 1					Fall	Hours Spring	Hours		
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation		Co-op	DS 4420	4		
CS 1800 and CS 1802	5 CS 3200	4				Integrative course	4		
CS 2500 and CS 2501	5 EEMB 2302 and EEMB 2303	5				Khoury elective	4		
ENVR 2200	4 ENVR 1400 and ENVR 1401	5				Elective	4		
ENGW 1111	4					Elective	4		
	19	19	0	0		0	20		
Total Hours: 141					Total Hours: 141				

### Environmental and Sustainability Sciences and Chemistry, BS

The Departments of Marine and Environmental Sciences and Chemistry provide education in basic environmental and sustainability sciences (ESS) and chemistry-related disciplines. The overall objective of this combined major is to provide the fundamental scientific background



and practical training for students as they prepare for environmental and chemically related careers or advanced study in fields including the traditional specialties such as toxicology, pollution, bioremediation, environmental protection, education, law, and other endeavors that may draw upon an understanding of the chemical basis of the environment and the changes that will likely result from global environmental change.

Key general objectives are the development of qualitative and quantitative problem-solving skills and effective communication skills. This combined major includes the development of conceptual understanding and problem-solving abilities in the fundamental dynamics between the environment and its chemistry, be it analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, and physical chemistry. Students will have the opportunity to perform quantitative measurements; learn proper laboratory practices, including safety; develop proficiency with modern instruments and computers for data acquisition and analysis; and learn the relevance of chemistry within the context of the abiotic and biotic environments.

Students also have the opportunity to participate in the cooperative education program and thereby gain invaluable professional experience to augment their classroom and laboratory work. Not only does that experience add immensely to the overall education received, it also has the potential to provide contacts and references for later employment or graduate school admissions. Students in this major may also undertake research projects for at least one semester under the supervision of a faculty member. Sufficient electives are available in the program either to take more advanced courses or research within the department or to add courses in an area of special interest.

There are a number of interdisciplinary opportunities involving ESS. Due to curricular overlap, combinations of any ESS major, including combined majors, cannot occur with majors or minors in ecology and evolutionary biology or environmental studies or with the minor in geoscience. ESS and chemistry combined majors are also restricted from a minor in environmental chemistry.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Environmental Science and Sustainability Requirements

Code	Title	Hours
<b>Core Courses</b>		
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
ENVR 2200 or ENVR 1200	Earth's Changing Cycles Dynamic Earth	4
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 2515	Sustainable Development	4

Complete one skills course:		4-5
ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3555	Networks and Natural Systems	
Complete four courses from the list below. Three of four must be above the 3000 level:		16
EEMB 2400	Introduction to Evolution	
EEMB 3460	Conservation Biology	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 2340	Earth Landforms and Processes	
ENVR 3125	Global Oceanic Change	
ENVR 3150	Food Security and Sustainability	
ENVR 3200	Water Resources	
ENVR 3410	Environmental Geochemistry	
ENVR 3600	Oceanography	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
ENVR 4505	Wetlands	
ENVR 5150	Climate and Atmospheric Change	
ENVR 5190	Soil Science	
ENVR 5210	Environmental Planning	
ENVR 5220	Ecosystem-Based Management	
ENVR 5350	Sustainable Energy and Climate Solutions	
ENVR 5450	Applied Social-Ecological Systems Modeling	
POLS 2395	Environmental Politics and Policy	
PPUA 5260	Ecological Economics	
SOCL 2485	Environment, Technology, and Society	

## Chemistry Requirements

Code	Title	Hours
<b>General Chemistry</b>		
Complete the following lecture and lab:		
CHEM 1161 or CHEM 1151	General Chemistry for Science Majors General Chemistry for Engineers	4
CHEM 1162	Lab for CHEM 1161	1
<b>Intermediate-Level Chemistry</b>		
CHEM 2161 and CHEM 2162	Concepts in Chemistry and Lab for CHEM 2161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
CHEM 2321 and CHEM 2322	Analytical Chemistry and Lab for CHEM 2321	5
<b>Advanced-Level Chemistry</b>		
Complete two of the following:		10
CHEM 3331 and CHEM 3332	Bioanalytical Chemistry and Lab for CHEM 3331	

CHEM 3401 Chemical Thermodynamics and  
and CHEM 3402 Kinetics  
and Lab for CHEM 3401

CHEM 3403 Quantum Chemistry and Spectroscopy  
and CHEM 3404 and Lab for CHEM 3403

### Math Requirement

Complete two of the following: 8-9

MATH 1241 Calculus 1  
or MATH 1251 Calculus and Differential Equations for Biology 1  
or MATH 1341 Calculus 1 for Science and Engineering

MATH 1242 Calculus 2  
or MATH 1252 Calculus and Differential Equations for Biology 2  
or MATH 1342 Calculus 2 for Science and Engineering

ENVR 2500 Biostatistics  
and ENVR 2501 and Lab for ENVR 2500  
or ECON 2350 Statistics  
or POLS 2400 Quantitative Techniques  
or SOCL 2321 Research Methods in Sociology

### Integrative Requirement

**Code Title Hours**

#### Integrative Requirement

Complete two of the following: 8

CHEM 3410 Environmental Geochemistry

CHEM 4750 Senior Research

ENVR 4050 Solving Emerging Environmental  
Challenges through Capstone

ENVR 4504 Environmental Pollution

ENVR 5190 Soil Science

### Major Credit Requirement

89 total semester hours required in the major

### Program Credit Requirement

137 total semester hours required in the major

### Plan of Study

Four Years, Two Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 1200 and ENVR 1201	5 ENVR 2515	4 General elective	4 General elective	4
CHEM 1161 and CHEM 1162	5 CHEM 2161 and CHEM 2162 and CHEM 2163	5 General elective	4 General elective	4
General elective #1	4 General elective #2	4		
ENVR 1400 and ENVR 1401	5 EEMB 2302 and EEMB 2303	5		
	19	18	8	8

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 2311 and CHEM 2312	5 CHEM 2313 and CHEM 2314	5 General elective #5	4 Co-op	
General elective #3	4 ENVR elective; 2 of 4	4 Math requirement, 2 of 2	4	
Math requirement; 1 of 2	4 ENVR skills requirement	4		
ENVR elective; 1 of 4	4 General elective #4	4		
	17	17	8	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ENVR elective; 3 of 4	4 General elective #7	4 Co-op	
	Advanced CHEM elective 1 of 2	5 General elective #8	4	
	Advanced Chem elective 2 of 2	5		
	General elective #6	4		
	0	18	8	0

#### Year 4

Fall	Hours Spring	Hours
Co-op	ENVR elective; 4 of 4	4
	Integrative course 1 of 2	4
	Integrative course 2 of 2	4
	General elective #9	4
	0	16

Total Hours: 137

## Environmental and Sustainability Sciences and Economics, BS

Through this combined major, successful undergraduates will develop an awareness of the intrinsic connection between the environment and economics and understand how long-run economic growth is crucially dependent on policies that account for the sustainability and well-being of the environment and that are grounded on environmental science.

There are a number of interdisciplinary opportunities involving environmental and sustainability sciences. Due to curricular overlap, combinations of any environmental and sustainability sciences major, including combined majors, cannot occur with majors or minors in ecology and evolutionary biology or environmental studies or with the minor in geoscience.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Environmental and Sustainability Sciences Requirements

Code	Title	Hours
<b>Core Courses</b>		
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
ENVR 2200 or ENVR 1200	Earth's Changing Cycles Dynamic Earth	4
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 2515	Sustainable Development	4
Complete one of the following skills courses:		4-5
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3555	Networks and Natural Systems	
Complete four courses from these lists:		16
<i>Earth Oceans and Environmental Change</i>		
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 3125	Global Oceanic Change	
ENVR 3600	Oceanography	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
<i>Conservation, Restoration, and Management</i>		
EEMB 2400	Introduction to Evolution	
EEMB 3460	Conservation Biology	
EEMB 3465	Ecological and Conservation Genomics	
EEMB 4001	Landscape and Restoration Ecology	
<i>Sustainable Planning and Development</i>		
ENVR 3150	Food Security and Sustainability	
ENVR 3200	Water Resources	
ENVR 5150	Climate and Atmospheric Change	
ENVR 5210	Environmental Planning	
<i>Environment and Society</i>		
POLS 2395	Environmental Politics and Policy	
PPUA 5260	Ecological Economics	
PPUA 5268	International Environmental Policy	
SOCL 2485	Environment, Technology, and Society	

## Economics Requirements

Code	Title	Hours
<b>Core Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
ECON 3423	Environmental Economics	4
<b>Supporting Courses</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	
CS 1100	Computer Science and Its Applications	4
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
or MISM 2510	Fundamentals of Information Analytics	
<b>Electives</b>		
Complete two courses in the following ranges, with only one below the 3000 level:		8
ECON 1200–ECON 1999		
ECON 3000–ECON 4689		
ECON 4900–ECON 4999		
ECON 5200–ECON 5999		
<b>Integrative Requirements</b>		
Code	Title	Hours
<b>Introduction to College</b>		
ENVR 1000	Marine and Environmental Sciences at Northeastern	1
or ECON 1000	Economics at Northeastern	
<b>Co-op</b>		
EESC 2000	Professional Development for Co-op	1
or EESH 2000	Professional Development for Co-op	
<b>Environmental and Sustainability Sciences Integrative Course</b>		
Complete one of the following (courses used as electives may not overlap with courses used as integrative):		4
ENVR 3150	Food Security and Sustainability	
ENVR 5350	Sustainable Energy and Climate Solutions	
ENVR 5450	Applied Social-Ecological Systems Modeling	
ENVR 5563	Advanced Spatial Analysis	
<b>Economics Integrative Course</b>		
Complete one of the following (courses used as electives may not overlap with courses used as integrative):		4
ECON 1711	Economics of Sustainability	
ECON 3404	International Food Policy	
ECON 3425	Energy Economics	
<b>Capstone</b>		
Complete one of the following:		4

ENVR 4050	Solving Emerging Environmental Challenges through Capstone
ENVR 4997	Senior Thesis
ECON 4692	Senior Economics Seminar

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### English Requirements (First-Year Writing and Advanced Writing in the Disciplines)

Code	Title	Hours
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
ENGW 3307	Advanced Writing in the Sciences	4
or ENGW 3308	Advanced Writing in the Social Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Major GPA/Credit Requirement

Grades in the following four economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

83 semester hours required in the major

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 1000 or ECON 1000	1 CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4 Elective	4 Elective	4
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4 ECON 1116	4 Elective	4 Elective	4
ECON 1115	4 ENVR 2200 or 1200	4		
ENGW 1111 or 1102	4 ENVR elective 1	4		
ENVR 1400	4			
ENVR 1401	1			
	18	16	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EEMB 2302	4 ECON 2316	4 Elective	4 Co-op	
EEMB 2303	1 ECON 2350	4 Elective	4	
ECON 2315	4 ENVR 2515	4		
ENVR elective 2	4 ENVR elective 3	4		
ECON elective 1	4			
	17	16	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ECON 2560	4 Elective	4 Co-op	
	ECON 3423	4 ENVR elective 4	4	
	ENVR 3150, 5350, 5450, or 5563	4		
	ENGW 3308, 3307, or 3315	4		
	0	16	8	0

Year 4		
Fall	Hours Spring	Hours
Co-op	ENVR 4050, 4997, or ECON 4692	4
	ENVR elective 5	4
	ECON elective 2	4
	ECON 1711, 3404, or 3425	4
	0	16

Total Hours: 131

### Environmental and Sustainability Sciences and Landscape Architecture, BS

The Department of Marine and Environmental Sciences and the program in landscape architecture provide an education in basic environmental and sustainability sciences and landscape-architecture-related disciplines. This combined major provides students the opportunity to obtain the fundamental scientific background and practical training to tackle environmental and landscape-related issues. The program seeks to prepare students for advanced studies or careers in fields of urban planning, urban design, sustainable development, environmental consulting, and/or other fields focusing on the interactions among landscapes, the built environment, human societies, and overall climate impacts.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Environmental and Sustainability Sciences Requirements

Code	Title	Hours
<b>Environmental and Sustainability Sciences Required Courses</b>		
<i>Core Courses</i>		
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 1200 and ENVR 1201 or ENVR 2200	Dynamic Earth and Lab for ENVR 1200 Earth's Changing Cycles	4
ENVR 2515	Sustainable Development	4
Complete one course from each category:		
<i>Skills</i>		4-5
ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3555	Networks and Natural Systems	
<i>Earth, Oceans, and Environmental Change</i>		4-5
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 3600	Oceanography	
ENVR 3125	Global Oceanic Change	
ENVR 5150	Climate and Atmospheric Change	
<i>Conservation, Restoration, and Management</i>		4
EEMB 2400	Introduction to Evolution	
EEMB 3460	Conservation Biology	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 5220	Ecosystem-Based Management	
<i>Sustainable Planning and Development</i>		4
ENVR 3200	Water Resources	
ENVR 3150	Food Security and Sustainability	
ENVR 5210	Environmental Planning	
ENVR 5350	Sustainable Energy and Climate Solutions	
<i>Environment and Society</i>		4
ENVR 5450	Applied Social-Ecological Systems Modeling	
POLS 2395	Environmental Politics and Policy	
PPUA 5260	Ecological Economics	
SOCL 2485	Environment, Technology, and Society	

## Landscape Architecture Requirements

Code	Title	Hours
ARCH 1110	Fundamental Architectural Representation	4

ARCH 1120	Fundamental Architectural Design	6
LARC 2130	Sustainable Urban Site Design	6
LARC 2230	Introduction to Sustainable Site Planning and Design	4
LARC 2330	Cities, Landscape, and Modern Culture	4
LARC 2340	Cities, Landscape, and Contemporary Culture	4
LARC 2430	Plants, People, and Landscape Change	4

## Landscape Architecture Electives

Code	Title	Hours
Complete three of the following:		12-14
LARC 2240	Sustainable Site Construction and Detailing	
LARC 2440	Planting Design	
LARC 3170	Landscape Planning and Urbanism Studio	
ARCH 3370	Advanced Topics in Architectural History	
ARCH 3450	Advanced Architectural Communication	
LARC 5210	Landscape Ecology	
LARC 5220	Sustainable Landscape Practices	
LARC 5310	Urban Landscape Seminar	
SUEN 6210	Implementation and Visualization for Urban Environments 1	
SUEN 6220	Implementation and Visualization for Urban Environments 2	
ARCH 3352	Architecture Topics Abroad: Drawing	
ARCH 3351	Architecture Topics Abroad: Theory	
ARCH 4850	Urban and Architectural History Abroad	

## Capstone/Integrative Course

Code	Title	Hours
Complete one of the following:		4
ENVR 4997	Senior Thesis	
LARC 5120	Comprehensive Design Studio	
LARC 5210	Landscape Ecology	
ENVR 4050	Solving Emerging Environmental Challenges through Capstone	

## Environmental and Sustainability Sciences and Landscape Architecture Major Credit Requirement

Complete a minimum of 84 semester hours in the major.

## Program Requirements

132 total semester hours required

## Plan of Study

### Four-Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LARC 2430	4	ARCH 1110	4	Elective	4	Elective	4
ENVR 1400 and ENVR 1401	5	ARCH 1120	6	ENGW 1111	4	Elective	4

ENVR 2200	4	EEMB 2302 and EEMB 2303	5		
Elective	4	EEAM 2000	1		
	17		16	8	8
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
LARC 2130	6	LARC 2340	4	Elective	4
LARC 2230	4	ENVR 3300 and ENVR 3301	5	Elective	4
LARC 2330	4	LARC elective	4		
ENVR elective	4	Elective	4		
	18		17	8	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	0	ENVR elective	4	ENGW 3314	4
		ENVR elective	4	Elective	4
		ENVR elective	4		
		LARC elective	4		
	0		16	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	0	ENVR 2515	4		
		Capstone	4		
		ENVR elective	4		
		LARC elective	4		
	0		16		

Total Hours: 132

## Five-Years, Two Co-ops

<b>Year 1</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
LARC 2430	4	ARCH 1110	4	Vacation	Vacation
ENVR 1400 and ENVR 1401	5	ARCH 1120	6		
ENVR 2200	4	EEMB 2302 and EEMB 2303	5		
ENGW 1111	4	EEAM 2000	1		
	17		16	0	0
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
LARC 2130	6	LARC 2340	4	Vacation	0
LARC 2230	4	LARC elective	4		
LARC 2330	4	Elective	4		

Elective	4	Elective	4		
	18		16	0	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
ENVR 3300 and ENVR 3301	5	Co-op 1	Co-op 1	0	Vacation
ENGW 3314	4				
ENVR elective	4				
Elective	4				
	17		0	0	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
LARC elective	4	Co-op 2	Co-op 2	0	Vacation
ENVR 2515	4				
ENVR elective	4				
Elective	4				
	16		0	0	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
ENVR elective	4	Capstone	4		
ENVR elective	4	ENVR elective	4		
Elective	4	LARC elective	4		
Elective	4	Elective	4		
	16		16		

Total Hours: 132

## Environmental Studies and History, BA

Through this combined major, successful undergraduates will develop an awareness of the scientific, cultural, and political aspects of the world's environmental problems through historical perspectives and backgrounds.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Environmental Studies Requirements

Code	Title	Hours
<b>Science Requirements</b>		
ENVR 1101	Environmental Science	4
ENVR 1202 and ENVR 1203	History of Earth and Life and Interpreting Earth History	5
ENVR 1110	Global Climate Change	4
<b>Humanities Requirement</b>		
PHIL 1180	Environmental Ethics	4
<b>Social Science Requirements</b>		
ECON 1116	Principles of Microeconomics	4
POLS 1150 and POLS 1151	American Government and Recitation for POLS 1150	4
SOCL 1246	Environment and Society	4
<b>Environmental Studies Requirements</b>		
ECON 3423	Environmental Economics	4
POLS 2395	Environmental Politics and Policy	4

## History Requirements

Code	Title	Hours
<b>History Requirements</b>		
HIST 1130	Introduction to the History of the United States	4
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	4
HIST 1201	First-Year Seminar	4
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	4
<b>History Seminar</b>		
HIST 2301 and HIST 2302	The History Seminar and Historical Writing	5
<b>History/Geographic-Area Electives</b>		
Complete two of the following:		8
ASNS 1150	East Asian Studies	
HIST 1180	African History	
HIST 1185	Introduction to Middle Eastern History	
<b>History-Area Electives</b>		
Complete four HIST courses, approved by a faculty adviser, focused on an idea or geographic area. These courses must be numbered 2000 or higher.		16

## Integrative Courses

Code	Title	Hours
<b>Required Integrative Course</b>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5

## Integrated Elective

ENVR 5210	Environmental Planning	4
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## Experiential Learning and Capstone

Code	Title	Hours
<b>Experiential Learning</b>		
Complete an approved activity from either department, combined with reflection in capstone.		
<b>Capstone Course</b>		
Complete one of the following:		1-4
ENVR 4997 or ENVS 4997	Senior Thesis	
ENVR 4900	Earth and Environmental Science Capstone	
ENVR 4970	Junior/Senior Honors Project 1	
HIST 4701	Capstone Seminar	

## Combined-Major Credit Requirement

Complete 91 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Five Years, Three Co-ops in Summer 2/Fall

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ENGV 1111	4	ENVR 1202 and ENVR 1203	5	Vacation	0
ENVR 1000	1	HIST 1170	4		
ENVR 1101	4	HIST 1201	4		
HIST 1130	4	PHIL 1180	4		
SOCL 1246	4				
		17		17	0
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
ECON 1116	4	EESC 2000	1	Vacation	0
Foreign language course	4	Elective	4		
HIST 1215	4	ENVR 1110	4		
History elective	4	Foreign language course	4		
		HIST geographic elective	4		
		16		17	0
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	ENVR 3300 and ENVR 3301	5	Elective	4
		POLS 1150 and POLS 1151	4	Elective	4

	Foreign language course	4			
	ENVR undergraduat elective	4			
		0	17	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	0 ENGW 3308 or 3315	4 Elective	4 Co-op	0	
	HIST 2301 and HIST 2302	5 Elective	4		
	History elective	4			
	History elective	4			
		0	17	8	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	0 Capstone course	1-3			
	ENVR undergraduat elective	4			
	HIST geographic elective	4			
	Integrative major requirement	4			
	History elective	4			
		0	17-19		

Total Hours: 134-136

## Environmental Studies and International Affairs, BA

Through this combined major, successful undergraduates will develop an awareness of the international issues that influence the scientific, cultural, societal, political, and economic aspects of the world's environmental problems and the ways in which such environmental challenges can be ameliorated and/or solved.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Environmental Studies Requirements

Code	Title	Hours
<b>Introductory Courses</b>		
Choose one introductory science:		4-5
ENVR 1101	Environmental Science	
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	
Choose one introductory social science		4
ANTH 1101	Peoples and Cultures	
ENVR 2401	Food Justice and Community Development	
PHIL 1180	Environmental Ethics	
SOCL 1246	Environment and Society	
<b>Scientific Foundations of Environmental Systems:</b>		
Complete one of the following:		4
ENVR 1110	Global Climate Change	
ENVR 3150	Food Security and Sustainability	
ENVR 3200	Water Resources	
<b>Human Foundations of Environmental Systems:</b>		
Complete one of the following:		4
ENVR 2515	Sustainable Development	
PTH 2414	Environmental Health	
SOCL 4522	Environmental Justice	
<b>Skills Course:</b>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
<b>Electives:</b>		
Complete four of the following, three of which must be at the 3000 level or higher:		16
ARTG 5110	Information Design History	
BUSN 1110	Fundamentals of Business	
BUSN 3110	The Consulting Environment	
CIVE 5280	Remote Sensing of the Environment	
COMM 3500	Environmental Issues, Communication, and the Media	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 3466	Disease Ecology	
EEMB 3700	Desert Ecology	
ENTR 3520	Impact Investing and Social Finance	
ENVR 5210	Environmental Planning	
ENVR 5563	Advanced Spatial Analysis	
ENVR 3701	Energy in the Desert Ecosystem	
FINA 2720	Sustainability in the Business Environment	
JRNL 3650	Science Writing	
LPSC 2301	Introduction to Law, Policy, and Society	
PHIL 1180	Environmental Ethics	



PHTH 1270	Introduction to Global Health
PHTH 4202	Principles of Epidemiology in Medicine and Public Health
POLS 2395	Environmental Politics and Policy
PPUA 5268	International Environmental Policy
SOCL 2485	Environment, Technology, and Society

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4

### International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

### International Affairs Elective

Code	Title	Hours
Complete one of the following courses:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

### Global Dynamics Requirement

Code	Title	Hours
Complete two of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		8

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	

### *Law, Diplomacy, and Global Governance*

COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	

POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations

### *Human Rights and Social Justice*

HIST 2373	Gender and Sexuality in World History
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

### *Conflict and Security*

CRIM 3060	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO

### *Globalization*

AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective

POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 1270 or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203 or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Regional Analysis Requirement**

Code	Title	Hours
	Complete two regional analysis courses, both of which must be in one region, from the following lists. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.	8

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464 or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465 or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150 or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 2395	Japanese Buddhism	
<i>Europe</i>		
CLTR 1501	Introduction to French Culture	
CLTR 1503	Introduction to Italian Culture	
CLTR 1504	Cultural History of Spain	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
HIST 2376	Britain and the British Empire	
HIST 4946	Independent Field Research Abroad: Central Europe	
POLS 3435	Politics and Governance of Europe and the European Union	
<i>Latin America</i>		

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Integrative Courses**

Code	Title	Hours
<b>Integrative Courses</b>		
ECON 1711	Economics of Sustainability	4
or ECON 3290	History of the Global Economy	
or ECON 3423	Environmental Economics	
INTL 4700	Senior Capstone Seminar in International Affairs	4
or ENVS 4997	Senior Thesis	
PHTH 4120	Global Perspectives on Discrimination and Health	4
or INTL 5100	Climate and Development	
or ENVR 3151	Food Sustainability in the Mediterranean - Abroad	
or ENVR 4000	Science Communication and Professional Development	

or ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia
or ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine
or HIST 2211	The World Since 1945
or HIST 2311	Colonialism/Imperialism

**Environmental Studies and International Affairs Combined Major Credit Requirement**

Complete 81 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	ENVR 1110	4	Vacation	0	Vacation	0
ENVR 1101	4	ENVR 2515	4				
INTL 1101	4	POLS 1160	4				
SOCL 1246	4	Foreign language course	4				
ENVR 1000	1						
		17		16		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2211	4	EESC 2000	1	Vacation	0	Co-op	0
ENVR 3300 and ENVR 3301	5	Foreign language course	4				
Foreign language course	4	ENVR 3300 and ENVR 3301	5				
INAF regional analysis course 1	4	INAF global dynamics course 1	4				
		INAF regional analysis course 2	4				
		17		18		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	International experiential learning	16	Elective	4	Co-op	0
				Quantitative methods course	4-5		
		0		16		8-9	

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ECON 3423	4 INAF global dynamics course 2	4 Co-op	0
	ENGW 3308 or 3315	4 INTL 4700	4	
	INTL 3400	4		
	ENVR elective; 1 of 4			
	0	12	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 ENVR Elective; 2 of 4	4
	ENVR elective; 3 of 4	4
	INAF global dynamics course 3	4
	ENVR elective; 4 of 4	4
	0	16

Total Hours: 128-129

## Environmental Studies and Philosophy, BA

Through this combined major, successful undergraduates will develop an awareness of the scientific, cultural, and political aspects of the world's environmental problems while considering the philosophical, moral, and ethical impacts that such decisions have on human-environment interactions. Due to overlap in course content, students majoring in Environmental Studies or any Environmental Studies combined majors may not complete a minor in Environmental and Sustainability Sciences.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Environmental Studies Requirements

Code	Title	Hours
<b>Introductory Courses</b>		
<i>Choose one introductory science course:</i>		4-5
ENVR 1101	Environmental Science	
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	
<i>Choose one introductory social science course:</i>		4
ANTH 1101	Peoples and Cultures	
ENVR 2401	Food Justice and Community Development	
PHIL 1180	Environmental Ethics	
SOCL 1246	Environment and Society	
<b>Scientific Foundations of Environmental Systems:</b>		
Complete one of the following:		4
ENVR 1110	Global Climate Change	
ENVR 3150	Food Security and Sustainability	
ENVR 3200	Water Resources	
<b>Human Foundations of Environmental Systems:</b>		
Complete one of the following:		4
ENVR 2515	Sustainable Development	
PHTH 2414	Environmental Health	
SOCL 4522	Environmental Justice	
<b>Skills Course:</b>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
<b>Electives:</b>		
Complete four of the following, three of which must be at the 3000 level or higher:		16
ARTG 5110	Information Design History	
BUSN 1110	Fundamentals of Business	
BUSN 3110	The Consulting Environment	
CIVE 5280	Remote Sensing of the Environment	
COMM 3500	Environmental Issues, Communication, and the Media	
EEMB 3466	Disease Ecology	
EEMB 3700	Desert Ecology	
ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia	
ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine	
ENVR 3701	Energy in the Desert Ecosystem	
ENVR 4504	Environmental Pollution	
ENVR 5210	Environmental Planning	
ENVR 5563	Advanced Spatial Analysis	
FINA 2720	Sustainability in the Business Environment	
JRNL 3650	Science Writing	
LPSC 2301	Introduction to Law, Policy, and Society	
PHIL 1180	Environmental Ethics	
PHTH 1270	Introduction to Global Health	

POLS 2395	Environmental Politics and Policy
PPUA 5268	International Environmental Policy

## Philosophy Requirements

Code	Title	Hours
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### Philosophy Required Courses

PHIL 1115	Introduction to Logic	4
PHIL 1180	Environmental Ethics	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

### Philosophy of Science/Environment

Complete one of the following: 4

PHIL 1105	Science and Pseudoscience	
PHIL 3050	Information and Uncertainty	
PHIL 4510	Philosophy of Science	
PHIL 4555	Philosophy of Biology	

### Restricted Electives

Complete two of the following not used to fulfill another requirement with at least one course at the 4000 or 5000 level: 8

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

### Additional Electives

Complete two additional PHIL courses. 8

## Integrative Courses

Code	Title	Hours
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Complete two of the following. Courses used for electives may not be used as integrative courses: 8

ENVR 4050	Solving Emerging Environmental Challenges through Capstone	
ENVR 4997	Senior Thesis	
ENVR 5210	Environmental Planning	
ENVR 5220	Ecosystem-Based Management	
COMM 3532	Theories of Conflict and Negotiation	

## Environmental Studies and Philosophy Combined Major Credit Requirement

Complete 78 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Five Years, Three Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 1115	4	PHIL 2325 or POLS 2325	4	Vacation	4	Vacation	0
ENVR 1101	4	ENVR 3150	4				
INTL 2240	4	ENVR 2515	4				
PHIL 1180	4	Elective	4				
	16		16		0		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 1105 or 4510	4	PHIL Restricted Elective	4	Elective	4	Co-op	4
ENVR 3300 and ENVR 3301	5	ENVR elective; 2 of 4	4	Elective	4		4
ENVR elective; 1 of 4	4	Elective	4				
PHIL 2330	4	Elective	4				
	17		16		8		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL Elective	4	Vacation	4	Co-op	4
		PHIL 4000/5000 Elective	4				
		ENVR elective; 3 of 4	4				
		ENVR elective; 4 of 4	4				
	0		16		0		0

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL Elective	4	Elective	4	Co-op	4
		Elective	4	Elective	4		4
		Elective	4				
		Elective	4				
	0		16		8		0

#### Year 5

Fall	Hours	Spring	Hours
Co-op		Integrative Course #1	4

Integrative Course #2	4
Elective	4
Elective	4
0	16

Total Hours: 129

## Environmental Studies and Political Science, BA

In this combined major, successful undergraduates will develop an awareness of the scientific, cultural, societal, and political aspects of the world's environmental problems through the lens of geopolitical decisions, public policy, and environmental regulations. Due to overlap in course content, students majoring in Environmental Studies or any Environmental Studies combined majors may not complete a minor in Environmental and Sustainability Sciences.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Environmental Studies Requirements

Code	Title	Hours
<b>Introductory Courses</b>		
<i>Choose one introductory science course:</i>		4-5
ENVR 1101	Environmental Science	
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	
<i>Choose one introductory social science course:</i>		4
ANTH 1101	Peoples and Cultures	
ENVR 2401	Food Justice and Community Development	
PHIL 1180	Environmental Ethics	
SOCL 1246	Environment and Society	
<b>Scientific Foundations of Environmental Systems (choose one):</b>		4
ENVR 1110	Global Climate Change	
ENVR 3150	Food Security and Sustainability	
ENVR 3200	Water Resources	
<b>Human Foundations of Environmental Systems (choose one):</b>		4

ENVR 2515	Sustainable Development	
PHTH 2414	Environmental Health	
SOCL 4522	Environmental Justice	
<b>Skills Course:</b>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
<b>Electives (select 4, at least 3 at 3000 level or higher):</b>		16
ARTG 5110	Information Design History	
BUSN 1110	Fundamentals of Business	
BUSN 3110	The Consulting Environment	
CIVE 5280	Remote Sensing of the Environment	
COMM 3500	Environmental Issues, Communication, and the Media	
EEMB 3466	Disease Ecology	
ENTR 3520	Impact Investing and Social Finance	
ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia	
ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine	
ENVR 3701	Energy in the Desert Ecosystem	
ENVR 4504	Environmental Pollution	
ENVR 5563	Advanced Spatial Analysis	
FINA 2720	Sustainability in the Business Environment	
JRNL 3650	Science Writing	
PHIL 1180	Environmental Ethics	
PHTH 1270	Introduction to Global Health	
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	
PPUA 5268	International Environmental Policy	
SOCL 2485	Environment, Technology, and Society	

### Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete four POLS Electives 2000 level or above		16

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 726)
- Campaigns and Elections (p. 726)
- Comparative Politics (p. 726)
- Identity, Culture, and Politics (p. 726)
- International Relations and Diplomacy (p. 726)
- Law and Legal Studies (p. 727)
- Public Policy (p. 727)
- Security Studies (p. 727)

### Integrative Courses

Code	Title	Hours
<b>Political Science Integrative Course (choose one):</b>		<b>4</b>
POLS 2395	Environmental Politics and Policy	
POLS 2390	Science, Technology, and Public Policy	
<b>Environmental Science Integrative Course (choose one):</b>		<b>4</b>
ENVR 5220	Ecosystem-Based Management	
ENVR 5210	Environmental Planning	
ENVR 4504	Environmental Pollution	
<b>Capstone Requirement</b>		
Complete one of the following:		1-4
ENVR 4900	Earth and Environmental Science Capstone	
ENVR 4997	Senior Thesis	
POLS 4701	Political Science Senior Capstone	
ENVR 4050	Solving Emerging Environmental Challenges through Capstone	

### Environmental Studies and Political Science Combined Major Credit Requirement

Complete 84 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

#### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

#### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

#### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

#### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		

Complete three of the following: 12

POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3408	International Security
POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES****Code Title Hours**

Complete four of the following: 16

POLS 2330	American Political Thought
POLS 3300	The U.S. Congress
POLS 3302	Judicial Process and Behavior
POLS 3324	Law and Society
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

**CONCENTRATION IN PUBLIC POLICY****Code Title Hours****Core Requirement**

POLS 3307	Public Policy and Administration	4
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**Electives**

Complete three of the following: 12

POLS 2335	Budgeting and Taxation
POLS 2340	Business and Government
POLS 2345	Urban Policies and Politics
POLS 2350	State and Local Politics
POLS 2357	Growth and Decline of Cities and Suburbs
POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 3425	U.S. Foreign Policy

**CONCENTRATION IN SECURITY STUDIES****Code Title Hours**

Complete four of the following: 16

POLS 3408	International Security
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3425	U.S. Foreign Policy
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study****Four Years, Two Co-ops in Summer 2/Fall****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	POLS 1155	4	Foreign Language course	4	Elective	4

ENVR 1101	4	Foreign language course	4	ENVR elective 1 of 4	4	Elective	4
POLS 1150	4	ENVR 2515	4				
SOCL 1246	4	ENVR 3150	4				
	16		16			8	8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	POLS 2400	4	Elective	4	Co-op	0
ENVR elective; 2 of 4	4	ENVR elective, 3 of 4	4	Elective	4		
ENVR 3300 and ENVR 3301	5	Political thought course	4				
Foreign language course	4	Foreign language course	4				
	17		16			8	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315 or 3308	4	Elective	4	Co-op	0
		POLS undergrad elective	4	POLS elective	4		
		Quantitative methods course	4-5				
		Integrative course #1	4				
	0		16-17			8	0

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	Capstone <sup>1</sup>	4
		Integrative course #2	4
		POLS undergrad elective	4
		ENVR elective, 4 of 4	4
	0		16

Total Hours: 129-130

<sup>1</sup> Earth and Environmental Science Capstone (ENVR 4900 (<https://northeastern-test.courseleaf.com/search/?P=ENVR%204900>)) is also an option to fulfill the capstone requirement of this program. Students who completes 1 SH ENVR 4900 must still complete a minimum of 128 SH to meet degree requirements.

**Sociology and Environmental Studies, BA**

This combined major will lead to undergraduates that have a broad awareness of the sociological and scientific foundations of environmental problem solving. They will have the opportunity to develop concrete skills in GIS and scientific communication that will facilitate



student success. Due to overlap in course content, students majoring in environmental studies or any environmental studies combined majors may not complete a minor in environmental and sustainability sciences.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Sociology Requirements

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 2485	Environment, Technology, and Society	4
SOCL 3300	Social Theory	4
ANTH 2305	Global Markets and Local Culture	4
<b>Statistics</b>		
Complete one of the following:		4
SOCL 2320	Statistical Analysis in Sociology	
ENVR 2500	Biostatistics	
<b>Capstone</b>		
Complete one of the following:		4
SOCL 4600	Senior Seminar	
ENVS 4997	Senior Thesis	
ENVR 4900	Earth and Environmental Science Capstone	
<b>Sociology Elective A</b>		4
Please note that SOCL 1246 may not be used to fulfill this requirement as it is required in the major. Complete one course in the following range:		
SOCL 1000 to SOCL 2999		
<b>Sociology Elective B</b>		8
Complete two additional sociology courses in the following range:		
SOCL 3000 to SOCL 5999		

## Environmental Studies Requirements

Code	Title	Hours
<b>Introductory Courses</b>		
Complete one introductory science course:		4-5
ENVR 1101	Environmental Science	
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	

ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	
Complete one introductory social science course:		4
ANTH 1101	Peoples and Cultures	
HUSV 2401	Food Justice and Community Development	
PHIL 1180	Environmental Ethics	
SOCL 1246	Environment and Society	
<b>Skills Course</b>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
<b>Electives</b>		
Complete four of the following, three of which must be at the 3000 level or above:		
ARTG 5110	Information Design History	
BUSN 1110	Fundamentals of Business	
BUSN 3110	The Consulting Environment	
CIVE 5280	Remote Sensing of the Environment	
COMM 3500	Environmental Issues, Communication, and the Media	
EEMB 3466	Disease Ecology	
ENTR 3520	Impact Investing and Social Finance	
ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia	
ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine	
ENVR 3701	Energy in the Desert Ecosystem	
ENVR 4504	Environmental Pollution	
ENVR 5563	Advanced Spatial Analysis	
FINA 2720	Sustainability in the Business Environment	
JRNL 3650	Science Writing	
PHIL 1180	Environmental Ethics	
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	
PPUA 5268	International Environmental Policy	
SOCL 2485	Environment, Technology, and Society	

## Integrative Requirements

Code	Title	Hours
SOCL 4522	Environmental Justice	4
ENVR 5450	Applied Social-Ecological Systems Modeling	4

## Sociology Major Grade Requirement

2.000 GPA required for major courses

## Sociology and Environmental Studies Combined Major Credit Requirement

Complete 75 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1000	1	ENVR 1110	4	Vacation	0	Vacation	0
ENVR 1101	4	ENVR 2515	4				
SOCL 1246	4	SOCL 2321	4				
SOCL 1101	4	ENVR 2500	4				
ANTH 2305	4						
	17		16		0		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 3300 and ENVR 3301	5	ENVR elective; 1 of 4	4	Vacation	0	Co-op	0
SOCL 3300	4	Elective	4				
Sociology elective	4	Sociology elective	4				
SOCL 2485	4	Sociology elective	4				
	17		16		0		0

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENVR elective; 2 of 4	4	Elective	4	Co-op	0
		ENVR elective; 3 of 4	4	Elective	4		
		ENVR elective; 4 of 4	4				
		Sociology elective	4				
	0		16		8		0

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Sociology elective	4	Sociology elective	4	Co-op	0
		Sociology elective	4	Elective	4		
		Elective	4				
		Elective	4				
	0		16		8		0

##### Year 5

Fall	Hours	Spring	Hours
Co-op	0	Integrative major requirement	4
		Integrative major requirement	4

Sociology elective 4

Capstone 4

0 16

Total Hours: 130

### Ecology and Evolutionary Biology, Minor

The ecology and evolutionary biology minor is designed to provide students a foundation in the principles of ecology and evolutionary biology, as well as to provide concrete skills that will help students achieve their career goals.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

#### Restrictions

Minor not available for students who major in marine biology.

#### Required Courses

Code	Title	Hours
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
EEMB 1105 and EEMB 1106	Foundations in Ecological and Evolutionary Genomics and Lab for EEMB 1105	5

#### Elective Courses

Code	Title	Hours
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Complete four courses from the lists below. At least one course needs to come from each list:

##### Evolution of Organisms

EEMB 2400	Introduction to Evolution	4
EEMB 2290	Ecology and Evolution of Behavior	4
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	5
EEMB 3465	Ecological and Conservation Genomics	4
EEMB 4010	Biology of Mammals	4

##### Ecology and Conservation Biology

EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
EEMB 3460	Conservation Biology	4
EEMB 3475	Wildlife Ecology	4
EEMB 4001	Landscape and Restoration Ecology	4
EEMB 4000	Applied Conservation Biology	4

##### Analytical Skills

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	5
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
EEMB 3465	Ecological and Conservation Genomics	4

EEMB 3555	Networks and Natural Systems	4
EEMB 5130	Ecological Dynamics	4

### GPA Requirement

2.000 GPA required in the minor

### Environmental and Sustainability Sciences, Minor

The environmental and sustainability sciences minor provides undergraduates with a strong foundation in a variety of scientific, technical, institutional, economic, behavioral, and conservation-oriented solutions to environmental problems caused by either natural phenomena and/or human activity.

There are a number of interdisciplinary opportunities involving environmental and sustainability sciences. Due to curricular overlap, combinations of any environmental and sustainability sciences major, including combined majors, cannot occur with majors or minors in ecology and evolutionary biology, environmental studies, or with the minor in geoscience.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Coursework

Code	Title	Hours
<b>Foundational Classes</b>		
Complete two of the following:		8-9
ENVR 1200 and ENVR 1201 or ENVR 2200	Dynamic Earth and Lab for ENVR 1200 Earth's Changing Cycles	
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
ENVR 2515	Sustainable Development	
<b>Advanced Coursework</b>		
Complete four courses from this list (at least three courses need to be at the 3000 level or above):		16-19
EEMB 1450	Introduction to Marine Biology	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 3460	Conservation Biology	
EEMB 3465	Ecological and Conservation Genomics	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 1110	Global Climate Change	
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
ENVR 2200	Earth's Changing Cycles	
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 3125	Global Oceanic Change	
ENVR 3150	Food Security and Sustainability	

ENVR 3151	Food Sustainability in the Mediterranean - Abroad
ENVR 3200	Water Resources
ENVR 3600	Oceanography
ENVR 5210	Environmental Planning
ENVR 5350	Sustainable Energy and Climate Solutions
POLS 2395	Environmental Politics and Policy
PPUA 5260	Ecological Economics
PPUA 5268	International Environmental Policy
SOCL 2485	Environment, Technology, and Society

### GPA Requirement

2.000 GPA required in the minor

### Environmental Studies, Minor

Students pursuing a minor in environmental studies will complete a blend of courses that bridge the scientific foundations and human dimensions of environmental systems. Students will also take a skills course that is designed to improve their marketability in environmental fields. A successful student will broaden their understanding of the science and policy of the Earth's environmental challenges through this program, which complements any undergraduate major.

The goals of the environmental studies minor are threefold:

- To help undergraduates develop an awareness of the scientific, cultural, and political aspects of the world's environmental problems
- To better prepare students for careers in the expanding field of environmental professions
- To prepare students for further study at the graduate or professional school level

### Minor Requirements

Complete all courses listed below unless otherwise indicated.

### Introductory Courses

Code	Title	Hours
ENVR 1101	Environmental Science	4
or ENVR 1200	Dynamic Earth	
or ENVR 1400	Foundations in Environmental and Sustainability Sciences	
SOCL 1246	Environment and Society	4
or ANTH 1101	Peoples and Cultures	
or PHIL 1180	Environmental Ethics	
or HUSV 2401	Food Justice and Community Development	

### Scientific Foundations of Environmental Systems

Code	Title	Hours
Complete one of the following:		
ENVR 1110	Global Climate Change	4-5
ENVR 3150	Food Security and Sustainability	
ENVR 3200	Water Resources	

## Human Dimensions of Environmental Systems

Code	Title	Hours
Complete one of the following:		4
ENVR 2515	Sustainable Development	
PHTH 2414	Environmental Health	
SOCL 4522	Environmental Justice	

## Skills Courses

Code	Title	Hours
Complete one of the following:		4-5
ANTH 3410	Ethnographic Field Experience	
ECON 2350	Statistics	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
POLS 2395	Environmental Politics and Policy	
SOCL 2321	Research Methods in Sociology	

## GPA Requirement

2.000 GPA required in the minor

### Geosciences, Minor

The geosciences minor is designed to provide students with a comprehensive understanding of the breadth of topics in the geosciences. Core foundational classes in Earth science are followed by student-directed electives across a range of course options.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Courses

Code	Title	Hours
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	5
ENVR 2200	Earth's Changing Cycles	4
Complete one of the following:		5
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	

## Geology Elective

Code	Title	Hours
Complete three of the following:		12-14
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
ENVR 3410	Environmental Geochemistry	
ENVR 3600	Oceanography	
ENVR 5150	Climate and Atmospheric Change	

ENVR 5190	Soil Science
ENVR 5202	Environmental Science Field Seminar Abroad
ENVR 5210	Environmental Planning
ENVR 5350	Sustainable Energy and Climate Solutions

## GPA Requirement

2.000 GPA required in the minor

### Marine Sciences, Minor

The marine science minor is designed to provide Northeastern undergraduates with a strong foundation in the marine sciences, while offering the opportunity to obtain concrete skills that will enhance employability. Our minor curriculum also offers the flexibility to take classes in the area of greatest interest to the student and provides hands-on training in foundation marine science courses.

## Minor Requirements

### Required Courses

Code	Title	Hours
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
ENVR 3600 or ENVR 3125	Oceanography Global Oceanic Change	4

### Skills Course

Code	Title	Hours
Complete one of the following:		4-5
ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3555	Networks and Natural Systems	

### Elective Courses

Code	Title	Hours
Complete three of the following:		11-15
EEMB 2420	Fisheries Biology, Policy, and Conservation	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
ENVR 3125	Global Oceanic Change	
ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia	
ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine	
EEMB 3450	Physiological Adaptations to the Environment	
ENVR 3600	Oceanography	
ENVR 5242 and ENVR 5243	Ancient Marine Life and Lab for ENVR 5242	

## Courses offered in Nahant, MA:

EEMB 5510	New England Marine Biomes
EEMB 5522	Experimental Design Marine Ecology
EEMB 5542	Marine Spatial Planning
EEMB 5546	Sustainability of the Land-Sea Interface

**GPA Requirement**

2.000 GPA required in the minor

**Mathematics**

Website (<https://cos.northeastern.edu/mathematics/>)

**Egon Schulte, PhD**  
Professor and Chair

617.373.2450  
617.373.5658 (fax)

Mathematics is of ever-increasing importance to our society and everyday life. It has long been the language of science and technology and provides a rich source of methods for analyzing and solving problems encountered in the physical world. Today, mathematics is essential in virtually all fields of human endeavor, including business, the arts, and the social sciences.

The Bachelor of Arts degree requires at least 11 mathematics courses and two physics courses, in addition to the study of a foreign language; this program is appropriate for students who wish a broader liberal arts education. The Bachelor of Science degree requires at least 14 mathematics courses and two physics courses but no foreign language study; it is more specialized, and it is recommended for those strongly interested in mathematics and science. The department also offers a minor degree in mathematics.

The major programs provide flexibility with elective courses. Students may take advantage of a range of interdisciplinary programs and may join a major in mathematics with one in such fields as computer science, physics, and biology.

Exceptional students are accepted into the Honors Program and have the option to enroll in honors sections of several of their mathematics courses. All math majors may benefit from co-op opportunities in the scientific and business communities in Boston and elsewhere.

Many of the mathematics courses that we offer use computers for visualization, modeling, and numerical approximation.

Students planning to teach secondary school mathematics must major in mathematics and take a specific minor in education, which includes coursework and student teaching.

Mathematical training may lead to opportunities in applied research (natural sciences, engineering, economics, management, computer science) as well as in mathematical research, teaching, or industry.

**Programs****Bachelor of Arts (BA)**

- Mathematics (p. 732)

**Bachelor of Science (BS)**

- Mathematics (p. 734)
- Biology and Mathematics (p. 652)

- Computer Science and Mathematics (p. 368)
- Data Science and Mathematics (p. 422)
- Economics and Mathematics (p. 742)
- Graphic and Information Design and Mathematics (p. 109)
- Mathematics and Business Administration (p. 285)
- Mathematics and Cultural Anthropology (p. 746)
- Mathematics and Physics (p. 747)
- Mathematics and Political Science (p. 748)
- Mathematics and Psychology (p. 750)
- Mathematics and Sociology (p. 752)

**Minor**

- Mathematics (p. 753)

**Accelerated Programs**

See Accelerated Bachelor/Graduate Degree Programs (p. )

**Mathematics, BA**

The Bachelor of Arts degree requires at least 11 mathematics courses and two physics courses, in addition to the study of a foreign language. This program is appropriate for students who wish a broader liberal arts education.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Mathematics Major Grade Requirement**

A grade of C or higher is required in all mathematics courses numbered 3000 and below and in MATH 4000.

**Mathematics Major Requirements**

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>History of Mathematics</b>		
MATH 2201	History of Mathematics	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4

**Intermediate and Advanced Mathematics**

MATH 2331	Linear Algebra	4
MATH 3150	Real Analysis	4
or MATH 4565	Topology	
MATH 3175	Group Theory	4
MATH 3560	Geometry	4
or MATH 3527	Number Theory 1	
<b>Co-op Reflections</b>		
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1

<b>Mathematics Elective</b>		
Complete one course in the following range:		
MATH 3001 to MATH 4899		

<b>Required Physics</b>		
<i>Physics 1</i>		
Complete one of the following:		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	

<i>Physics 2</i>		
Complete one of the following:		
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

<b>Capstone</b>		
Complete one of the following:		
MATH 4025	Applied Mathematics Capstone	4
MATH 5131	Introduction to Mathematical Methods and Modeling	
MATH 4020	Research Capstone	

### Mathematics Major Credit Requirement

Complete 54 semester hours in the major.

### Upper-Division Electives

Note: Courses used as upper-division electives do not count toward the major or NUPath.

<b>Code</b>	<b>Title</b>	<b>Hours</b>
Complete three general electives numbered 3000 or above.		12

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

<b>Year 1</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
MATH 1341	4	MATH 1342	4	Vacation	0
MATH 1365	4	PHYS 1165	4		
Elective	4	PHYS 1166	1		
PHYS 1161	4	Elective	4		

PHYS 1162	1	ENGW 1111	4		
MATH 1000	1				
		18	17	0	0

<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
MATH 2321	4	MATH 2201	4	Vacation	0
MATH 2331	4	Elective	4	0 Co-op	0
Elective	4	Elective	4		
Foreign language core course	4	Foreign language core course	4		
		EESC 2000	1		
		16	17	0	0

<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	0	MATH 3560 or 3527	4	MATH elective	4
		ENGW 3315	4	Elective	4
		Foreign language core course	4		
		Elective	4		
		MATH 3000	1		
		0	17	8	0

<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	0	MATH 3150	4	Upper-division elective	4
		Elective	4	Upper-division elective	4
		Elective	4		
		Upper-division elective	4		
		MATH 4000	1		
		0	17	8	0

<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	0	MATH 3175	4		
		MATH elective	4		
		MATH 4025	4		
		Elective	4		
		0	16		

Total Hours: 134

#### Five Years, Three Co-ops in Spring/Summer 1

<b>Year 1</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
PHYS 1161	4	MATH 1342	4	Vacation	0
PHYS 1162	1	PHYS 1165	4		
MATH 1365	4	PHYS 1166	1		
MATH 1341	4	ENGW 1111	4		

MATH 1000	1 Elective	4			
Elective	4				
		18	17	0	0
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
MATH 2321	4 Co-op	0 Co-op	0 Vacation	0	
MATH 2331	4				
Elective	4				
Foreign language core course	4				
EESC 2000	1				
		17	0	0	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
MATH 2201	4 Co-op	0 Co-op	0 MATH elective	4	
Elective	4		Elective	4	
Elective	4				
Foreign language core course	4				
MATH 3000	1				
		17	0	0	8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
ENGW 3315	4 Co-op	0 Co-op	0 Elective	4	
MATH 3560 or 3527	4		Elective	4	
MATH 4000	1				
Foreign language core course	4				
Elective	4				
		17	0	0	8
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
MATH 3150	4 MATH 3175	4			
MATH elective	4 MATH 4025	4			
Elective	4 Upper-division elective	4			
Upper-division elective	4 Upper-division elective	4			
		16	16		

Total Hours: 134

## Mathematics, BS

The Bachelor of Science degree requires 14 mathematics courses and 2 physics courses. It is the degree most commonly pursued by math majors and is the one recommended for those strongly interested in mathematics and science.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Mathematics Major Grade Requirement

A grade of C or higher is required in all mathematics courses numbered 3000 and below and in MATH 4000.

## Mathematics Major Requirements

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
A grade of C or higher is required:		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
MATH 3150	Real Analysis	4
MATH 3175	Group Theory	4
<b>Co-op Reflections</b>		
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
<b>Mathematics Electives</b>		
Complete four courses in the following range:		16
MATH 3101 to MATH 4899		
<b>Required Physics</b>		
<i>Physics 1</i>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<i>Physics 2</i>		
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	

PHYS 1155 Physics for Engineering 2  
 and PHYS 1156 and Lab for PHYS 1155  
 and PHYS 1157 and Interactive Learning Seminar for  
 PHYS 1155

Capstone		Hours
Complete one of the following:		4
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	
MATH 4020	Research Capstone	

### Mathematics Major Credit Requirement

Complete 66 semester hours in the major.

### Upper-Division Electives

Note: Courses used as upper-division electives do not count toward the major or NUpath.

Code	Title	Hours
Complete three general electives numbered 3000 or above.		12

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1341	4 MATH 1342	4 Vacation	0 Vacation	0
MATH 1365	4 PHYS 1165	4		
Elective	4 PHYS 1166	1		
PHYS 1161	4 ENGW 1111	4		
PHYS 1162	1 Elective	4		
MATH 1000	1			
				0
				18
				17
				0
				0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321	4 MATH 2341	4 Vacation	0 Co-op	0
MATH 2331	4 Elective	4		
Elective	4 Elective	4		
Elective	4 Elective	4		
		EESC 2000	1	
				0
				16
				17
				0
				0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 MATH elective	4 MATH elective	4 Co-op	0
		ENGW 3315	4 Elective	4
		MATH 3081	4	
		Upper-division elective	4	
		MATH 3000	1	
				0
				17
				8
				0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 MATH 3150	4 MATH elective	4 Co-op	0
		MATH elective	4	
		Elective	4	
		Upper-division elective	4	
		MATH 4000	1	
				0
				17
				8
				0

Year 5		
Fall	Hours Spring	Hours
Co-op	0 MATH 3175	4
		MATH elective
		MATH 4025
		Upper-division elective
		4
		4
		16

Total Hours: 134

#### Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 1161	4 MATH 1342	4 Vacation	0 Vacation	0
PHYS 1162	1 PHYS 1165	4		
MATH 1365	4 PHYS 1166	1		
MATH 1341	4 ENGW 1111	4		
MATH 1000	1 Elective	4		
Elective	4			
				0
				18
				17
				0
				0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321	4 Co-op	0 Co-op	0 Vacation	0
MATH 2331	4			
Elective	4			
Elective	4			
EESC 2000	1			
				0
				17
				0
				0
				0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2341	4 Co-op	0 Co-op	0 MATH elective	4
MATH 3175	4		Elective	4
Elective	4			
Elective	4			
MATH 3000	1			
				8
				17
				0
				0
				0



**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3315	4 Co-op	0 Co-op	0 MATH elective	4
MATH 3081	4		Elective	4
MATH 4000	1			
MATH 3150	4			
Upper-division elective	4			
	17	0	0	8

**Year 5**

Fall	Hours Spring	Hours
MATH elective	4 Elective	4
MATH elective	4 MATH 4025	4
Upper-division elective	4 Upper-division elective	4
Elective	4 MATH elective	4
	16	16

Total Hours: 134

## Biology and Mathematics, BS

In the BS, combined biology and mathematics degree program, science courses lay the groundwork for strong basic training in mathematics, chemistry, and physics that are relevant to biology. In biology courses, students broadly explore the organization and processes of life—from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. In mathematics courses, students pursue mathematical reasoning, differential equations, and linear algebra, as well as statistics and probability. The fields of biology and mathematics are integrated in a range of course offerings including bioinformatics, applied statistics, advanced genomics, and biological imaging.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Biology Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000 or MATH 1000	Biology at Northeastern Mathematics at Northeastern	1

### Biology

### Foundations

BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
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### Inquiries

BIOL 2299	Inquiries in Biological Sciences	4
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### Genetics

BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
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### Project Lab

BIOL 2309	Biology Project Lab	4
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### Chemistry

#### General Chemistry

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
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#### Organic Chemistry

CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
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CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
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#### Biochemistry

BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
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#### Intermediate/Advanced Biology

Complete one of the following: 4-5

BIOL 2327 to BIOL 3999

BIOL 4705 to BIOL 5999

#### Organismal and Population Biology Elective

Complete one of the following: 4-5

BIOL 2327 Human Parasitology

BIOL 3401 Comparative Vertebrate Anatomy

BIOL 3403 Animal Behavior

BIOL 3413 Current Topics in Organismal and Population Biology

BIOL 3421  
and BIOL 3422 Microbiology  
and Lab for BIOL 3421

EEMB 2302  
and EEMB 2303 Ecology  
and Lab for EEMB 2302

EEMB 2400 Introduction to Evolution

EEMB 2700  
and EEMB 2701 Marine Biology  
and Lab for EEMB 2700

EEMB 3460 Conservation Biology

### Mathematics Requirements

Code	Title	Hours
<b>Calculus 1</b>		
MATH 1341 or MATH 1251	Calculus 1 for Science and Engineering Calculus and Differential Equations for Biology 1	4

#### Calculus 2 and Calculus 3

MATH 1342 or MATH 1252	Calculus 2 for Science and Engineering Calculus and Differential Equations for Biology 2	4
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MATH 2321	Calculus 3 for Science and Engineering	4
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#### Physics

PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
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### Required Mathematics Courses

MATH 1365	Introduction to Mathematical Reasoning	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4

#### Mathematics Electives

Complete three of the following:		12
MATH 2331	Linear Algebra	
MATH 3001 to MATH 4899		

#### Additional Requirements

Code	Title	Hours
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1

#### Capstone

Complete one of the following to fulfill capstone requirement:		1-4
BIOL 4701	Biology Capstone	
BIOL 4900	Biology Research Capstone (concurrent with BIOL 4991, which may be used toward Intermediate/Advanced Biology)	
BIOL 4971	Junior/Senior Honors Project 2	
MATH 4020	Research Capstone	
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	

#### Biology/Mathematics Integrative Courses

Complete two of the following:		8-10
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
BIOL 3405	Neurobiology	
BIOL 5569	Advanced Microbiology	
BIOL 5581	Biological Imaging	
BIOL 5591	Advanced Genomics	
MATH 4581	Statistics and Stochastic Processes	
MATH 7343	Applied Statistics	
BINF 6308	Bioinformatics Computational Methods 1	
BINF 6309	Bioinformatics Computational Methods 2	

#### Writing Requirement

ENGW 3307	Advanced Writing in the Sciences	4
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#### Biology and Mathematics Combined Major Credit/GPA Requirements

Complete 93 semester hours in the major with a cumulative GPA of 2.000.

#### Program Requirements

143 total semester hours required

### Computer Science and Mathematics, BS

The computer science and mathematics combined major was the first dual major created by the college. The mathematics requirements focus

on courses that have computing applications or form the basis for further studies in mathematical theory. The program emphasizes the strong ties between computer science and mathematics that date back to the origins of machine computation in the 1930s and 1940s—and persist to this day.

#### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

#### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Hourly Co-op	1

#### Computer Science Fundamental Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800 (Integrative course)	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5

#### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3800	Theory of Computation	4
CS 4300 or CS 4100	Computer Graphics Artificial Intelligence	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

#### Khoury Elective Courses

With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete eight semester hours of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
CY 2000 or higher, except CY 4930
DS 2500 or higher, except DS 4900
IS 2000 or higher, except IS 4900

**Mathematics Courses**

Code	Title	Hours
<b>Calculus Courses</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Mathematics Courses</b>		
MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
MATH 3175	Group Theory	4
MATH 3527	Number Theory 1	4
<b>Mathematics Electives</b>		
Complete three courses in the following range:		12
MATH 3001 to MATH 4999 but not MATH 4000		

**Supporting Course**

Code	Title	Hours
Complete one of the following:		
AFAM 2600	Issues in Race, Science, and Technology	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

**Required General Electives**

Code	Title	Hours
Complete 28 semester hours of general electives.		28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study****Sample Patterns:****Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Elective	4 Vacation	
CS 1800 and CS 1802	5 CS 2800 and CS 2801	5 MATH 2321	4	
CS 2500 and CS 2501	5 MATH 1342	4		
MATH 1341	4 Elective	4		
ENGW 1111	4			
19		18	8	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	4 CS 1210	1 Elective	4 Co-op	
MATH 2331	4 CS 3000	4 MATH 3081	4	
MATH 2341	4 Khoury elective	4		
CS 3800	4 MATH 3527	4		
	MATH elective	4		
16		17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Math elective	4 Elective	4 Co-op	
	CS 4300	4 Elective	4	
	ENGW 3302	4		
	MATH 3175	4		
0		16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
Co-op	CS 4500	4 Elective	4
	Khoury elective	4 Elective	4
	Math elective	4	
	Computing and social issues	4	
	0	16	8

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 2800 and CS 2801	5		
MATH 1341	4 MATH 1342	4		
ENGW 1111	4 Elective	4		
CS 1200	1			
	19	18	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	4 CS 3000	4 Vacation	0 Co-op	0
MATH 2321	4 MATH 2331	4		
MATH 2341	4 MATH 3081	4		
Elective	4 CS 1210	1		
	Elective	4		
	16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 3800	4 Elective	4 Co-op	0
	CS 4300	4 Elective	4	
	MATH 3175	4		
	ENGW 3302	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 4500	4 Elective	4 Co-op	0
	MATH 3527	4 Elective	4	
	MATH elective	4		
	Khoury elective	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 Khoury elective	4

Computing and social issues	4
MATH elective	4
MATH elective	4
0	16

Total Hours: 134

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 2800 and CS 2801	5		
MATH 1341	4 MATH 1342	4		
ENGW 1111	4 Elective	4		
CS 1200	1			
	19	18	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	4 Co-op	0 Co-op	0 Vacation	0
MATH 2321	4			
MATH 2341	4			
CS 1210	1			
Elective	4			
	17	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 Co-op	0 Co-op	0 Elective	4
MATH 2331	4		Elective	4
MATH 3081	4			
Elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3800	4 Co-op	0 Co-op	0 Elective	4
CS 4300	4		Elective	4
MATH 3527	4			
ENGW 3302	4			
	16	0	0	8

**Year 5**

Fall	Hours Spring	Hours
CS 4500	4 Khoury elective	4
MATH 3175	4 Computing and social issues	4
MATH elective	4 MATH elective	4

Khoury elective	4 MATH elective	4
		16
		16

Total Hours: 134

## Data Science and Mathematics, BS

The data science and mathematics combined major combines computer science, data science, and mathematics into an integrated curriculum. The program provides the rigorous theoretical background necessary for success in the data science field.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

#### Programming Sequence Pathways

Choose one of two options 12

#### Computer Science Option

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500	Object-Oriented Design	

#### Data Science Option

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	

#### Computer Science Required Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800 (Integrative course)	5
CS 3200	Database Design	4

#### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4

DS 4300	Large-Scale Information Storage and Retrieval	4
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### Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete eight credits of CS,CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 8

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Mathematics Courses

Code	Title	Hours
<b>Problem-Solving Requirement</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Math Requirement</b>		
MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
MATH 3175	Group Theory	4
MATH 3527	Number Theory 1	4

### Mathematics Elective Requirement

Complete four courses in the following range: 16

MATH 3001 to MATH 4999 but not MATH 4000

### Integrative Requirement

Code	Title	Hours
<b>Integrative Courses</b>		
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours	
CS 1200	1 CS 2510 and CS 2511	5 MATH 2321	4	
CS 1800 and CS 1802	5 MATH 1342	4 CS 3500	4	
CS 2500 and CS 2501	5 MATH 1365	4		
MATH 1341	4 Elective	4		
ENGW 1111	4			
19		17	8	
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2331	4 CS 1210	1 MATH 3081	4 Co-op	
MATH 2341	4 MATH 3527	4 Elective	4	
CS 3200	4 DS 4200	4		
DS 3000	4 MATH elective	4		
	Khoury elective	4		
16		17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4300	4 ENGW 3302	4 Co-op	
	DS 4400	4 Elective	4	
	MATH 3175	4		
	MATH elective	4		
0		16	8	0

Year 4			
Fall	Hours Spring	Hours Summer 1	Hours
Co-op	DS 4420	4 Elective	4
	Khoury elective	4 Elective	4
	MATH elective	4	
	MATH elective	4	
0		16	8

Total Hours: 133

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 MATH 1342	4		
MATH 1341	4 MATH 1365	4		
ENGW 1111	4 Elective	4		
CS 1200	1			
19		17	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	4 CS 1210	1 Vacation	0 Co-op	0
MATH 2321	4 CS 3200	4		
DS 3000	4 MATH 2331	4		
MATH 2341	4 MATH 3081	4		
	Khoury elective	4		
16		17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 MATH 3175	4 ENGW 3302	4 Co-op	0
	DS 4200	4 Elective	4	
	DS 4300	4		
	Elective	4		
0		16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 MATH 3527	4 Elective	4 Co-op	0
	DS 4400	4 Elective	4	
	MATH elective	4		
	MATH elective	4		
0		16	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	0 DS 4420	4		
	Khoury elective	4		

MATH elective	4
MATH elective	4
0	16

Total Hours: 133

## Economics and Mathematics, BS

Given the mathematical and graphical models used extensively in economics, economics and mathematics are natural partners. Our combined major with mathematics is designed for students who want to further develop their mathematics skills to enhance their understanding and interest in economics. This combined major is strongly recommended for students with an interest in pursuing graduate studies in economics.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000 or MATH 1000	Economics at Northeastern Mathematics at Northeastern	1

#### Required Economics

ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4

#### Economics Electives

Complete 4 economics electives found in the following ranges, with no more than two in the ECON 1200 to ECON 1999 range: 16

ECON 1200 to ECON 1999

ECON 3000 to ECON 4689

ECON 4900 to ECON 4999

ECON 5200 to ECON 5999

### Mathematics Requirements

Code	Title	Hours
<b>Required Mathematics</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
MATH 1341	Calculus 1 for Science and Engineering	4

MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4

#### Mathematics Electives

Complete two courses in the following range: 8  
MATH 3001 to MATH 4999

The following courses are recommended:

MATH 3150 Real Analysis

MATH 4581 Statistics and Stochastic Processes

### Breadth Course

Code	Title	Hours
<b>Computer Science</b>		
Choose one of the following: 4		
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MISM 2510	Fundamentals of Information Analytics	

### Integrative Requirements

Code	Title	Hours
<b>Advanced Writing in the Disciplines</b>		
ENGW 3308	Advanced Writing in the Social Sciences	4

#### Integrative Course

Complete one of the following: 4		
ECON 4692	Senior Economics Seminar	
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	

### Combined Major GPA/Credit Requirement

Code	Title	Hours
Grades in the following 4 Economics courses must average to a minimum of C (2.000):		
ECON 2315	Macroeconomic Theory	
ECON 2316	Microeconomic Theory	
ECON 2560	Applied Econometrics	
MATH 3081	Probability and Statistics	

A cumulative GPA of 2.000 is required in all math courses.

A grade of C or higher is required in all math courses numbered MATH 2999 or below; grades below C will not count toward the degree.

### Economics and Mathematics Major Credit Requirement

Complete 76 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ECON 1115	4 ECON 1116	4 MATH 2321	4 Elective	4
MATH 1365	4 MATH 1342	4 Elective	4 Elective	4
MATH 1341	4 ENGW 3308	4		
CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4 Elective	4		
MATH 1000 or ECON 1000	1			
	17	16	8	8

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ECON 2315	4 ECON 2316	4 Elective	4 Co-op	
MATH 2341	4 ECON elective 1	4 MATH 3081	4	
Elective	4 MATH 2331	4		
Elective	4 Math elective 1	4		
	16	16	8	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ECON 2560	4 Elective	4 Co-op	
	ECON elective 2	4 Elective	4	
	Math elective 2	4		
	Elective	4		
	0	16	8	0

#### Year 4

Fall	Hours Spring	Hours
Co-op	ECON elective 3	4
	ECON elective 4	4
	ECON 4692, MATH 4025, or MATH 5131	4
	Elective	4
	0	16

Total Hours: 129

## Graphic and Information Design and Mathematics, BS

The Department of Mathematics and the Department of Art + Design offer a combined major in mathematics and graphic and information design. Students interested in the combined major integrate the study of mathematical reasoning including methods for analyzing and solving

problems encountered in the physical world with the design of message and meaning, integrating text and image to visualize concepts and data to enhance human understanding of complex and vital knowledge.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Difference and Diversity (DD), and Ethical Reasoning (ER) must be met through electives.

## Graphic and Information Design Requirements

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000 or MATH 1000	Art and Design at Northeastern Mathematics at Northeastern	1
<b>Art and Design Fundamentals</b>		
	Complete one course in the following range. ARTF 1143 is recommended. ARTF 1141 to ARTF 1149	4
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Art and Design Elective</b>		
	Complete one of the following:	4
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTG 2260	Programming Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	



ARTF 2223	Experience and Interaction (with optional ARTF 2224 )
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401 )
ARTG 3351	
ARTG 3450	Graphic Design 2
ARTG 3460	Identity and Brand Design
ARTG 4552	
ARTG 4553	
ARTG 4554	Typography 3

## Mathematics Requirements

Code	Title	Hours
<b>Math Reasoning</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
A grade of C or higher is required:		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate Math</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Advanced Elective</b>		
Complete one of the following:		4
MATH 3150	Real Analysis	
MATH 3175	Group Theory	
MATH 3560	Geometry	
<b>Mathematics Elective</b>		
MATH 4025 can count as an upper-level math elective as well as a capstone.		
Complete one course in the following range:		4
MATH 3101 to MATH 4899		

## Integrative Requirement

Code	Title	Hours
ARTG 3451	Information Design 1	4

## Combined-Major Credit Requirement

Complete 80 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample 5-Year Plan of Study , 2 Co-op

Year 1			
Fall	Hours	Spring	Hours
ARTF 1000	1	MATH 1342	4
ARTF 1143	4	ARTF 1122 (with optional ARTF 1123)	4
MATH 1365	4	ARTG 1250	4

MATH 1341	4	ARTH 2210	4
ENGW 1111	4		
		17	16
<b>Year 2</b>			
Fall	Hours	Spring	Hours
MATH 2321	4	MATH 2341	4
ARTG 2250	4	ARTG 2252	4
ARTH 2215	4	Math elective	4
Elective	4	Elective	4
		16	16

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 2331	4	Co-op		Co-op	
ARTG 3350	4				
Elective	4				
Elective	4				
EEAM 2000	1				
		17		0	0

Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 3081	4	Co-op		Co-op	
ARTG 3451	4				
Elective	4				
Elective	4				
		16		0	0

Year 5			
Fall	Hours	Spring	Hours
ARTG 4550	4	Capstone	4
Art and Design Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 130

## Mathematics and Business Administration, BS

A combined major combines two majors in a way that allows a student to fulfill all requirements within the standard 128 credits. For details, see program requirements.

Current students can also find details about combined majors and minors by going to their audit, clicking on "explore options," and finding the appropriate program. Students will be able to see a list of required courses and will be able to track their progress toward fulfilling them.

In the BS combined mathematics and business administration degree program, business and mathematics courses lay the groundwork for strong basic training in finance.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Mathematics Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 1365	Introduction to Mathematical Reasoning	4
MATH 3081	Probability and Statistics	4
<b>Calculus and Linear Algebra (Required) and Differential Equations (Recommended)</b>		
Complete either Option 1 or Option 2 below:		8
<i>Option 1 (Recommended)</i>		
MATH 2321	Calculus 3 for Science and Engineering	
MATH 2341	Differential Equations and Linear Algebra for Engineering	
<i>Option 2</i>		
MATH 2321	Calculus 3 for Science and Engineering	
MATH 2331	Linear Algebra	
<b>Co-op Reflections</b>		
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
<b>Mathematics Electives</b>		
Complete three courses in the range MATH 3001 to MATH 5999. The following courses are recommended:		12
MATH 4681	Probability and Risks	
MATH 4682	Theory of Interest and Basics of Life Insurance 1	
MATH 4581	Statistics and Stochastic Processes	

## Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4
<b>Strategy in Action</b>		
STRT 4501	Strategy in Action	4

## Integrative Course

*Note:* Financial Risk Management (FINA 4512) also counts toward the finance concentration.

Code	Title	Hours
FINA 4512	Financial Risk Management	4

## Finance Concentration

Code	Title	Hours
<b>Finance Requirements</b>		
FINA 3301	Corporate Finance	4
FINA 3303	Investments	4
FINA 4512	Financial Risk Management	4
<b>Finance Elective</b>		
Complete one of the following:		4
ENTR 3520	Impact Investing and Social Finance	
or FINA 2720	Sustainability in the Business Environment	
FINA 4604	Fixed-Income Securities (Recommended)	
FINA 4310	Working Capital Management	
FINA 4312	Issues in Corporate Governance	
FINA 4320	International Financial Management	
FINA 4410	Valuation and Value Creation	
FINA 4412	Personal Financial Planning	
FINA 4420	Mergers and Acquisitions	
FINA 4514	Investment Banking	
FINA 4516	Real Estate Finance	
FINA 4526	Core Topics in Alternative Investments	
FINA 4602	Turnaround Management	
FINA 4604	Fixed-Income Securities	
FINA 4608	Advanced Financial Strategy	
FINA 4610	Entrepreneurial Finance and Private Equity	
FINA 4983	Special Topics in Finance	

## Second Business Concentration (Optional)

A second business concentration is optional and may be chosen from the following list.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

**Supplemental Courses**

Code	Title	Hours
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
<b>Co-op Preparation</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EESC 2000	Professional Development for Co-op	

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Mathematics GPA Requirement**

Minimum 2.000 GPA required in all mathematics courses

**Business GPA Requirement**

Minimum 2.000 GPA required in business courses

**Program Requirement**

128 total semester hours required

**Mathematics and Cultural Anthropology, BS**

In the BS combined mathematics and cultural anthropology degree program, anthropology and mathematics courses lay the groundwork for strong basic training that is designed to train the student to use mathematical models and methodologies for the study of problems in cultural anthropology.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Mathematics Requirements**

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4

**Math Electives**

Complete two courses in the following range that are not required in the requirements above: MATH 3001 to MATH 5999	8
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**Anthropology Requirements**

Code	Title	Hours
<b>Anthropology Required Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 2305	Global Markets and Local Culture	4
<b>Anthropology Area Courses</b>		
Complete two of the following. Additional area courses may count as anthropology electives:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

**Anthropology Electives**

Complete three 4-semester-hour courses in addition to the requirements stated above. One study-abroad course may count toward this requirement with prior permission from the department. ANTH 2000 to ANTH 4990	12
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**Capstone Requirement**

ANTH 4600	Senior Seminar	4
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**Integrative Requirement**

Code	Title	Hours
Complete one of the following:		4
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	
Complete the following:		4
ANTH 3120	Consumer Cultures	
Total Hours		8

**Mathematics and Anthropology Combined Major Credit Requirement**

Complete 80 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

## Plan of Study

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1341	4 MATH 1342	4 Vacation	Vacation	
MATH 1365	4 Foreign language course	4		
ANTH 1101	4 ANTH 2305	4		
ENGW 1111	4 Elective	4		
	16	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321	4 ANTH elective	4 Vacation	Vacation	
ANTH 3410	4 MATH 2331	4		
MATH 2341	4 Foreign language course	4		
ANTH elective	4 MATH 3081	4		
	16	16	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	MATH elective	4 Elective	4 Vacation	
	Elective	4 Elective	4	
	ANTH elective	4		
	ANTH advanced area course	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ANTH 3421	4 MATH elective	4 Vacation	
	MATH elective	4 Elective	4	
	ANTH advanced area course	4		
	ANTH advanced area course	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	ANTH 4600	4		
	ANTH advanced area course	4		
	Elective	4		

Integrative course	4
	0
	16

Total Hours: 128

## Mathematics and Physics, BS

Mathematics and physics have been linked since antiquity. By combining physics and mathematics you can take closely related courses in each discipline, such as statistical mechanics and stochastic processes, mechanics and dynamical systems, thermodynamics and Fourier Series, and quantum mechanics and partial differential equations. The two departments jointly offer a course in mathematical methods in physics.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Mathematics Requirements

Code	Title	Hours
<b>Calculus</b>		
A grade of C or higher is required:		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Math</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
MATH 3150	Real Analysis	4
MATH 3175	Group Theory	4
<b>Co-op Reflections</b>		
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
<b>Mathematics Elective</b>		
Complete one course in the following range:		4
MATH 3101 to MATH 4899		

### Physics Requirements

Code	Title	Hours
<b>Physics 1</b>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151
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**Physics 2**

Complete one of the following: 5

PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155

**Intermediate Physics**

PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4

**Advanced Physics**

PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

**Elective Courses**Complete two courses in the following range: 8  
PHYS 3000 to PHYS 7999**Integrative Courses**

Code	Title	Hours
PHYS 3601	Classical Dynamics	4
MATH 4545 or MATH 4525	Fourier Series and PDEs Applied Analysis	4

**Combined Major Credit Requirement**

Complete 83 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study****Notes on Physics courses in Plans of Study**

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

Please contact your academic adviser for additional information and plans of study.

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1341	4 MATH 1342	4 Vacation	0 Vacation	0
ENGW 1111	4 PHYS 1165	4		
Elective	4 PHYS 1166	1		
PHYS 1161	4 Elective	4		
PHYS 1162	1 Elective	4		
MATH 1000	1			
	18	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321	4 MATH 2341	4 Vacation	0 Co-op	0
Elective	4 MATH 2331	4		
PHYS 2303	4 Elective	4		
PHYS 2371	3 EESC 2000	1		
PHYS 2372	1 PHYS 3601	4		
	16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 PHYS 3602	4 PHYS 3600	4 Co-op	0
	MATH 3150	4 MATH 3081	4	
	Elective	4		
	MATH 3000	1		
	PHYS 4305	4		
	0	17	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 MATH 3175	4 Elective	4 Co-op	0
	MATH elective	4 Elective	4	
	PHYS undergraduate elective	4		
	ENGW 3315	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 PHYS undergraduate elective	4
	PHYS undergraduate elective	4
	MATH 4025	4
	MATH 4545	4
	0	16

Total Hours: 133

**Mathematics and Political Science, BS****Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Mathematics Requirements**

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Math Electives</b>		
Complete two courses in the following range that are not required in the requirements above:		8
MATH 30001 to MATH 5999		

**Political Science Requirements**

Code	Title	Hours
<b>Political Science Required Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
POLS 2325	Ancient Philosophy and Political Thought	4
POLS 2328	Modern Political Thought	4
POLS 2330	American Political Thought	4
POLS 2332	Contemporary Political Thought	4
<b>Political Science Electives</b>		
Complete three POLS courses numbered 2000 and above.		12

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below.

- American Political Institutions (p. 749)
- Campaigns and Elections (p. 749)
- Comparative Politics (p. 749)
- Identity, Culture, and Politics (p. 750)
- International Relations and Diplomacy (p. 750)
- Law and Legal Studies (p. 750)
- Public Policy (p. 750)
- Security Studies (p. 750)

**Integrative Requirement**

Code	Title	Hours
POLS 3402		

**Mathematics and Political Science Combined-Major Credit Requirement**

Complete 68 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Optional Political Science Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

**Experiential/Practicum Requirement**

Complete one of the following:	4
POLS 4915 Model Arab League	
POLS 4918 Model NATO	
POLS 4937 Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
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**Core Course**

POLS 3418 Nationalism	4
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**Electives**

Complete three of the following:	12
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POLS 2368 Music and Politics in America and Abroad	
POLS 2370 Religion and Politics	
POLS 2375 Gender and Politics	
POLS 3309 Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324 Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
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**Experiential/Practicum Requirement**

Complete one of the following:	4
POLS 4910 Model United Nations	
POLS 4915 Model Arab League	
POLS 4938 Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following:	12
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POLS 3405 International Political Economy	
POLS 3406 International Law	
POLS 3408 International Security	
POLS 3435 Politics and Governance of Europe and the European Union	
POLS 3470 Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
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Complete four of the following:	16
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POLS 2330 American Political Thought	
POLS 3300 The U.S. Congress	
POLS 3302 Judicial Process and Behavior	
POLS 3324 Law and Society	
POLS 3406 International Law	
POLS 3409 Global Governance	
POLS 4500 U.S. Constitutional Law	
POLS 4505 U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
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**Core Requirement**

POLS 3307 Public Policy and Administration	4
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**Electives**

Complete three of the following:	12
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POLS 2335 Budgeting and Taxation	
POLS 2340 Business and Government	
POLS 2345 Urban Policies and Politics	
POLS 2350 State and Local Politics	
POLS 2357 Growth and Decline of Cities and Suburbs	
POLS 2390 Science, Technology, and Public Policy	
POLS 2395 Environmental Politics and Policy	
POLS 3425 U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
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Complete four of the following:	16
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POLS 3408 International Security	
POLS 3420 U.S. National Security Policy	
POLS 3423 Terrorism and Counterterrorism	
POLS 3425 U.S. Foreign Policy	
POLS 3430 Revolution, Civil War, and Insurrection	
POLS 3470 Arab-Israeli Conflict	
POLS 3487 Politics of Developing Nations	

**Mathematics and Psychology, BS**

In the mathematics and psychology combined-major BS program, psychology and mathematics courses help lay the groundwork for strong basic training that seeks to prepare the student toward developing psychological models using mathematics.

**Program Requirements****Mathematics Requirements**

Code	Title	Hours
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**Problem Solving**

MATH 1365 Introduction to Mathematical Reasoning	4
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**Calculus**

MATH 1341 Calculus 1 for Science and Engineering	4
MATH 1342 Calculus 2 for Science and Engineering	4
MATH 2321 Calculus 3 for Science and Engineering	4

**Intermediate and Advanced Mathematics**

MATH 2341 Differential Equations and Linear Algebra for Engineering	4
MATH 2331 Linear Algebra	4
MATH 3081 Probability and Statistics	4

**Math Electives**

Complete two courses in the following range that are not required in the requirements above:	8
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MATH 3001 to MATH 5999

**Psychology Requirements**

Code	Title	Hours
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**Required Courses**

PSYC 1101 Foundations of Psychology	4
PSYC 2320 Statistics in Psychological Research	4

**Area A (Personality/Social Basis of Behavior)**

Complete two of the following:	8
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PSYC 3400	Personality
PSYC 3402	Social Psychology
PSYC 3404	Developmental Psychology
PSYC 3406	Abnormal Psychology

**Area B (Biological/Cognitive Basis of Behavior)**

Complete two of the following: 8

PSYC 3450	Learning and Motivation
PSYC 3452	Sensation and Perception
PSYC 3458	Biological Psychology
PSYC 3464	Psychology of Language
PSYC 3466	Cognition

**Psychology Laboratory**

Complete one of the following: 4

PSYC 4600	Laboratory in Research Design
PSYC 4606	Laboratory in Biological Psychology
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4612	Laboratory in Cognition
PSYC 4614	Laboratory in Social Psychology
PSYC 4616	Laboratory in Personality
PSYC 4622	Laboratory in Sensation and Perception
PSYC 4624	Laboratory in Affective Science
PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4628	Laboratory in Developmental Psychology

**Psychology Capstone Requirement**

Complete one of the following: 4

PSYC 4654	Seminar in Behavioral Modification
PSYC 4656	Seminar in Biological Psychology
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4662	Seminar in Personality
PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

**Psychology Elective**

Any PSYC course in the 3000 range and up 4

**Integrative Requirement**

Code	Title	Hours
PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience	4

**Mathematics and Psychology Combined-Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1365	4	MATH 1341	4	Vacation		Vacation	
PSYC 1101	4	PSYC Area A	4				
NUpath EI	4	Open elective	4				
ENGW 1111	4	NUpath IC	4				
MATH 1000 or PSYC 1000	1						
		17	16		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1342	4	MATH 2321	4	Vacation		Co-op	
PSYC 2320	4	PSYC Area A	4				
PSYC Area B	4	Open elective	4				
NUpath DD	4	MATH elective	4				
		EESC 2000	1				
		16	17		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		MATH 2331	4	MATH 2341	4	Co-op	
		PSYC Area B	4	Adv writing	4		
		PSYC elective	4				
		Open elective	4				
		0	16		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PSYC lab	4	Open elective	4	Co-op	
		MATH 3081	4	Open elective	4		
		PSYC 4540	4				
		NUpath ER	4				
		0	16		8		0
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PSYC seminar	4				
		MATH elective	4				
		Open elective	4				
		Open elective	4				
		0	16				

Total Hours: 130



## Mathematics and Sociology, BS

In the mathematics and sociology combined-major BS program, sociology and mathematics courses help lay the groundwork for strong basic training that seeks to prepare students toward developing sociological models using mathematics.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Mathematics Requirements

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Math Electives</b>		
Complete two courses in the following range that are not required in the requirements above:		8
MATH 30001 to MATH 5999		

### Sociology Requirements

Code	Title	Hours
<b>Sociology Required Courses</b>		
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Sociology Electives</b>		
Complete one course from each course range:		
<i>Introductory Elective</i>		4
SOCL 1101 to SOCL 1999		
<i>Intermediate Elective</i>		4
SOCL 2000 to SOCL 3999		
<i>Advanced Elective</i>		4
SOCL 4000 to SOCL 4999		

### Capstone Requirement

SOCL 4600	Senior Seminar	4
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### Integrative Requirement

Code	Title	Hours
Complete one of the following:		
SOCL 1280	The Twenty-First-Century Workplace	4
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	

### Mathematics and Sociology Combined Major Credit Requirement

Complete 68 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 1341	4	MATH 1342	4	Vacation	
MATH 1365	4	SOCL 2320	4		
ANTH 1101	4	SOCL 3300	4		
ENGW 1111	4	Elective	4		
		16		16	
				0	
					0
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 2321	4	MATH 2341	4	Vacation	
ANTH 2305	4	Elective	4		
SOCL 2321	4	SOCL elective	4		
Elective	4	MATH elective	4		
		16		16	
				0	
					0
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 2331	4	Co-op		Co-op	
Elective	4			Vacation	
SOCL elective	4				
MATH elective	4				
		16		0	
				0	
					0
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 3081	4	Co-op		Co-op	
SOCL elective	4			Vacation	

Elective	4			
Elective	4			
	16	0	0	0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
Elective	4	Elective	4	
Elective	4	Elective	4	
Elective	4	Capstone	4	
Elective	4	Integrative course	4	
	16		16	

Total Hours: 128

## Mathematics, Minor

A math minor can be combined with any other major at Northeastern and can be obtained by completing six math courses: two calculus courses, two intermediate courses, and two upper-level courses.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4

Biology majors may substitute the following two courses:

MATH 1251	Calculus and Differential Equations for Biology 1
MATH 1252	Calculus and Differential Equations for Biology 2

### Intermediate-Level Courses

Code	Title	Hours
Complete two of the following:		8
MATH 2321	Calculus 3 for Science and Engineering	
MATH 2341	Differential Equations and Linear Algebra for Engineering	
MATH 2331	Linear Algebra	

### Mathematics Electives

Code	Title	Hours
Complete two courses in the following range:		8
MATH 3001 to MATH 4699 <sup>1</sup>		

<sup>1</sup> MATH 4000 is excluded.

### GPA Requirement

2.000 GPA required in the minor

## Physics

Website (<http://www.northeastern.edu/cos/physics/>)

Mark C. Williams, PhD

Professor and Chair

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617.373.2902  
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Physics examines the fundamental principles that govern natural phenomena, ranging in scale from collisions of subatomic particles; through the behavior of solids, liquids, and biomolecules; to exploding stars and colliding galaxies.

The program aims to help students experience the intellectual stimulation of studying physics and the excitement of frontline research, understand the basic principles and techniques of physics-related careers, and prepare for graduate study in physics or related fields.

### Programs

The department offers several degree programs:

- BS in physics, applied physics, or biomedical physics
- BS in applied physics/MS in electrical engineering
- MS and PhD in physics

Four levels of courses are offered:

- Descriptive courses for nonscience majors with limited mathematical background
- General survey courses for students in scientific and engineering fields
- Advanced courses primarily intended for physics, biomedical physics, and applied physics majors
- Highly advanced courses primarily intended for prospective graduate students

A BS, MS, or a PhD degree in physics offers many career opportunities in industrial, government, and academic high-technology laboratories as scientists or engineers.

### COMBINED MAJORS

Students also have the opportunity to combine physics with another discipline through a combined major. Current combined majors with physics include mathematics, computer science, music with concentration in music composition and technology, philosophy, chemical engineering, computer engineering, electrical engineering, and mechanical engineering.

### Research Opportunities for Undergraduates

Students are encouraged to participate in the excitement of cutting-edge research in particle physics, biophysics, and nanotechnology with world-renowned faculty.

### Programs

#### Bachelor of Science (BS)

- Physics (p. 754)
- Applied Physics (p. 756)
- Biomedical Physics (p. 758)
- Computer Science and Physics (p. 378)
- Data Science and Physics (p. 424)
- Mathematics and Physics (p. 747)

- Physics and Music with Concentration in Music Technology (p. 224)
- Physics and Philosophy (p. 769)

### Bachelor of Science in Chemical Engineering (BSCHE)

- Chemical Engineering and Physics (p. 460)

### Bachelor of Science in Computer Engineering (BSCmpE)

- Computer Engineering and Physics (p. 492)

### Bachelor of Science in Electrical Engineering (BSEE)

- Electrical Engineering and Physics (p. 504)

### Bachelor of Science in Mechanical Engineering (BSME)

- Mechanical Engineering and Physics (p. 532)

### Minor

- Physics (p. 782)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Physics, BS

The physics program provides a strong foundation in classical and modern physics, including studies of the various physical phenomena such as electromagnetism, dynamics, building blocks of matter, energy, and radiation.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<i>Physics 2</i>		
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	

PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
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### Intermediate Physics

PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4

### Advanced Physics

PHYS 3600	Advanced Physics Laboratory	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 3603	Electricity and Magnetism 2	4
PHYS 4115	Quantum Mechanics	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

### Elective Course

Complete one of the following:		4
MATH 4606	Mathematical and Computational Methods for Physics	
PHYS 3500 to PHYS 7999		

### Experiential Learning

Complete one course in experiential learning. See department for approved courses. Note: The experiential learning requirement is waived following a student presentation connected with a co-op and/or research experience. The requirement is often fulfilled by a talk at a Society of Physics Students meeting but can be fulfilled by an adequately documented presentation at a professional meeting or at an appropriate campus event. Contact your faculty adviser for additional information.

### Senior Capstone

PHYS 5318	Principles of Experimental Physics	4
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### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Computational Methods</b>		
PHYS 1211	Computational Problem Solving in Physics	4
or PHYS 1130 or GE 1111	Computing, Data, and Science Engineering Problem Solving and Computation	
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211	5
<b>Technical Electives</b>		
Complete 8 semester hours from the following:		8
MATH 2280	Statistics and Software	
MATH 2321 to MATH 5999		

PHYS 2303 to PHYS 7999
CHEM 2311 to CHEM 5999
BIOL 2301 to BIOL 5999
ENVR 2300 to ENVR 5999
CS 2990 to CS 4900
CHME 2001 to CHME 4699
CIVE 2001 to CIVE 4699
EECE 2001 to EECE 5999
ME 2001 to ME 4699
IE 2001 to IE 4699

## Physics Major Credit Requirement

Complete 91 semester hours in the major.

## Program Requirement

133 total semester hours required

## Plan of Study

### Note on Physics Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, **depending on the year of entry for that student.** See course offering schedule at the end of the plan of study.

Please contact your academic advisor for additional information and plans of study.

### FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 1000	1 PHYS 1165	4 Vacation	Vacation	
PHYS 1161	4 PHYS 1166	1		
PHYS 1162	1 PHYS 1167	0		
PHYS 1163	0 PHYS 1211	4		
MATH 1341	4 MATH 1342	4		
ENGW 1111	4 Elective	4		
Elective	4			
	18	17	0	0

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 2303	4 PHYS 3601	4 Vacation	Co-op	
PHYS 2371	3 MATH 2331	4		
PHYS 2372	1 MATH 2341	4		
MATH 2321	4 Elective	4		
CHEM 1211	4 EESC 2000	1		
CHEM 1212	1			
CHEM 1213	0			
	17	17	0	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHYS 3602	4 PHYS 3600	4 Co-op	
	MATH 3081	4 PHYS 3603	4	
	Elective	4		
	Elective	4		
	0	16	8	0

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHYS 4115	4 Technical Elective	4 Co-op	
	PHYS 4305	4 Elective	4	
	ENGW 3307	4		
	Elective	4		
	0	16	8	0

#### Year 5

Fall	Hours Spring	Hours
Co-op	PHYS 5318	4
	PHYS advanced elective	4
	Technical elective	4
	Elective	4
	0	16

Total Hours: 133

## Odd-Numbered Year One

### FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 1000	1 PHYS 1165	4 MATH 2321	4 MATH 2331	4
PHYS 1161	4 PHYS 1166	1 Elective	4 MATH 2341	4
PHYS 1162	1 PHYS 1167	0		
PHYS 1163	0 MATH 1342	4		
MATH 1341	4 PHYS 1211	4		
ENGW 1111	4 CHEM 1211	4		
Elective	4 CHEM 1212	1		
	CHEM 1213	0		
	18	18	8	8

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 2303	4 Co-op	Co-op	PHYS 3600	4
PHYS 2371	3		Elective	4
PHYS 2372	1			
PHYS 3602	4			
Elective	4			
EESC 2000	1			
	17	0	0	8

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 3601	4 Co-op	Co-op	MATH 3081	4
PHYS 3603	4		Elective	4
Elective	4			
Elective	4			
	16	0	0	8

#### Year 4

Fall	Hours Spring	Hours
PHYS 4115	4 PHYS 5318	4

PHYS 4305	4 PHYS advanced elective	4
ENGW 3307	4 Technical elective	4
Technical Elective	4 Elective	4
		16
		16

Total Hours: 133

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring
- PHYS 5318 offered every spring

## Applied Physics, BS

The applied physics BS degree is a flexible, interdisciplinary-oriented program designed to provide students with a solid background in basic physics, in conjunction with the opportunity to sample courses from a wide range of disciplines, including engineering, biology, chemistry, math, environmental studies, and computer science. This program seeks to enable students to prepare for a variety of careers in, for example, nanotechnology, a medical field, environmental research, or even finance.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Applied Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151
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### *Physics 2*

Complete one of the following: 5

PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155

### Intermediate Physics

PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4

### Advanced Physics

PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 3603	Electricity and Magnetism 2	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

### Advanced Physics Electives

Complete three of the following: 12

PHYS 3601	Classical Dynamics
PHYS 4115	Quantum Mechanics
PHYS 5111	Astrophysics and Cosmology
PHYS 5113	Particle Physics
PHYS 5116	Complex Networks and Applications
PHYS 4621	Biological Physics 1
PHYS 4623	Medical Physics
PHYS 4651	Medical Physics Seminar 1
PHYS 4652	Medical Physics Seminar 2
PHYS 5260	Introduction to Nanoscience and Nanotechnology
MATH 4606	Mathematical and Computational Methods for Physics

### Experiential Learning

Note: The experiential learning requirement is waived following a student presentation connected with a co-op and/or research experience. The requirement is often fulfilled by a talk at a Society of Physics Students meeting but can be fulfilled by an adequately documented presentation at a professional meeting or at an appropriate campus event. Contact your faculty adviser for additional information.

PHYS 4996	Experiential Education Directed Study	4
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### Senior Capstone

PHYS 5318	Principles of Experimental Physics	4
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### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2331	Linear Algebra	4

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
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**Computational Methods**

PHYS 1211	Computational Problem Solving in Physics	4
or PHYS 1130	Computing, Data, and Science	
or GE 1111	Engineering Problem Solving and Computation	

**Chemistry**

CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211	5
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**Technical Electives**

Complete 16 semester hours of technical electives from the following: 16

MATH 2280	Statistics and Software	
MATH 2321 to MATH 5999		
PHYS 2303 to PHYS 7999		
CHEM 2311 to CHEM 5999		
BIOL 2301 to BIOL 5999		
ENVR 2300 to ENVR 5999		
CS 2990 to CS 4900		
CHME 2001 to CHME 4699		
CIVE 2001 to CIVE 4699		
EECE 2001 to EECE 5999		
ME 2001 to ME 4699		
IE 2001 to IE 4699		

**Applied Physics Major Credit Requirement**

Complete 91 semester hours in the major.

**Program Requirement**

133 total semester hours required

**Plan of Study****Note on Applied Physics Plans of Study**

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

Please contact your academic adviser for additional information and plans of study.

**FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 1000	1 PHYS 1165	4 Vacation	0 Vacation	0
PHYS 1161	4 PHYS 1166	1		
PHYS 1162	1 PHYS 1167	0		
PHYS 1163	0 PHYS 1211	4		
MATH 1341	4 MATH 1342	4		
ENGW 1111	4 Elective	4		
Elective	4			
	18	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 2303	4 Co-op	0 Co-op	0 MATH 2341	4
PHYS 2371	3		PHYS 4305	4

PHYS 2372	1			
MATH 2321	4			
CHEM 1211	4			
CHEM 1212	1			
CHEM 1213	0			
EESC 2000	1			
	18	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 3602	4 Co-op	0 Co-op	0 PHYS 3600	4
MATH 2331	4		Elective	4
Technical elective	4			
Technical elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3307	4 Co-op	0 Co-op	0 Vacation	0
Technical elective	4			
Technical elective	4			
Elective	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
PHYS 3603	4 PHYS 5318	4
Elective	4 PHYS advanced elective	4
Elective	4 PHYS advanced elective	4
Elective	4 PHYS advanced elective	4
	16	16

Total Hours: 133

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

## Biomedical Physics, BS

The biomedical physics program seeks to understand the role of physical processes occurring on molecular, cellular, or macroscopic scales; in vital biological functions, ranging from the interaction of chemicals with DNA, to the extraction of oxygen from red blood cells, to the generation of complex electrical signals in the brain and nervous system; and physical principles of medical devices. The biomedical physics program also offers a premed (prehealth) specialized track.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Biomedical Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<i>Physics 2</i>		
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 3603	Electricity and Magnetism 2	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4
<b>Biomedical Physics</b>		
PHYS 4621	Biological Physics 1	4
PHYS 4623	Medical Physics	4
PHYS 4651	Medical Physics Seminar 1	4

PHYS 4652	Medical Physics Seminar 2	4
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### Advanced Physics Elective

Complete one of the following:		4
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MATH 4606	Mathematical and Computational Methods for Physics	
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PHYS 2300 to PHYS 7999		
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### Experiential Learning

Note: The experiential learning requirement is waived following a student presentation connected with a co-op and/or research experience. The requirement is often fulfilled by a talk at a Society of Physics Students meeting but can be fulfilled by an adequately documented presentation at a professional meeting or at an appropriate campus event. Contact your faculty advisor for additional information.		4
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PHYS 4996	Experiential Education Directed Study	4
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### Senior Capstone

PHYS 5318	Principles of Experimental Physics	4
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### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
<b>Computational Methods</b>		
PHYS 1211	Computational Problem Solving in Physics	4
or PHYS 1130	Computing, Data, and Science	
or GE 1111	Engineering Problem Solving and Computation	
<b>Biology</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211	5
<b>Technical Electives</b>		
Complete two of the following:		8
MATH 2280	Statistics and Software	
MATH 2321 to MATH 5999		
PHYS 2303 to PHYS 7999		
CHEM 2311 to CHEM 5999		
BIOL 2301 to BIOL 5999		
ENVR 2300 to ENVR 5999		
CS 2990 to CS 4900		
CHME 2001 to CHME 4699		
CIVE 2001 to CIVE 4699		
EECE 2001 to EECE 5999		
ME 2001 to ME 4699		
IE 2001 to IE 4699		

## Biomedical Physics Major Credit Requirement

Complete 97 semester hours in the major.

### Program Requirement

135 total semester hours required

### Plan of Study

#### Additional Recommended Courses for Premedical School Track

In addition to the required courses for the BS in Biomedical Physics, students who are pursuing the premed/health track are encouraged to enroll in the following courses, utilizing available elective slots:

Code	Title	Hours
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	5
CHEM 2313 and CHEM 2314 and CHEM 2320	Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313	5
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
MATH 2280	Statistics and Software	4

#### Note on Biomedical Physics Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

See course offering schedule at the end of the plans of study.

Please contact your academic adviser for additional information and plans of study.

#### FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1000	1	PHYS 1165	4	Vacation	0	Vacation	0
ENGW 1111	4	PHYS 1166	1				
MATH 1341	4	PHYS 1167	0				
PHYS 1161	4	MATH 1342	4				
PHYS 1162	1	PHYS 1211	4				
PHYS 1163	0	BIOL 1113	4				
BIOL 1111	4	BIOL 1114	1				
BIOL 1112	1						
	19		18		0		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	Co-op	0	Co-op	0	Vacation	0
PHYS 2371	3						
PHYS 2372	1						
MATH 2321	4						

CHEM 1211	4			
CHEM 1212	1			
CHEM 1213	0			
EESC 2000	1			
	18	0	0	0

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 4621	4	Co-op	0	Co-op	0	MATH 2341	4
PHYS 4623	4					PHYS 3600	4
Technical elective	4						
Elective	4						
	16	0	0	0			8

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 3602	4	Co-op	0	Co-op	0	PHYS 4305	4
PHYS 4651	4					Elective	4
Technical elective	4						
Elective	4						
	16	0	0	0			8

##### Year 5

Fall	Hours	Spring	Hours
PHYS 3603	4	PHYS 4652	4
ENGW 3307	4	PHYS 5318	4
Elective	4	PHYS advanced elective	4
Elective	4	Elective	4
	16	16	

Total Hours: 135

PHYS 2303 offered every fall & spring

PHYS 2305 offered every spring & summer 2 (even years)

PHYS 2371/2372 offered every fall

PHYS 3600 offered every summer 1 & summer 2

PHYS 3601 offered spring & fall (even years)

PHYS 3602 offered every fall & spring

PHYS 3603 offered fall (even years) & summer 1 (odd years)

PHYS 5115 offered every fall & spring

PHYS 5318 offered every spring

PHYS 4621 offered fall (even years) & spring (odd years)

PHYS 4623 offered fall & summer 1 (even years)

PHYS 4651 offered fall & spring (odd years)

PHYS 4652 offered every spring



## Mathematics and Physics, BS

Mathematics and physics have been linked since antiquity. By combining physics and mathematics you can take closely related courses in each discipline, such as statistical mechanics and stochastic processes, mechanics and dynamical systems, thermodynamics and Fourier Series, and quantum mechanics and partial differential equations. The two departments jointly offer a course in mathematical methods in physics.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Mathematics Requirements

Code	Title	Hours
<b>Calculus</b>		
A grade of C or higher is required:		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Math</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
MATH 3150	Real Analysis	4
MATH 3175	Group Theory	4
<b>Co-op Reflections</b>		
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
<b>Mathematics Elective</b>		
Complete one course in the following range:		4
MATH 3101 to MATH 4899		

### Physics Requirements

Code	Title	Hours
<b>Physics 1</b>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<b>Physics 2</b>		
Complete one of the following:		5

PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

### Intermediate Physics

PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4

### Advanced Physics

PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

### Elective Courses

Complete two courses in the following range:	8
PHYS 3000 to PHYS 7999	

### Integrative Courses

Code	Title	Hours
PHYS 3601	Classical Dynamics	4
MATH 4545 or MATH 4525	Fourier Series and PDEs Applied Analysis	4

### Combined Major Credit Requirement

Complete 83 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Notes on Physics courses in Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

Please contact your academic adviser for additional information and plans of study.

### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1341	4	MATH 1342	4	Vacation	0	Vacation	0
ENGW 1111	4	PHYS 1165	4				
Elective	4	PHYS 1166	1				
PHYS 1161	4	Elective	4				
PHYS 1162	1	Elective	4				
MATH 1000	1						
		18			17		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2321	4	MATH 2341	4	Vacation	0	Co-op	0
Elective	4	MATH 2331	4				
PHYS 2303	4	Elective	4				
PHYS 2371	3	EESC 2000	1				

PHYS 2372	1	PHYS 3601	4		
	16		17	0	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	0	PHYS 3602	4	PHYS 3600	4
		MATH 3150	4	MATH 3081	4
		Elective	4		
		MATH 3000	1		
		PHYS 4305	4		
	0		17	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	0	MATH 3175	4	Elective	4
		MATH elective	4	Elective	4
		PHYS undergraduate elective	4		
		ENGW 3315	4		
	0		16	8	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Co-op	0	PHYS undergraduate elective	4		
		PHYS undergraduate elective	4		
		MATH 4025	4		
		MATH 4545	4		
	0		16		

Total Hours: 133

## Computer Science and Physics, BS

The computer science and physics combined major brings together three disciplines: computer science, physics, and mathematics. The mathematics requirements serve as a foundation for both computer science and physics. From hands-on experience with sophisticated physics instruments, to mathematical theory, to the latest computational innovations, our interdisciplinary approach will prepare students for the myriad challenges in today's rapidly changing world.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

## Physics Courses

Code	Title	Hours
<b>Required Courses</b>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	5
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371 (Integrative course)	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

## Capstone and Electives

Code	Title	Hours
<b>Capstone</b>		
	Complete either one computer science capstone or the physics capstone:	4
<i>Computer Science Capstone</i>		
CS 4100	Artificial Intelligence	
CS 4300	Computer Graphics	
CS 4410	Compilers	
CS 4150	Game Artificial Intelligence	
CS 4550	Web Development	
<i>Physics Capstone</i>		
PHYS 5318	Principles of Experimental Physics	
<b>Khoury Elective</b>		

The computer science elective is not required if the student has completed the computer science capstone (above). With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Physics Elective

Only one physics elective is required if the student has completed the physics capstone (above).

Complete two courses in the following range: 8  
PHYS 3000 to PHYS 5999

### Integrative Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4

### Additional Mathematics Requirements

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4

### Supporting Course

Code	Title	Hours
Complete one of the following: 4		
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4

or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUPath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

136 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 MATH 1342	4 MATH 2321	4	
CS 2500 and CS 2501	5 PHYS 1165	4		
MATH 1341	4 PHYS 1166	1		
PHYS 1161	4 ENGW 1111	4		
PHYS 1162	1			
	20	18	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 2800 and CS 2801	5 CS 3000	4 Elective	4 Co-op	
MATH 2341	4 PHYS 3602	4 Elective	4	
PHYS 2371	3 PHYS 4305	4		
PHYS 2372	1 Computing and social issues	4		

PHYS 2303	4	CS 1210	1		
	17		17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 3800	4 PHYS 3600	4 Co-op	
	Elective	4 Elective	4	
	PHYS elective if CS capstone (Khoury elective if PHYS capstone)	4		
	CS or PHYS capstone	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
Co-op	CS 4500	4 Elective	4
	PHYS elective	4 Elective	4
	MATH 3081	4	
	ENGW 3302	4	
	0	16	8

Total Hours: 137

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 1800 and CS 1802	5 MATH 1342	4		
CS 2500 and CS 2501	5 PHYS 1165	4		
MATH 1341	4 PHYS 1166	1		
PHYS 1161	4 ENGW 1111	4		
PHYS 1162	1			
	20	18	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 3000	4 Vacation	0 Co-op	0
PHYS 2303	4 MATH 2321	4		
PHYS 2371	3 MATH 2341	4		
PHYS 2372	1 PHYS 4305	4		
CS 2800 and CS 2801	5 CS 1210	1		
	18	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 3800	4 PHYS 3600	4 Co-op	0
	Elective	4 Elective	4	
	PHYS 3602	4		

ENGW 3302	4			
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CS 4500	4 Elective	4 Co-op	0
	PHYS elective	4 Elective	4	
	MATH 3081	4		
	Computing and social issues	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 CS or PHYS capstone	4
	PHYS elective if CS capstone (Khoury elective if PHYS capstone)	4
	Elective	4
	Elective	4
	0	16

Total Hours: 137

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 MATH 1342	4		
PHYS 1161	4 PHYS 1165	4		
PHYS 1162	1 PHYS 1166	1		
CS 1200	1 ENGW 1111	4		
MATH 1341	4			
	20	18	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 Co-op	0 Co-op	0 Vacation	0
PHYS 2303	4			
PHYS 2371	3			
PHYS 2372	1			
CS 2800 and CS 2801	5			
CS 1210	1			
	19	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321	4 Co-op	0 Co-op	0 PHYS 3600	4
CS 3000	4		PHYS 4305	4

MATH 2341	4			
Elective	4			
	16	0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
CS 3800	4 Co-op	0 Co-op	0 Elective	4
Elective	4		Elective	4
PHYS 3602	4			
ENGW 3302	4			
	16	0	0	8
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
CS 4500	4 CS or PHYS capstone	4		
PHYS elective	4 PHYS elective if CS capstone (CS elective if PHYS capstone)	4		
MATH 3081	4 Elective	4		
Computing and social issues	4 Elective	4		
	16	16		

Total Hours: 137

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

## Data Science and Physics, BS

The data science and physics combined major brings together computer and data science, physics, and mathematics. The computer science and mathematics requirements serve as a foundation for both data science and physics. From hands-on experience with sophisticated physics instruments, to mathematical theory, to the latest computational innovations, our interdisciplinary approach is designed to prepare students for the myriad challenges in today's rapidly changing world.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Data Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Hourly Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of the two options		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

### Physics Courses

Code	Title	Hours
<b>Required Courses</b>		
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	5
PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	5
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4

PHYS 3603	Electricity and Magnetism 2	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 4115	Quantum Mechanics	4
or PHYS 5116	Complex Networks and Applications	
PHYS 4305	Thermodynamics and Statistical Mechanics	4

## Electives

Code	Title	Hours
<b>Khoury Elective</b>		

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four semester hours of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Physics Elective

Complete one course not already required in the following range:

PHYS 3000 to PHYS 5999	4
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## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4

### Advanced Writing in the Disciplines

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4

### Additional Mathematics Requirements

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4

## Integrative Course and Capstone

Code	Title	Hours
PHYS 5318	Principles of Experimental Physics	4

## Required General Electives

Code	Title	Hours
Complete 16 semester hours of general electives.		16

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

## Program Requirement

132 total semester hours required

## Plan of Study

Sample Patterns:

## Five Years, Three Co-ops in Summer 2/Fall

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0
CS 1800 and CS 1802	5	MATH 1342	4		
CS 2500 and CS 2501	5	PHYS 1165 and PHYS 1166 and PHYS 1167	5		
PHYS 1161 and PHYS 1162 and PHYS 1163	5	ENGW 1111	4		
MATH 1341	4				
		20	18	0	0
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 3500 and CS 3501	5	MATH 2341	4	CS 3200	4
PHYS 2303	4	PHYS 3601	4	MATH 3081	4
DS 3000	4	DS 4200	4		
MATH 2321	4	General elective	4		
		CS 1210	1		
		17	17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHYS 3602	4 PHYS 3600	4 Co-op	
	PHYS 4305	4 PHYS 3603	4	
	DS 4300	4		
	General elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4400	4 Vacation	Co-op	
	PHYS 4115 or 5116	4		
	ENGW 3307	4		
	Khoury elective	4		
	0	16	0	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	PHYS 5318	4
	PHYS XXXX advanced physics elective	4
	General elective	4
	General elective	4
	0	16

Total Hours: 136

**Four Years, Two Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 MATH 2331	4 MATH 2341	4
CS 1800 and CS 1802	5 MATH 1342	4 General elective	4 General elective	4
CS 2500 and CS 2501	5 PHYS 1165 and PHYS 1166 and PHYS 1167	5		
PHYS 1161 and PHYS 1162 and PHYS 1163	5 ENGW 1111	4		
MATH 1341	4			
	20	18	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 CS 1210	1 CS 3200	4 Co-op	0
DS 3000	4 DS 4200	4 MATH 3081	4	
PHYS 2303	4 ENGW 3307	4		

General elective	4 PHYS 3601	4		
	General elective	4		
	17	17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHYS 3602	4 PHYS 3600	4 Co-op	
	PHYS 4305	4 PHYS 3603	4	
	DS 4300	4		
	Khoury elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	DS 4400	4
	PHYS 5318	4
	PHYS 4115 or 5116	4
	PHYS XXXX advanced physics elective	4
	0	16

Total Hours: 136

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

**Physics and Music with Concentration in Music Technology, BS**

The combined major in physics and music provides a strong foundation in classical and modern physics, including studies of the various physical phenomena including electromagnetism, dynamics, building blocks of matter, energy, and radiation. It also provides students with a solid background in composition for acoustic and electronic instruments and for combined and/or interactive live and digital sources. The combined major allows students to learn how physical principles influence sound production and propagation.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
<i>Physics 2</i>		
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	5
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4
PHYS 5318	Principles of Experimental Physics	4

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

## Music Requirements

Code	Title	Hours
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
Complete two of the following: 8		
MUSC 3541	Music Analysis Seminar	
MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition	
<b>Music in Context</b>		
MUSC 1001	Music in Everyday Life	4
<i>Contemporary</i>		
Complete one course from the following: 4		
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	

MUSC 2317	Punk Rock	
MUSC 2310	Popular Music Since 1945	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	

<b>Music Technology</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4

<b>Music Technology Electives</b>		
Complete two of the following: 8		
MUSC 4510	Music and the Brain Research	
MUST 3540	Special Topics in Music Technology	
MUST 4610	Composition for Electronic Instruments	
MUST 4520		

<b>Music Technology Capstone</b>		
MUST 4611	Music Technology Capstone/Senior Recital	4

## Physics/Music Integrative Requirements

Code	Title	Hours
<b>Integrative Course Requirements</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4

## Physics and Music Combined-Major Credit Requirement

Complete 98 semester hours in the major.

## Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

## Program Requirement

131 total semester hours required

## Plan of Study

### Note on Physics courses in Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, **depending on the year of entry for that student.**

*See course offering schedule at the end of the plans of study.*

Please contact your academic adviser for additional information and plans of study.



**Five Years, Two Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 1000	1 PHYS 1165	4 Vacation	Vacation	
PHYS 1161	4 PHYS 1166	1		
PHYS 1162	1 PHYS 1167	0		
PHYS 1163	0 MATH 1342	4		
MATH 1341	4 MUST 1220	4		
MUSC 1001	4 Elective	4		
ENGW 1111	4			
	18	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 2303	4 PHYS 3602	4 Vacation	Vacation on ODD years. See offering schedule for even years	
MATH 2321	4 MATH 2341	4		
MUSC 1201	4 MUSC 1202	4		
Elective	4 MUSC 2350	4		
	16	16	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 2371	3 Co-op	Co-op	PHYS 3600	4
PHYS 2372	1		PHYS 4305	4
MUST 2431	4			
Elective	4			
EESC 2000	1			
MUSC 3541, 2111, or 3300	4			
	17	0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MUSC 3541, 2111, or 3300	4 Co-op	Co-op	Vacation	
MUST 3540	4			
PHYS 4115	4			
Music elective	4			
	16	0	0	0

Year 5		
Fall	Hours Spring	Hours
ENGW 3307	4 PHYS 5318	4
MUST 4610	4 MUST 4611	4
Elective	4	
Elective	4	
	16	8

Total Hours: 132

**FOUR YEARS, ONE CO-OP IN SPRING/SUMMER 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 1000	1 PHYS 1165	4 Vacation	Vacation	
PHYS 1161	4 PHYS 1166	1		
PHYS 1162	1 PHYS 1167	0		
PHYS 1163	0 MATH 1342	4		
MATH 1341	4 MUST 1220	4		
MUSC 1001	4 Elective	4		
ENGW 1111	4			
	18	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHYS 2303	4 MATH 2341	4 Vacation	PHYS 3600	4
PHYS 2371	3 MUSC 1202	4	Elective in ODD years, PHYS 4305 in EVEN years	4
PHYS 2372 <sup>3</sup>	1 MUSC 2350	4		
MATH 2321	4 PHYS 3602	4		
MUSC 1201	4			
	16	16	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MUST 2431	4 Co-op	Co-op	ENGW 3307	4
MUSC 3541, 2111, or 3300	4		PHYS 4305 (in EVEN years, Elective in ODD years.)	4
Music elective	4			
PHYS 4115	4			
EESC 2000	1			
	17	0	0	8

Year 4		
Fall	Hours Spring	Hours
MUSC 3541, 2111, or 3300	4 PHYS 5318	4
MUST 3540	4 MUST 4611	4
MUST 4610	4 Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 132

**Offerings schedule (subject to changes)**

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2 (**take in yr. 2 or 3, whichever is even**)
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)

- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (**take in yr. 2 or 3, whichever is even**)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

## Physics and Philosophy, BS

The combined major in physics and philosophy provides a strong foundation in classical and modern physics, including studies of the various physical phenomena including electromagnetism, dynamics, building blocks of matter, energy, and radiation. It also provides students with an understanding of the methods and traditions of philosophical thought, as well as with opportunities to critically and collaboratively reflect on the nature of the world and the human situation in it. Students will be able to describe the method by which physical "law" is made manifest in the sciences, how this knowledge compares with other epistemological models studied in other contexts, and philosophical views on the status and source of physical "law."

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<i>Physics 2</i>		
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4

PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

### Physics Elective

Complete one of the following:		4
MATH 4606	Mathematical and Computational Methods for Physics	
PHYS 5111	Astrophysics and Cosmology	
PHYS 5113	Particle Physics	
PHYS 5116	Complex Networks and Applications	
PHYS 5260	Introduction to Nanoscience and Nanotechnology	
PHYS 4621	Biological Physics 1	
PHYS 4623	Medical Physics	
PHYS 4651	Medical Physics Seminar 1	
PHYS 4652	Medical Physics Seminar 2	

### Philosophy Major Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 4500	Theory of Knowledge	4
or PHIL 3050	Information and Uncertainty	

### Philosophy Advanced Elective

Complete two of the following (not used to fulfill another requirement):		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	
<b>Additional Electives</b>		
Complete three PHIL courses.		12

**Physics/Philosophy Integrative Requirements**

Code	Title	Hours
<b>Integrative Course Requirements</b>		
PHIL 4510	Philosophy of Science	4
PHYS 3601	Classical Dynamics	4

**Breadth Courses**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

**Physics and Philosophy Major Credit Requirement**

Complete 98 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

132 total semester hours required

**Plan of Study****Notes on Physics Plans of Study**

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

See course offering schedule at the end of the plans of study.

Please contact your academic advisor for additional information and plans of study.

**Even-Numbered Year One****FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
PHYS 1000	1	PHYS 1165	4	Vacation	0
PHYS 1161	4	PHYS 1166	1		
PHYS 1162	1	PHYS 1167	0		
PHYS 1163	0	MATH 1342	4		
MATH 1341	4	PHIL 2325	4		
PHIL 1115	4	Elective	4		
ENGW 1111	4				
		18	17	0	0
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
PHYS 2303	4	MATH 2341	4	Vacation	0
PHYS 2371	3	PHIL elective	4		
PHYS 2372	1	PHIL elective	4		
MATH 2321	4	EESC 2000	1		

PHIL 2330	4	PHYS 3601	4		
		16	17	0	0
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	PHYS 4115	4	PHYS 3600	4
		PHYS elective	4	Elective	4
		PHIL 4500	4		
		PHIL elective	4		
		0	16	8	0
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	PHYS 3602	4	Elective	4
		PHIL 4510	4	Elective	4
		PHIL elective	4		
		ENGW 3307	4		
		0	16	8	0
Year 5					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	PHYS 4305	4		
		PHIL advanced elective	4		
		Elective	4		
		Elective	4		
		0	16		

Total Hours: 132

**FOUR YEARS, TWO CO-OPS IN SUMMER 2/FALL**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
PHYS 1000	1	PHYS 1165	4	MATH 2321	4
PHYS 1161	4	PHYS 1166	1	Elective	4
PHYS 1162	1	PHYS 1167	0		
PHYS 1163	0	MATH 1342	4		
MATH 1341	4	PHIL 2325	4		
PHIL 1115	4	PHIL 2330	4		
ENGW 1111	4				
		18	17	8	8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
PHYS 2303	4	PHYS 3601	4	PHYS 3600	4
PHYS 2371	3	PHYS 3602	4	Elective	4
PHYS 2372	1	PHIL elective	4		
PHIL elective	4	PHIL elective	4		
PHIL elective	4	EESC 2000	1		
		16	17	8	0
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	PHYS 4115	4	ENGW 3307	4
		PHYS elective	4	Elective	4
		PHIL 4500	4		

PHIL 4510		4
0	16	8
0		0
<b>Year 4</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
Co-op	0 PHYS 4305	4
	PHIL advanced elective	4
	Elective	4
	Elective	4
0	16	

Total Hours: 132

**OFFERING SCHEDULE (SUBJECT TO CHANGES)**

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

**Chemical Engineering and Physics, BSChE**

This intercollege combined major serves students who would like to explore their interest in physics while earning the benefit of a Bachelor of Science degree in chemical engineering. Upon completion, the successful student will understand the fundamental physics behind many chemical-based processes, resulting in the ability to design and practice in the field of engineering that deals with the movement of mass, heat transfer, and reactions involved in the processing of various materials.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

**Engineering**

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
PHYS 3600	Advanced Physics Laboratory	4
<b>Chemical Engineering Capstone</b>		
CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
<b>Mathematics/Science Requirement</b>		
Complete all Mathematics/Science courses with a minimum of 30 semester hours.		
Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4

PHYS 5318	Principles of Experimental Physics	4
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**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:	1
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GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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**Advanced Science Requirement**

Code	Title	Hours
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
PHYS 2303	Modern Physics	4
PHYS 4115	Quantum Mechanics	4
Complete one of the following:		5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	
CHEM 2317 and CHEM 2318	Organic Chemistry 2 for Chemistry Majors and Lab for CHEM 2317	

**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:	1
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GE 1501	Cornerstone of Engineering 1 <sup>1</sup>
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1 semester hour from the following course counts toward the professional development requirement:	1
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GE 1502	Cornerstone of Engineering 2 <sup>1</sup>
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**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 8 SH of academic, nonremedial, nonrepetitive courses.		8

**Major GPA Requirement**

2.000 minimum required in CHME courses

**Program Requirement**

135 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, One Co-op in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	CHME 2308	4	MATH 2321 (FQ)	4	Vacation	0
CHEM 1153	0	GE 1502 (ER)	4	PHYS 1155 (ND)	3		
ENGW 1111 (WF)	4	MATH 1342 (FQ)	4	PHYS 1156 (AD)	1		
GE 1000	1	PHYS 1151 (ND)	3	PHYS 1157	1		
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
	17		17		9		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2311	4	CHEM 2313	4	Vacation	0	Vacation	0
CHEM 2312	1	CHEM 2314	1				
CHME 2320	4	CHME 2310	4				
MATH 2341	4	CHME 3322	4				
PHYS 2371 (ND)	3	PHYS 2303 (ND)	4				
PHYS 2372 (EI)	1						
	17		17		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 3312	4	CHME 4315 (AD, WI)	4	PHYS 3600 (ND, AD, WI)	4	Co-op	0
CHME 3315 (AD)	4	CHME 4316	0	General Elective	4		
CHME 3316	0	CHME 4510	4				
ENGW 3302 or 3315 (WD)	4	CHME 4701	4				
General Elective	4	ENCP 2000	1				
		PHYS 3601 (ND)	4				
	16		17		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CHME 4703 (EI, CE, WI)	4				
		CHME 4705	0				
		ENCP 3000	1				
		PHYS 3602 (ND)	4				
		PHYS 4115 (ND, FQ)	4				

PHYS 5318 (ND, AD, WI, CE)	4
0	17

Total Hours: 135

## Five Years, Three Co-ops in Summer 2/Fall

### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 CHME 2308	4 MATH 2321 (FQ)	4 Vacation	0
CHEM 1153	0 GE 1502 (ER)	4 PHYS 1155 (ND)	3	
ENGW 1111 (WF)	4 MATH 1342 (FQ)	4 PHYS 1156 (AD)	1	
GE 1000	1 PHYS 1151 (ND)	3 PHYS 1157	1	
GE 1501	4 PHYS 1152 (AD)	1		
MATH 1341 (FQ)	4 PHYS 1153	1		
	17	17	9	0

### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 2311	4 CHEM 2313	4 Vacation	0 Co-op	0
CHEM 2312	1 CHEM 2314	1		
CHME 2320	4 CHME 2310	4		
MATH 2341	4 CHME 3322	4		
PHYS 2371 (ND)	3 ENCP 2000	1		
PHYS 2372 (EI)	1 PHYS 2303 (ND)	4		
	17	18	0	0

### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CHME 3312	4 PHYS 3600 (ND, AD, WI)	4 Co-op	0
	CHME 3315 (AD)	4 General Elective	4	
	CHME 3316	0		
	ENGW 3302 or 3315 (WD)	4		
	PHYS 3601 (ND)	4		
	0	16	8	0

### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CHME 4315	4 Vacation	0 Co-op	0
	CHME 4316	0		
	CHME 4510	4		
	CHME 4701	4		
	ENCP 3000	1		
	PHYS 3602 (ND)	4		
	0	17	0	0

### Year 5

Fall	Hours Spring	Hours
Co-op	0 CHME 4703 (EI, CE, WI)	4
	CHME 4705	0
	PHYS 4115 (ND, FQ)	4
	PHYS 5318 (ND, AD, WI, CE)	4
	General Elective	4
	0	16

Total Hours: 135

### Notes:

Physics courses are offered on the following schedule:

- PHYS 2303 offered every fall, spring and summer 2.
- PHYS 2371/2372 offered every fall.
- PHYS 3600 offered every summer 1 and summer 2.
- Classical Dynamics (PHYS 3601) is offered fall and spring semesters of even years only. Please meet with your Academic Advisor to discuss scheduling options for Year 4 of odd years.
- PHYS 3602 offered every fall and spring.
- PHYS 3603 offered fall (even years) and summer 1 (odd years).
- PHYS 4115 offered every fall and spring.
- PHYS 4305 offered every spring and summer 2 (even years).
- PHYS 4621 offered spring (odd years) and fall (even years).
- PHYS 4623 offered summer 1 and fall (even years).
- PHYS 4651 offered spring and fall (odd years).
- PHYS 4652 offered every spring.
- PHYS 5318 offered every spring.

## Computer Engineering and Physics, BSCmpE

This intercollege combined major serves students who would like to explore their interest in physics while earning the benefit of an accredited Bachelor of Science degree in engineering. The dual major combines a major in physics from the Department of Physics in the College of Arts and Sciences with the Bachelor of Science in Computer Engineering degree from the Department of Electrical and Computer Engineering.

Because of the large body of shared knowledge between computer engineering and physics, an integrated dual major between these two disciplines is a logical course of study and can be accomplished within a student's usual five-year program (including three co-op placements) without requiring course overloading in any semester. A student graduating from this program will have studied both the physical fundamentals and computer systems.

Students interested in this program should contact the Department of Electrical and Computer Engineering or the Department of Physics as early as possible, preferably prior to registering for freshman courses.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses

where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements through general electives.

## Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2140	Computing Fundamentals for Engineers	4
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Computer Engineering Fundamentals</b>		
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
EECE 2560	Fundamentals of Engineering Algorithms	4
<b>Electrical Engineering Fundamentals</b>		
If more than one electrical engineering fundamentals course is taken, it can count as a technical elective.		
Complete one of the following: 4		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	
EECE 2520	Fundamentals of Linear Systems	
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	
<b>Computer Engineering Capstone Courses</b>		
EECE 4791	Electrical and Computer Engineering Capstone 1	1
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>Technical Electives</b>		
Students can register for EECE 4991 / EECE 4992 / EECE 4993 more than once. For these courses combined, a maximum of 8 semester hours will be allowed to satisfy the requirement of technical electives. An additional 4 semester hours will be allowed as a general elective. At most, one of these courses (4 semester hours) can be taken in a semester.		
Though students may register for EECE 2750 more than once, only 4 semester hours will be allowed to satisfy the requirements of technical electives. An additional 4 semester hours will be allowed as a general elective.		
Complete two of the following: 8		
EECE 2412 to EECE 2530		
EECE 2750	Enabling Engineering	

EECE 3324 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5115 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
One CS/CY/IS course from the following approved list may be taken toward the EECE technical elective requirement:		
CS 3200	Database Design	
CS 3500	Object-Oriented Design	
CS 3540 to CS 3800		
CS 4100 to CS 4770		
CS 4850	Building Game Engines	
CY 2550	Foundations of Cybersecurity	
IS 4200 to IS 4700		
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
<b>Mathematics/Science</b>		
Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
Complete one of the following:		5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
Complete one of the following:		5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	
PHYS 2303	Modern Physics	4
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4

PHYS 4115	Quantum Mechanics	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

**Advanced Physics Elective**

Complete one of the following: 4

MATH 4606	Mathematical and Computational Methods for Physics	
PHYS 3600 to PHYS 7999		

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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**Professional Development**

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	
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**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 8 semester hours of academic, nonremedial, nonrepetitive courses.		
		8

**Integrative Requirement**

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
EECE 4791	Electrical and Computer Engineering Capstone 1	1

**Major GPA Requirement**

2.000 minimum GPA required in EECE courses

**Program Requirement**

133 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.**Plan of Study****Four Years, One Co-op in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ENGW 1111 (WF)	4	MATH 2341	4	Vacation	4
CHEM 1153	0	GE 1502 (ER)	4				
GE 1000	1	MATH 1342 (FQ)	4				
GE 1501	4	PHYS 1165 or 1155 (ND)	4				
MATH 1341 (FQ)	4	PHYS 1166 or 1156 (AD)	1				
PHYS 1161 or 1151 (ND)	4	PHYS 1167 or 1157	0				
PHYS 1162 or 1152 (AD)	1						
PHYS 1163 or 1153	0						
	18		17		4		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2140	4	CS 1800 (FQ)	4	Vacation	4	Vacation	4
EECE 2160	4	CS 1802	1				
ENCP 2000	1	EECE 2150 (AD)	5				
MATH 2321 (FQ)	4	PHYS 4305 (ND)	4				
PHYS 2303 (ND)	4	CE fundamentals	4				
	17		18		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 3602 (ND)	4	Co-op	4	Co-op	4	EECE 4791 (EI, WI, CE)	1
CE fundamentals	5					ENGW 3302 or 3315 (WD)	4
CE fundamentals	4					PHYS 3600 (ND, AD, WI)	4
General elective	4						
	17		0		0		9
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 4792 (EI, WI, CE)	4	EE fundamentals	4				
ENCP 3000	1	EECE technical elective	4				
MATH 3081 (AD)	4	General elective	4				
PHYS 4115 (ND, FQ)	4	PHYS advanced elective	4				



EECE technical elective	4			
	17	16		

Total Hours: 133

### Five Years, Three Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 ENGW 1111 (WF)	4 Vacation	0 Vacation	0
CHEM 1153	0 GE 1502 (ER)	4		
GE 1000	1 MATH 1342 (FQ)	4		
GE 1501	4 PHYS 1165 or 1155 (ND)	4		
MATH 1341 (FQ)	4 PHYS 1166 or 1156 (AD)	1		
PHYS 1161 or 1151 (ND)	4 PHYS 1167 or 1157	0		
PHYS 1162 or 1152 (AD)	1			
PHYS 1163 or 1153	0			
	18	17	0	0

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EECE 2140	4 CS 1800 (FQ)	4 Vacation	0 Co-op	0
MATH 2321 (FQ)	4 CS 1802	1		
MATH 2341	4 EECE 2150 (AD)	5		
PHYS 2303 (ND)	4 EECE 2160	4		
	ENCP 3000	1		
	PHYS 3602 (ND)	4		
	16	19	0	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 PHYS 4115 (ND, FQ)	4 PHYS 3600 (ND, AD, WI)	4 Co-op	0
	CE fundamentals	5		
	CE fundamentals	4		
	CE fundamentals	4		
	0	17	4	0

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENCP 3000	1 EECE 4791 (EI, WI, CE)	1 Co-op	0
	MATH 3081 (AD)	4 ENGW 3302 or 3315 (WD)	4	

PHYS 4305 (ND)	4 EECE technical elective	4
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EE fundamentals	4		
General elective	4		
	0	17	9

#### Year 5

Fall	Hours Spring	Hours
Co-op	0 EECE 4792 (EI, WI, CE)	4
	EECE technical elective	4
	General elective	4
	PHYS advanced elective	4
	0	16

Total Hours: 133

#### Notes:

The capstone design courses are taken as follows: (Electrical and Computer Engineering Capstone 1 (EECE 4791)—summer 1 and Electrical and Computer Engineering Capstone 2 (EECE 4792)—spring) OR (Electrical and Computer Engineering Capstone 1 (EECE 4791)—summer 2 and Electrical and Computer Engineering Capstone 2 (EECE 4792)—fall).

Physics courses are offered on the following schedule:

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

### Electrical Engineering and Physics, BSEE

This intercollege combined major serves students who would like to explore their interest in physics while earning the benefit of an accredited Bachelor of Science degree in engineering. The major combines a major in physics from the Department of Physics in the College of Science with the Bachelor of Science in Electrical Engineering degree from the Department of Electrical and Computer Engineering.

Because of the large body of shared knowledge between electrical engineering and physics, a combined major between these two disciplines is a logical course of study and can be accomplished within a student's usual five-year program (including three co-op

placements) without requiring course overloading in any semester. A student graduating from this program will have studied both the physical fundamentals and the applications of electronic devices and systems. The program is a particularly appropriate course of study for students who wish to pursue a career in solid-state devices, microelectromechanical systems, or nanotechnology.

Students interested in this program should contact the Department of Electrical and Computer Engineering or the Department of Physics as early as possible, preferably prior to registering for freshman courses.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2140	Computing Fundamentals for Engineers	4
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Electrical Engineering Fundamentals</b>		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	5
EECE 2520	Fundamentals of Linear Systems	4
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	5
<b>Computer Engineering Fundamentals</b>		
If more than one computer engineering fundamentals course is taken, it can count as a technical elective.		
Complete one of the following:		4-5
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2560	Fundamentals of Engineering Algorithms	
<b>Electrical Engineering Capstone Courses</b>		
EECE 4791	Electrical and Computer Engineering Capstone 1	1
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>EECE Technical Electives</b>		

Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8 semester hours will be allowed to satisfy the requirement of technical electives. An additional 4 semester hours will be allowed as a general elective. At most, one of these courses (4 semester hours) can be taken in a semester.

Though students may register for EECE 2750 more than once, only 4 semester hours will be allowed to satisfy the requirements of technical electives. An additional 4 semester hours will be allowed as a general elective.

Complete two of the following:		8-9
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540 to EECE 2750		
EECE 3324 to EECE 3410		
EECE 4512 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5115 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:		2
EECE 3468	Noise and Stochastic Processes	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

### Mathematics/Science

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
Complete one of the following:		5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
Complete one of the following:		5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	4
PHYS 2303	Modern Physics	4
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

**Advanced Physics Elective**

Complete one of the following:		4
MATH 4606	Mathematical and Computational Methods for Physics	
PHYS 3600 to PHYS 7999		

**Supplemental Credit**

2 semester hours from the following course count toward the mathematics/science requirement:		2
EECE 3468	Noise and Stochastic Processes	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

**Professional Development**

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1
<b>Additional Required Courses</b>		
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 12 semester hours of academic, nonremedial, nonrepetitive courses.		12

**Major GPA Requirement**

2.000 minimum GPA required in EECE courses

**Program Requirement**

133 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.**Plan of Study****Four Years, One Co-op in Spring/Summer 1****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ENGW 1111 (WF)	4	MATH 2341	4	Vacation	4
CHEM 1153	0	GE 1502 (ER)	4				
GE 1000	1	MATH 1342 (FQ)	4				
GE 1501	4	PHYS 1165 or 1155 (ND)	4				
MATH 1341 (FQ)	4	PHYS 1166 or 1156 (AD)	1				
PHYS 1161 or 1151 (ND)	4	PHYS 1167 or 1157	0				
PHYS 1162 or 1152 (AD)	1						
PHYS 1163 or 1153	0						
		18		17		4	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2140	4	EECE 2160	4	Vacation		Vacation	
EECE 2150 (AD)	5	PHYS 4305 (ND)	4				
MATH 2321 (FQ)	4	EE fundamentals	5				
PHYS 2303 (ND)	4	EE fundamentals	5				
		17		18		0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 2000	1	Co-op		Co-op		EECE 4791 (EI, WI, CE)	1
ENGW 3302 or 3315 (WD)	4					PHYS 3600 (ND, AD, WI)	4
PHYS 3602 (ND)	4					General elective	4
EE fundamentals	4						
CE fundamentals	4						
		17		0		0	9

**Year 4**

Fall	Hours	Spring	Hours
EECE 3468	4	EECE technical elective	4
EECE 4792 (EI, WI, CE)	4	EECE technical elective	4
ENCP 3000	1	General elective	4

PHYS 4115 (ND, FQ)	4	PHYS advanced elective	4
General elective	4		
	17		16

Total Hours: 133

## Five Years, Three Co-ops in Summer 2/Fall

### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours				
ENGW 1111 (WF)	4	CHEM 1151 (ND)	4	Vacation	0	Vacation	0	
GE 1000	1	CHEM 1153	0					
GE 1501	4	GE 1502 (ER)	4					
MATH 1341 (FQ)	4	MATH 1342 (FQ)	4					
PHYS 1161 or 1151 (ND)	4	PHYS 1165 or 1155 (ND)	4					
PHYS 1162 or 1152 (AD)	1	PHYS 1166 or 1156 (AD)	1					
PHYS 1163 or 1153	0	PHYS 1167 or 1157	0					
	18		17		0		0	

### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours				
EECE 2140	4	EECE 2150 (AD)	5	Vacation	0	Co-op	0	
MATH 2321 (FQ)	4	EECE 2160	4					
MATH 2341	4	ENCP 2000	1					
PHYS 2303 (ND)	4	PHYS 3602 (ND)	4					
		General elective	4					
	16		18		0		0	

### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours				
Co-op	0	ENGW 3302 or 3315 (WD)	4	PHYS 3600 (ND, AD, WI)	4	Co-op	0	
		PHYS 4115 (ND, FQ)	4	General elective	4			
		EE fundamentals	4					
		EE fundamentals	5					
	0		17		8		0	

### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours				
Co-op	0	EECE 3468	4	EECE 4791 (EI, WI, CE)	1	Co-op	0	
		ENCP 3000	1	EECE technical elective	4			
		PHYS 4305 (ND)	4	General elective	4			

	CE fundamentals	4		
	EE fundamentals	5		
	0	18	9	0

### Year 5

Fall	Hours Spring	Hours	
Co-op	0	EECE 4792 (EI, WI, CE)	4
		EECE technical elective	4
		PHYS advanced elective	4
	0	12	

Total Hours: 133

## Notes

The capstone design courses are taken as follows: (EECE 4791—summer 1 and EECE 4792—spring) OR (EECE 4791—summer 2 and EECE 4792—fall).

Physics courses are offered on the following schedule:

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

## Mechanical Engineering and Physics, BSME

This undergraduate program takes advantage of the physical similarities between mechanical engineering and physics, providing students with the opportunity to pursue studies that explore both topics. The program culminates with mechanical engineering capstone design.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475	Fluid Mechanics	4
or ME 3480	International Applications of Fluid Mechanics	
ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5
ME 4508	Mechanical Engineering Computation and Design	4
ME 4550	Mechanical Engineering Design	4
ME 4555	System Analysis and Control	4
ME 4570	Thermal Systems Analysis and Design	4
<b>Mechanical Engineering Capstone</b>		
MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5
<b>Supplemental Credit</b>		
2 semester hours from the following course counts toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course counts toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

## Mathematics/Science Requirement

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	5
PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	5

PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 5318	Principles of Experimental Physics	4

### Advanced Physics Elective

Complete one 4 semester hour course from the below list:		4
PHYS 4606	Mathematical and Computational Methods for Physics	
PHYS 4621	Biological Physics 1	
PHYS 4623	Medical Physics	
PHYS 4651	Medical Physics Seminar 1	
PHYS 4652	Medical Physics Seminar 2	
PHYS 5111	Astrophysics and Cosmology	
PHYS 5113	Particle Physics	
PHYS 5116	Complex Networks and Applications	
PHYS 5260	Introduction to Nanoscience and Nanotechnology	

### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

## Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1
<b>Additional Required Courses</b>		
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

## Writing Requirements

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Required General Electives

Code	Title	Hours
Complete 8SH of academic, nonremedial, nonrepetitive courses.		8

**Integrative Requirement**

Code	Title	Hours
PHYS 5318	Principles of Experimental Physics	

This course is already required above and also fulfills the integrative requirement.

**Major GPA Requirement**

2.000 minimum GPA required in IE, ME, and MEIE courses

**Program Requirement**

139 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study****Four Years, One Co-op in Summer 2 / Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 ENGW 1111 (WF)	4 Vacation	0 Vacation	0
CHEM 1153	0 GE 1502 (ER)	4		
GE 1000	1 MATH 1342 (FQ)	4		
GE 1501	4 PHYS 1165 (ND)	4		
MATH 1341 (FQ)	4 PHYS 1166 (AD)	1		
PHYS 1161 (ND)	4 PHYS 1167	0		
PHYS 1162 (AD)	1			
	18	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321 (FQ)	4 ENCP 2000	1 ME 3475 or 3480	4 Vacation	
ME 2340 (WI)	4 MATH 2341	4 PHYS 3600 (ND, AD, WI)	4	
ME 2341	1 ME 2355	4		
ME 2350	4 ME 2356	1		
PHYS 2303 (ND)	4 ME 2380	4		
	ME 2381	0		
	PHYS 3601 (ND)	4		
	17	18	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3302 or 3315 (WD)	4 ME 3455	4 ME 4550	4 Co-op	0
ME 4505 (AD)	4 ME 3456	1 MEIE 4701 (EI, CE, WI)	1	
ME 4506	1 ME 4508	4 General Elective	4	
PHYS 2371 (ND)	3 ME 4570	4		

PHYS 2372 (EI)	1	PHYS 3602 (ND)	4		
General Elective	4				
	17	17	9	0	

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENCP 3000	1		
	ME 4555	4		
	MEIE 4702 (EI, CE, WI)	5		
	PHYS 5318 (ND, AD, WI, CE)	4		
	Advanced Physics Elective	4		
	0	18		

Total Hours: 139

**Five Years, Three Co-ops in Summer 2 / Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 ENGW 1111 (WF)	4 Vacation	0 Vacation	0
CHEM 1153	0 GE 1502 (ER)	4		
GE 1000	1 MATH 1342 (FQ)	4		
GE 1501	4 PHYS 1165 (ND)	4		
MATH 1341 (FQ)	4 PHYS 1166 (AD)	1		
PHYS 1161 (ND)	4			
PHYS 1162 (AD)	1			
	18	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321 (FQ)	4 ENCP 2000	1 Vacation	0 Co-op	0
MATH 2341	4 ME 2340 (WI)	4		
ME 2350	4 ME 2341	1		
PHYS 2371 (ND)	3 ME 2355	4		
PHYS 2372 (EI)	1 ME 2356	1		
	ME 2380	4		
	ME 2381	0		
	PHYS 2303 (ND)	4		
	16	19	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3302 or 3315 (WD)	4 ME 3475 or 3480	4 Co-op	0

	ME 3455	4	PHYS 3600 (ND, AD, WI)	4	
	ME 3456	1			
	ME 4508	4			
	PHYS 3602 (ND)	4			
	0	17		8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	0	ENCP 3000	1	ME 4550	4
		ME 4505 (AD)	4	MEIE 4701 (EI, WI, CE)	1
		ME 4506	1	General Elective	4
		ME 4555	4		
		ME 4570	4		
		PHYS 3601 (ND)	4		
	0		18		9
					0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Co-op	0	MEIE 4702 (EI, WI, CE)	5		
		PHYS 5318 (ND, AD, CE, WI)	4		
		Advanced Physics Elective	4		
		General Elective	4		
	0		17		

Total Hours: 139

**Notes:**

Physics courses are offered on the following schedule:

- PHYS 2303 offered every fall, spring and summer 2.
- PHYS 2371/2372 offered every fall.
- PHYS 3600 offered every summer 1 and summer 2.
- Classical Dynamics (PHYS 3601) is offered fall and spring semesters of even years only. Please meet with your COS Academic Advisor to discuss scheduling options for Year 4 of odd years.
- PHYS 3602 offered every fall and spring.
- PHYS 3603 offered fall (even years) and summer 1 (odd years).
- PHYS 4115 offered every fall and spring.
- PHYS 4305 offered every spring and summer 2 (even years).
- PHYS 4621 offered spring (odd years) and fall (even years).
- PHYS 4623 offered summer 1 and fall (even years).
- PHYS 4651 offered spring and fall (odd years).
- PHYS 4652 offered every spring.
- PHYS 5318 offered every spring.

**Physics, Minor**

The physics minor provides a foundation in classical and modern physics and allows students to explore more advanced topics in physics through elective choices.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
Complete one of the following sequences:		10

**Physics 1 and 2**

PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	

**Physics for Engineering 1 and 2**

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

**Modern Physics**

Code	Title	Hours
PHYS 2303	Modern Physics	4

**Elective Courses**

Code	Title	Hours
Complete two of the following:		8

MATH 4606	Mathematical and Computational Methods for Physics	
PHYS 2300 to PHYS 5999		

**GPA Requirement**

2.000 GPA required in the minor

**Psychology**Website (<http://www.northeastern.edu/psychology/>)**Peter Bex, PhD**

Professor and Chair

617.373.3076

617.373.8714 (fax)

Studies in modern psychology focus on mind, brain, and behavior. Based on empirical research with both humans and animals, psychologists investigate and seek explanations for the behavior and mental life of individuals, develop assessment tools and treatment options for addressing clinical problems, and test applications of psychology in a broad range of contexts.

The psychology curriculum explores such topics as how brain function determines behavior; how we see, hear, and learn; what constitutes personality; the nature of language and cognitive processing; how emotions affect behavior; how individuals work in groups; the efficacy of a range of therapeutic techniques; and how principles of psychology apply to educational, medical, and other settings. Through laboratory practice and experimentation, individual research projects, and small-group seminars, the program provides the opportunity for critical evaluation and in-depth exploration across the diverse topic areas that constitute modern psychology.

Students are eligible for directed study courses, which are individualized research experiences under the supervision of a faculty member. The department also offers honors sections of various courses. Co-op placements are varied and include both community (often mental health) and laboratory settings, depending on a student's interests.

A solid scientific background in psychology helps prepare students for academic careers in teaching and research, as well as professional careers in business, public and social services, education, mental health, law, and medicine. It also provides a strong foundation for graduate study in all areas of psychology, including clinical programs and programs in experimental and applied psychology.

*Note:* A double major in psychology and behavioral neuroscience is not offered due to the similarity in the course curricula of these majors.

## Programs

### Bachelor of Science (BS)

- Psychology (p. 783)
- American Sign Language and Psychology (p. 788)
- Business Administration and Psychology (p. 270)
- Computer Science and Cognitive Psychology (p. 341)
- Criminal Justice and Psychology (p. 793)
- Data Science and Psychology (p. 426)
- Economics and Psychology (p. 797)
- Health Science and Psychology (p. 550)
- Linguistics and Psychology (p. 681)
- Mathematics and Psychology (p. 750)
- Psychology and Music (p. 226)

### Minor

- Psychology (p. 807)

## Psychology, BS

The Bachelor of Science degree program in psychology is designed to provide a research-based undergraduate education for students with a broad range of interests in basic and applied psychology. Psychology majors engage in academic course work and other experiences that span the breadth of psychology, as well as in-depth explorations that meet their own specific interests. Students have an opportunity to take fundamental and advanced courses spanning biological psychology, cognition, social psychology, personality psychology, sensation and perception, clinical psychology, applied psychology, learning and motivation, developmental psychology, and other subfields of psychology. By its very nature, psychology is a wide-ranging, cross-cutting field of study, and we encourage and offer interdisciplinary explorations via a highly flexible interdisciplinary cluster of courses that counts toward the BS curriculum, strong ties to other departments and programs, and experiential education to enhance the learning process, including conducting

research in faculty laboratories and participation in Northeastern's co-op program.

### ACADEMIC PROGRESSION STANDARDS

Students who fail to maintain a minimum grade-point average of 2.000 will be placed on probation. Three consecutive academic terms on probation will result in dismissal from the major.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Psychology Major Requirements

Code	Title	Hours
<b>Introductory Course</b>		
PSYC 1101	Foundations of Psychology	4
<b>Personal/Social Bases of Behavior (Area A)</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Biological/Cognitive Bases of Behavior (Area B)</b>		
Complete two of the following:		8
PSYC 3450	Learning and Motivation	
	or PSYC 3451	Learning Principles and Behavior Analysis
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Statistics</b>		
Complete one of the following options:		4-5
PSYC 2320	Statistics in Psychological Research	
MATH 2280 and PSYC 2315	Statistics and Software and Statistics in Psychological Research Supplement <sup>1</sup>	
<b>Psychology Seminar</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	



PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

**Lab Requirement**

Complete two psychology lab courses OR one psychology lab course and one psychology directed study research or honors thesis: 8

*Lab*

PSYC 4600	Laboratory in Research Design
PSYC 4606	Laboratory in Biological Psychology
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4612	Laboratory in Cognition
PSYC 4614	Laboratory in Social Psychology
PSYC 4616	Laboratory in Personality
PSYC 4622	Laboratory in Sensation and Perception
PSYC 4624	Laboratory in Affective Science
PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4628	Laboratory in Developmental Psychology

*Directed Study Research or Honors Thesis*

PSYC 4991	Directed Study Research
or PSYC 4971	Junior/Senior Honors Project 2

<sup>1</sup> PSYC 2315 requires a departmental signature. This option is most common when using transfer credit.

**Psychology Required Electives**

Code	Title	Hours
Complete five PSYC courses.		20

**Supporting Courses****INTERDISCIPLINARY CLUSTER**

Code	Title	Hours
Complete three of the following courses. Choose from one group only. Students may petition to create their own interdisciplinary cluster.		11-15

**Educational Psychology**

EDUC 1111	Education in the Community
EDUC 5503	Culture, Equity, Power, and Influence
EDUC 5504	Child and Adolescent Development, Learning, and Teaching
EDUC 5570	Inclusion, Equity, and Diversity

**Society and Psychology**

ANTH 1101	Peoples and Cultures
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective
ANTH 2315	Religion and Modernity
LING 3412	Language and Culture
SOCL 1255	Sociology of the Family
SOCL 1260	Gender in a Changing Society
SOCL 1295	Drugs and Society

**Forensic Psychology**

CHEM 1107	Introduction to Forensic Science
CRIM 1120	Criminology
CRIM 3110	Gender, Crime, and Justice

CRIM 3120	Race, Crime, and Justice
<b>Cross-Cultural Psychology</b>	
ANTH 1101	Peoples and Cultures
LING 3412	Language and Culture
LING 3442	Sociolinguistics

**Expressive Therapy**

ARTF 1121	Conceptual Drawing
MUSC 1118	Music Therapy 1
THTR 1130	Introduction to Acting

**Counseling and Applied Psychology**

CAEP 3480	Counseling Theories and Practice
CAEP 3485	Mental Health and Counseling
HUSV 2300	Counseling in Human Services
HUSV 3520	Child Intervention and Treatment

**Artificial Intelligence and Information Science**

CS 3800	Theory of Computation
CS 4100	Artificial Intelligence
CS 4120	Natural Language Processing
IS 2000	Principles of Information Science
IS 4300	Human Computer Interaction

**Language**

DEAF 2700	ASL Linguistics
LING 2350	Linguistic Analysis
LING 3412	Language and Culture
LING 3422	Phonology
LING 3434	Bilingualism
LING 3442	Sociolinguistics
LING 3450	Syntax
LING 3452	Semantics
LING 3456	Language and Gender
SLPA 1205	Speech and Hearing Science

**Human Factors**

IS 2000	Principles of Information Science
IS 3500	Information System Design and Development
IS 4200	Information Retrieval
IS 4300	Human Computer Interaction
IS 4800	Empirical Research Methods

**Child and Adolescent Abnormal Psychology**

CRIM 2320	Youth Crime and Justice
HUSV 3520	Child Intervention and Treatment
HUSV 3580	Sexual Violence: Counseling, Programs, and Policy
SOCL 1295	Drugs and Society

**Human Resource Management and Business**

INTB 3310	Cultural Aspects of International Business
MISM 2301	Management Information Systems
MKTG 2209	Introduction to Marketing
ORGB 3201	Organizational Behavior
PHIL 1170	Business, Ethics, and Human Rights
SOCL 1280	The Twenty-First-Century Workplace

**Philosophy of Science and Psychology**

PHIL 1105	Science and Pseudoscience
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PHIL 1115	Introduction to Logic
PHIL 4510	Philosophy of Science
PHIL 4535	Philosophy of Mind

**Ethics**

PHIL 1130	Ethics: East and West
PHIL 1165	Moral and Social Problems in Healthcare
PHIL 1170	Business, Ethics, and Human Rights
PHIL 1180	Environmental Ethics
PHIL 3435	Moral Philosophy

**Biological and Chemical Sciences**

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113
BIOL 1141	Microbes and Society
BIOL 1147	The Human Organism
BIOL 1149	Biology of Human Reproduction
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219
BIOL 3403	Animal Behavior
BIOL 3405	Neurobiology
BIOL 5585	Evolution
CHEM 1101 and CHEM 1102	General Chemistry for Health Sciences and Lab for CHEM 1101
CHEM 1104 and CHEM 1105	Organic Chemistry for Health Sciences and Lab for CHEM 1104
CHEM 1107	Introduction to Forensic Science
CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211
CHEM 1214 and CHEM 1215	General Chemistry 2 and Lab for CHEM 1214
EEMB 1450	Introduction to Marine Biology
EEMB 2302	Ecology

**Physical Sciences and Mathematics**

In addition to the following courses, any math skill course may be used with advisor approval:

ENVR 1101	Environmental Science
ENVR 1110	Global Climate Change
ENVR 1120	Oceans and Coasts
ENVR 1200	Dynamic Earth
ENVR 2200	Earth's Changing Cycles
ENVR 3418	Geophysics
MATH 4581	Statistics and Stochastic Processes

or any PHYS course

**Health and Wellness**

BIOL 1141	Microbes and Society
BIOL 1143	Biology and Society
BIOL 1147	The Human Organism
BIOL 1149	Biology of Human Reproduction
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217
COMM 3201	Health Communication

HSCI 1105	Human Nutrition
HSCI 1106	Contemporary Issues in Nutrition
HSCI 5230	Clinical Nutrition Applications in Health and Disease
NRSG 1205	Wellness
PHIL 1165	Moral and Social Problems in Healthcare
PHIL 1180	Environmental Ethics
PHIL 1185	The Ethics of Food
PT 1880	Introduction to Sports Medicine
SOCL 1295	Drugs and Society

**Communication, Culture, and Society**

COMM 1131	Sex, Relationships, and Communication
COMM 1255	Communication in a Digital Age
COMM 2105	Social Networks
COMM 2304	Communication and Gender
COMM 2551	Free Speech in Cyberspace
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4625	Online Communities
LING 3412	Language and Culture
LING 3442	Sociolinguistics
LING 3456	Language and Gender

**Social Work Track**

HUSV 1101	Social Change and Human Services
HUSV 2355	Race, Identity, Social Change, and Empowerment
HUSV 2970	Research Methods for Human Services
HUSV 3900	Social Policy

**MATHEMATICS REQUIREMENT**

Code	Title	Hours
Complete one of the following courses:		4
CS 1800	Discrete Structures	
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1242	Calculus 2	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342	Calculus 2 for Science and Engineering	

**BS in Psychology Major Credit Requirements**

Complete 68 semester hours in the major. A maximum of 34 semester hours of transfer credit is allowed in the major. *Note:* Up to 12 semester hours of psychology-related electives will count toward the major *only after* the "Interdisciplinary Cluster" section has been completed.

**Program Requirement**

128 total semester hours required

**Plan of Study****Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 1101	4 PSYC area A elective	4 Vacation	0 Vacation	0
ENGW 1111	4 PSYC elective	4		
Math requirement	4 Elective	4		
PSYC 1214 (or other PSYC elective)	4 Elective	4		
PSYC 1000	1			
	17	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 2320	4 PSYC area A elective	4 Vacation	0 Co-op	0
PSYC area B elective	4 PSYC area B elective	4		
Elective	4 PSYC interdisciplinary cluster	4		
Elective	4 Elective	4		
	EESC 2000	1		
	16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 PSYC elective	4 Elective	4 Co-op	0
	PSYC lab elective	4 Elective	4	
	ENGW 3315	4		
	Elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 PSYC lab elective	4 Elective	4 Co-op	0
	PSYC elective	4 Elective	4	
	PSYC interdisciplinary cluster	4		
	Elective	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 PSYC seminar elective	4

PSYC interdisciplinary cluster	4
PSYC elective	4
Elective	4
0	16

Total Hours: 130

**Five Years, Three Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 1101	4 PSYC area A elective	4 Vacation	0 Vacation	0
ENGW 1111	4 PSYC elective	4		
Math requirement	4 Elective	4		
PSYC 1214 (or other PSYC elective)	4 Elective	4		
PSYC 1000	1			
	17	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 2320	4 Co-op	0 Co-op	0 Elective	4
PSYC area B elective	4		Elective	4
Elective	4			
Elective	4			
EESC 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC area A elective	4 Co-op	0 Co-op	0 Elective	4
PSYC area B elective	4		Elective	4
ENGW 3315	4			
Elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC lab elective	4 Co-op	0 Co-op	0 Vacation	0
PSYC elective	4			
PSYC interdisciplinary cluster	4			
Elective	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
PSYC lab elective	4 PSYC seminar elective	4
PSYC elective	4 PSYC elective	4
PSYC interdisciplinary cluster	4 PSYC interdisciplinary cluster	4
Elective	4 Elective	4
	16	16

Total Hours: 130

**Four Years, Two Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 1101	4 PSYC area A elective	4 PSYC elective	4 Vacation	
ENGW 1111	4 PSYC elective	4 Elective	4	
Math requirement	4 Elective	4		
PSYC 1214 (or other PSYC elective)	4 Elective	4		
PSYC 1000	1			
	17	16	8	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 2320	4 PSYC area A elective	4 Elective (or AP credit, etc.)	4 Co-op	
PSYC area B elective	4 PSYC area B elective	4 Elective (or AP credit, etc.)	4	
PSYC elective	4 PSYC elective	4		
PSYC interdisciplinary cluster	4 PSYC interdisciplinary cluster	4		
EESC 2000	1			
	17	16	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PSYC lab elective	4 Elective (or AP credit, etc.)	4 Co-op	
	ENGW 3315	4 Elective (or AP credit, etc.)	4	
	PSYC interdisciplinary cluster	4		
	Elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PSYC lab elective	4 Elective	4 Vacation	
	PSYC seminar elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0

Total Hours: 130

**Four Years, Two Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 1101	4 PSYC area A elective	4 PSYC elective	4 Vacation	
ENGW 1111	4 PSYC elective	4 Elective	4	
Math requirement	4 Elective	4		
PSYC 1214 (or other PSYC elective)	4 Elective	4		
PSYC 1000	1			
	17	16	8	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 2320	4 Co-op	Co-op	Elective (or AP credit, etc.)	4
PSYC area B elective	4		Elective (or AP credit, etc.)	4
PSYC elective	4			
PSYC interdisciplinary cluster	4			
EESC 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC area A elective	4 Co-op	Co-op	Elective (or AP credit, etc.)	4
PSYC area B elective	4		Elective (or AP credit, etc.)	4
PSYC interdisciplinary cluster	4			
Elective	4			
	16	0	0	8

## Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC lab	4 PSYC lab elective	4 Elective	4 Vacation	
ENGW 3315	4 PSYC seminar elective	4 Elective	4	
PSYC interdisciplinary cluster	4 Elective	4		
PSYC elective	4 Elective	4		
	16	16	8	0

Total Hours: 130

### American Sign Language and Psychology, BS

American Sign Language (ASL) is estimated to be the third most used language in the United States and its visibility in society is on the rise in recent years. There are roughly 500,000 to 2,000,000 Deaf, DeafBlind, or hard of hearing people in the United States who use ASL as their primary language, and a large number of non-Deaf signers use or learn ASL as a second language. A disproportionate percentage of Deaf people experience socioeconomic disadvantage due to their dual status as members of both a cultural linguistic minority group and a disability group. As a result, there is a broad societal misunderstanding of Deaf, signing people's minority language and culture—their lived experience—which creates barriers to educational and economic opportunity. While state and federal legislation enables improved civic engagement by Deaf, hard of hearing, and DeafBlind individuals, there is continued need to elevate quality of life, equity, and the rich contributions of the diverse members of the American Deaf communities.

The program offers a wide array of courses as well as volunteer, co-op, and research opportunities to learn from Deaf people's lived experiences through community and industry connections.

This combined major educates students in cognitive psychology, psycholinguistics, and the structures of human languages in general and ASL in particular. The curriculum is designed to assist students in acquiring competence in ASL, develop an understanding of the diverse American Deaf communities and Deaf culture, better understand cognitive efforts of interpreters' language transfer, as well as gain insights into various features of spoken language and experience firsthand the principles underlying the spatial organization of discourse required by signed languages. This knowledge and the psychology background from the major provide a foundation for more advanced studies of ASL and interpreting or psychology and Deaf people.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### American Sign Language Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4

### Social and Cultural World

DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4

### Linguistics

LING 1150	Introduction to Language and Linguistics	4
DEAF 2700	ASL Linguistics	4

### Interpreting

INTP 3500	The Interpreting Profession	2
INTP 3510	Interpreting Inquiry Texts	4
INTP 3970	Research Methods for Interpreting and Translation (Research Methods for Interpreting and Translation)	4

### Psychology Requirements

Code	Title	Hours
<b>Psychology</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3466	Cognition	4

### Psychology Lab or Directed Study

Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	
PSYC 4991	Directed Study Research	

### Personal/Social Bases of Behavior (Area A)

Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	

### Biological/Cognitive Bases of Behavior (Area B)

Complete one of the following:		4
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PSYC 3450	Learning and Motivation
PSYC 3451	Learning Principles and Behavior Analysis
PSYC 3452	Sensation and Perception
PSYC 3458	Biological Psychology
<b>Language/Cognition Elective</b>	
Complete one of the following: 4	
PSYC 4520	Language and the Brain
PSYC 4522	Psychology of Reading
PSYC 4524	Cognitive Development
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4674	Seminar in Cognitive Neuroscience

## Integrative Requirements

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
PSYC 3464	Psychology of Language	4

## Combined Major GPA Requirement

Minimum 2.750 GPA required in all AMSL, INTP, and DEAF courses  
Minimum 2.500 overall GPA required

## Combined Major Credit Requirement

Complete 82 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, No Co-op

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
AMSL 1101	4	AMSL 1102	4	Vacation	0	Vacation	0	0
DEAF 1500	4	LING 1150	4					
PSYC 1101	4	MATH 1215	4					
ENGW 1111	4	Elective	4					
		16	16	0	0	0	0	

Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
AMSL 2101	4	AMSL 2102	4	Vacation	0	Vacation	0	0
DEAF 2500	4	PSYC 2320	4					
PSYC 3464	4	PSYC 3466	4					
INTP 3500	2	Elective	4					
Elective	1-4							
		15-18	16	0	0	0	0	

Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
AMSL 3101	4	DEAF 2700	4	Vacation	0	Vacation	0	0
Psych Area A elective	4	Psych Area B elective	4					

ENGW 3315	4	Language/cognition elective	4		
INTP 3510	4	AMSL 3102	4		
		16	16	0	0

### Year 4

Fall	Hours	Spring	Hours	Hours
INTP 3970	4	INTP 4940	4	4
Elective	4	Psych lab elective	4	4
Elective	4	Psych Area A elective	4	4
Elective	4	Elective	4	4
		16	16	

Total Hours: 127-130

## Business Administration and Psychology, BS

This combined major educates students in business and psychology and the interface between the two disciplines. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including statistics and research, social psychology, developmental psychology, cognition, and personality. Business courses provide a foundation in accounting, innovation, marketing, management, and organizational behavior, with the opportunity to concentrate in a specific area of business. Students completing this program should be able to understand the relationships between these fields that pertain to explaining and addressing human behavior and business practices.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Business Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
ENTR 2301	Innovation!	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
MISM 2301	Management Information Systems	4
or SCHM 2301	Supply Chain and Operations Management	
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4

STRT 4501	Strategy in Action	4
<b>Supporting Courses for Business</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
MATH 1231	Calculus for Business and Economics	4

### Business Concentration

Complete one of the following concentrations.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

### Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
or MGSC 2301	Business Statistics	
PSYC 3402	Social Psychology	4
PSYC 3466	Cognition	4
PSYC 3400	Personality	4
PSYC 3404	Developmental Psychology	4
<b>Required Seminar</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	
<b>Required Lab</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	

PSYC 4610	Laboratory in Psycholinguistics
PSYC 4612	Laboratory in Cognition
PSYC 4614	Laboratory in Social Psychology
PSYC 4616	Laboratory in Personality
PSYC 4622	Laboratory in Sensation and Perception
PSYC 4624	Laboratory in Affective Science
PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4628	Laboratory in Developmental Psychology

### Psychology Electives

Complete two PSYC courses not used to fulfill the requirements above:	8
PSYC 1001 to PSYC 5999	

### Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
BUSN 1102	Personal Skill Development for Business	1
or PSYC 1000	Psychology at Northeastern	

### Co-op Preparation

Complete one of the following:	1
BUSN 1103	Professional Development for Business Co-op
or EESC 2000	Professional Development for Co-op

### Integrative Course

Code	Title	Hours
ORGB 3201	Organizational Behavior	4

### Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

### Psychology GPA Requirement

A minimum 2.000 GPA in psychology courses is required.

### Business Cooperative Education Requirement

Complete one six-month co-op experience.

### Program Requirement

128 total semester hours required

## Computer Science and Cognitive Psychology, BS

The computer science and cognitive psychology combined major provides a foundation in general psychology, psychology of language, cognition, and statistics—all supplemented by an experimental laboratory course, seminar course, and psychology electives. Students who choose this program often have a general interest in human psychology or specific interests in artificial intelligence or human-computer interaction.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 4100	Artificial Intelligence (Integrative course)	4
CS 4500 or CS 4530	Software Development (Integrative course) Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction (Integrative course)	4
<b>Khoury Elective Courses</b>		
With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.		
Complete twelve credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		12
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

## Psychology Courses

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
PSYC 3466	Cognition	4
<b>Advanced Psychology</b>		
PSYC 3452 or PSYC 3458	Sensation and Perception Biological Psychology	4
<b>Laboratory in Psychology</b>		
Complete one of the following:		4
PSYC 4610	Laboratory in Psycholinguistics	

PSYC 4612	Laboratory in Cognition	
PSYC 4622	Laboratory in Sensation and Perception	
<b>Seminar in Psychology</b>		
Complete one of the following:		4
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	

## Psychology Electives

Note: Courses satisfying the categories above cannot be reused.		
Complete two of the following:		8
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 4512	Neuropsychology	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4628	Laboratory in Developmental Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
With prior approval, directed study research and Honors Project courses can also be counted:		
PSYC 4970	Junior/Senior Honors Project 1	
PSYC 4971	Junior/Senior Honors Project 2	
PSYC 4991	Directed Study Research	

## Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	



IS 1300 or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

### Required General Electives

Code	Title	Hours
	Complete 32 credits of general electives.	32

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 PSYC 3466	4 Elective	4	

CS 2500 and CS 2501	5 MATH 1341	4		
PSYC 1101	4 Elective	4		
ENGW 1111	4			
	19	17	9	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 2320	4 Khoury elective	4 Elective	4 Co-op	
CS 3000 Elective	4 IS 4300	4 Elective	4	
PSYC 3464	4 PSYC elective	4		
	4 PSYC 3452 or 3458	4		
	CS 1210	1		
	16	17	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 4100	4 Elective	4 Co-op	
	PSYC lab elective	4 Elective	4	
	Khoury elective	4		
	Khoury elective	4		
	0	16	8	0

Year 4			
Fall	Hours Spring	Hours Summer 1	Hours
Co-op	CS 4500	4 Elective	4
	PSYC elective	4 ENGW 3302	4
	PSYC seminar	4	
	Computing and social issues	4	
	0	16	8

Total Hours: 134

### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 1800 and CS 1802	5 PSYC 3466	4		
CS 2500 and CS 2501	5 Elective	4		
PSYC 1101	4 Elective	4		
ENGW 1111	4			
	19	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500 and CS 3501	5 PSYC 3464	4 Vacation	0 Co-op	0

MATH 1341	4	CS 3000	4		
PSYC 2320	4	PSYC 3452	4		
Elective	4	CS 1210	1		
		Khoury elective	4		
	17		17	0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	IS 4300	4	Elective	4	Co-op	0
		ENGW 3302	4	Elective	4		
		PSYC elective	4				
		Khoury elective	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 4100	4	Elective	4	Co-op	0
		Khoury elective	4	Elective	4		
		PSYC lab elective	4				
		PSYC elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	CS 4500	4
		PSYC seminar	4
		Computing and social issues	4
		Elective	4
	0		16

Total Hours: 134

**Five Years, Three Co-ops in Spring/Summer 1****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	PSYC 3466	4				
PSYC 1101	4	Elective	4				
ENGW 1111	4	Elective	4				
CS 1200	1						
	19		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 and CS 3501	5	Co-op	0	Co-op	0	Vacation	0
MATH 1341	4						
PSYC 2320	4						
Elective	4						

CS 1210	1				
	18	0	0	0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3464	4	Co-op	0	Co-op	0	Elective	4
CS 3000	4					Elective	4
PSYC 3452	4						
Khoury elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
IS 4300	4	Co-op	0	Co-op	0	Elective	4
ENGW 3302	4					Elective	4
PSYC elective	4						
Khoury elective	4						
	16		0		0		8

**Year 5**

Fall	Hours	Spring	Hours
CS 4100	4	CS 4500	4
Khoury elective	4	PSYC seminar	4
PSYC lab elective	4	Computing and social issues	4
PSYC elective	4	Elective	4
	16		16

Total Hours: 134

**Criminal Justice and Psychology, BS**

This combined major educates students in criminal justice and psychology and the interface between the two disciplines. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including the biological and psychosocial bases of behavior, learning, personality, and cognition. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should be able to understand the relationships between the fields, as they relate to understanding and addressing criminal behavior.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Criminal Justice Requirements

Code	Title	Hours
<b>Criminal Justice Core Requirements</b>		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100		4
CRIM 2200		4
CRIM 3600	Criminal Justice Research Methods	4
<b>Thematic Elective</b>		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Survey Elective</b>		
Complete one of the following:		4
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3050	Organized Crime	
CRIM 3200		
CRIM 3300		
CRIM 3400		
CRIM 3500		
<b>System-Wide Elective</b>		
Complete one of the following:		4
CRIM 4010		
CRIM 4020		
CRIM 4040	Crime Prevention	
<b>Computer Science</b>		
CS 1100	Computer Science and Its Applications	4
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
<b>Electives</b>		
Complete two courses in the following range:		8
CRIM 4000 to CRIM 5999		

## Psychology Requirements

Code	Title	Hours
<b>Introductory Course</b>		
PSYC 1101	Foundations of Psychology	4
<b>Statistics</b>		
PSYC 2320	Statistics in Psychological Research	4
<b>Personality/Social Bases of Behavior</b>		
Complete two of the following:		8

PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	

### Biological/Cognitive Bases of Behavior

Complete two of the following:		8
PSYC 3450	Learning and Motivation	
or PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	

### Research Experience

Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	

### Psychology Seminar

Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	

### Electives

Complete two PSYC courses.	8
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## Integrative Requirement

Code	Title	Hours
CRIM 3040	Psychology of Crime	4

## Criminal Justice and Psychology Combined-Major Credit Requirement

Complete 84 semester hours in the major.

## Program Requirement

128 total semester hours required

## Data Science and Psychology, BS

The psychology and data science combined major offers an integrative curriculum in the study of mind, brain, and behavior and in the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. The study of psychology draws upon empirical research with both humans and animals to investigate and seek explanations for the behavior and mental life of individuals and develop assessment tools and treatment options for addressing clinical problems. In this program, students have an opportunity to augment such knowledge with skills in big data analysis, data science, and data analytics.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or PSYC 1000	First Year Seminar Psychology at Northeastern	1
CS 1210 or EESC 2000	Professional Development for Khoury Co-op Professional Development for Co-op	1
<b>Programming Sequence Pathways</b>		
Choose one of two options		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 3200	Database Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4

DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4

### Khoury Elective

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Computer Science Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Psychology Requirements

Code	Title	Hours
<b>Foundations of Psychology</b>		
PSYC 1101	Foundations of Psychology	4
<b>Statistics in Psychological Research</b>		
PSYC 2320	Statistics in Psychological Research	4
<b>Mathematics Foundations</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Personality/Social Basis of Behavior</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Cognitive/Biological Basis of Behavior</b>		
Complete two of the following:		8
PSYC 3450 or PSYC 3451	Learning and Motivation Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Psychology Laboratory</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	

PSYC 4606	Laboratory in Biological Psychology
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4612	Laboratory in Cognition
PSYC 4614	Laboratory in Social Psychology
PSYC 4616	Laboratory in Personality
PSYC 4622	Laboratory in Sensation and Perception
PSYC 4624	Laboratory in Affective Science
PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4628	Laboratory in Developmental Psychology

**Psychology Seminar**

Complete one of the following: 4

PSYC 4654	Seminar in Behavioral Modification
PSYC 4656	Seminar in Biological Psychology
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4662	Seminar in Personality
PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

**Psychology Electives**

Complete two of the following: 8

PSYC 2370 to PSYC 5999

**Integrative Requirement**

Code	Title	Hours
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**Integrative Course**

Complete one of the following: 4

PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience
IS 4300	Human Computer Interaction

**Required General Electives**

Code	Title	Hours
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Complete 28 credits of general electives. 28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Psychology GPA Requirement**

Minimum 2.000 GPA required in all PSYC courses

**Program Requirement**

130 total semester hours required

**Plan of Study**

**Sample Patterns:  
Five Years, Three Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	5	Vacation	5
CS 1800 and CS 1802	5	PSYC 2320	4				
CS 2500 and CS 2501	5	Personality/ social basis of behavior 1	4				
PSYC 1101	4	General elective	4				
ENGW 1111	4						
	19		17		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 and CS 3501	5	DS 3000	4	Vacation	4	Co-op	4
MATH 1341	4	CS 1210	1				
Cognitive/ biological basis of behavior 1	4	Cognitive/ biological basis of behavior 2	4				
General elective	4	Personality/ social basis of behavior 2	4				
		General elective	4				
	17		17		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4200	4	General elective	4	Co-op	4
		CS 3200	4	PSYC elective	4		
		PSYC laboratory	4				
		General elective	4				
	0		16		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	ENGW 3302	4	Co-op	4
		DS 4400	4	PSYC elective	4		
		General elective	4				
		PSYC seminar	4				
	0		16		8		0

Year 5					
Fall	Hours	Spring	Hours	Summer	Hours
Co-op		DS 4420	4		

Integrative requirement	4
Khoury Elective	4
General elective	4
0	16

Total Hours: 134

## Four Years, Two Co-ops

### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 General elective	4
CS 1800 and CS 1802	5 PSYC 2320	4 General elective	4 General elective	4
CS 2500 and CS 2501	5 Personality/social basis of behavior 1	4		
PSYC 1101	4 General elective	4		
ENGW 1111	4			
	19	17	9	8

### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3200	4 CS 1210	1 PSYC elective	4 Co-op	
DS 3000	4 DS 4200	4 General elective	4	
Cognitive/biological basis of behavior 1	4 Personality/social basis of behavior 2	4		
MATH 1341	4 Cognitive/biological basis of behavior 2	4		
	General elective	4		
	16	17	8	0

### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	DS 4300	4 PSYC elective	4 Co-op	
	DS 4400	4 ENGW 3302	4	
	PSYC laboratory	4		
	General elective	4		
	0	16	8	0

### Year 4

Fall	Hours Spring	Hours
Co-op	DS 4420	4
	Khoury elective	4
	PSYC seminar	4

Integrative requirement	4
0	16

Total Hours: 134

## Economics and Psychology, BS

This combined major educates students in economics and psychology and the interface between the two disciplines. Economics courses provide a foundation in macroeconomics, microeconomics, and applied econometrics. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including such topics as cognition, decision making, learning, and motivation. Students completing this program of study should be able to understand how the two fields jointly contribute to explaining the complexity of human behavior in an economic context.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Economics Requirements

Code	Title	Hours
<b>Required Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
ECON 4692	Senior Economics Seminar	4

### Economics Electives

Complete four ECON courses from the following ranges with no more than two at the ECON 1200–ECON 1999 range. The course used to satisfy the integrative course requirement may not be used as an economics elective:

ECON 1200–ECON 1999
ECON 3000–ECON 4689
ECON 4900–ECON 4999
ECON 5200–ECON 5999

### Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3402	Social Psychology	4
PSYC 3450	Learning and Motivation	4

PSYC 3466	Cognition	4
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**Required Lab**

Complete one of the following: 4

PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	

**Required Seminar**

Complete one of the following: 4

PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	

**Psychology Electives**

Complete three PSYC courses not used to fulfill requirements above. 12

**Other Requirements Outside Major**

Code	Title	Hours
PSYC 1000 or ECON 1000	Psychology at Northeastern Economics at Northeastern	1
EESC 2000 or EESH 2000	Professional Development for Co-op Professional Development for Co-op	1
ENGW 1111	First-Year Writing	4
MATH 1231 or MATH 1241 or MATH 1245 or MATH 1251 or MATH 1340 or MATH 1341	Calculus for Business and Economics Calculus 1 Calculus with Applications Calculus and Differential Equations for Biology 1 Intensive Calculus for Engineers Calculus 1 for Science and Engineering	4
CS 1100 or DS 2000 and DS 2001 or MISM 2510	Computer Science and Its Applications Programming with Data and Data Science Programming Practicum Fundamentals of Information Analytics	4
COOP 3945	Co-op Work Experience	0

**Integrative Course**

Code	Title	Hours
ECON 4681	Information Economics and Game Theory	4
or ECON 3416	Behavioral Economics	

**NUPath Not Fulfilled by Major**

Code	Title	Hours
NUPath EI	Expression and Innovation	4
NUPath IC	Interpreting Culture	4
NUPath DD	Difference and Diversity	4
NUPath ER	Ethical Reasoning	4
NUPath WD	Advanced Writing in the Discipline	4

**Open Electives**

Code	Title	Hours
	Complete three open electives.	12

**Combined Major Credit/ GPA Requirement**

Complete 84 semester hours in the major.

Grades in the following required courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
PSYC 2320	Statistics in Psychological Research	4

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1101	4	PSYC 2320	4	ECON elective	4	Open elective	4
ENGW 1111	4	ECON 1116	4	PSYC elective	4	ECON elective	4
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4	CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4				
ECON 1115	4	PSYC elective	4				
ECON 1000 or PSYC 1000	1						
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3402	4	PSYC 3466	4	NUPath DD	4	Co-op	8

ECON 2315	4	ECON 2316	4	PSYC elective	4
ECON elective	4	NUpath IC	4		
NUpath EI	4	Open elective	4		
		EESC 2000 or EESH 2000	1		
	16		17		8
					0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours Summer 2</b>
Co-op		PSYC 3450	4	ECON 4692	4 Co-op
		ECON 2560	4	PSYC lab	4
		ECON elective	4		
		NUpath ER	4		
	0		16		8
					0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Co-op		ECON 4681 or 3416	4		
		PSYC seminar	4		
		NUpath WD	4		
		Open elective	4		
	0		16		

Total Hours: 130

## Health Science and Psychology, BS

The combined Bachelor of Science degree program in health science and psychology is designed to provide an interdisciplinary approach to public health and psychology. Through interdisciplinary explorations, students have the opportunity to develop knowledge in health promotion and illness prevention by way of understanding people's behaviors, perceptions, and emotions within the contexts of relationships and culture. This highly flexible curriculum is enhanced by experiential learning opportunities and prepares students to practice in interdisciplinary settings and be successful in sustaining and promoting health across populations.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260	The American Healthcare System	4
or PHTH 1261	Comparative Healthcare Systems	
PHTH 2300	Communication Skills for the Health Professions	4
or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 2350	Community and Public Health	4
or PHTH 2351	Community and Public Health - Global	
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
<b>Supporting Courses for Health Science</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

## Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3458	Biological Psychology	4
<b>Personal/Social Bases of Behavior (Area A)</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Biological/Cognitive Bases of Behavior (Area B)</b>		
Complete one of the following:		4
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Psychology Electives</b>		
Complete 12 semester hours from the following subject area:		12
PSYC		
<b>Psychology Lab</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	



PSYC 4624	Laboratory in Affective Science
PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4628	Laboratory in Developmental Psychology

**Psychology Seminar**

Complete one of the following: 4

PSYC 4654	Seminar in Behavioral Modification
PSYC 4656	Seminar in Biological Psychology
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4662	Seminar in Personality
PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

**Supporting Courses**

Code	Title	Hours
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**Introduction to College**

Complete one of the following: 1

HSCI 1000	College: An Introduction
PSYC 1000	Psychology at Northeastern

**First-Year Writing**

ENGW 1111 First-Year Writing 4

**Co-op Preparation**

Complete one of the following: 1

HSCI 2000	Professional Development for Bouvé Co-op
EESC 2000	Professional Development for Co-op

**Math**

MATH 1241 Calculus 1 4

**Advanced Writing in the Discipline**

ENGW 3306 Advanced Writing in the Health Professions 4

**Ethical Reasoning**

PHIL 1165 Moral and Social Problems in Healthcare 4

**Open Electives**

Complete 28 semester hours of general electives. 28

**Integrative Requirement**

Code	Title	Hours
PSYC 3510	Brain, Behavior, and Immunity	4
or PSYC 4514	Clinical Neuroscience	
or CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research	

**Health Sciences Major Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Psychology GPA Requirement**

A grade of C or higher is required for all PSYC courses.

**Program Requirement**

133 total semester hours required

**Plan of Study****Four Years, One Co-op Plan****Year 1**

Fall	Hours	Spring	Hours
HSCI 1000 or PSYC 1000	1	BIOL 1113	4
PHTH 1260 or 1261	4	BIOL 1114	1
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
BIOL 1112	1	ENGW 1111	4
MATH 1241	4	Elective	4
PSYC 1101	4		
	18		18

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours
PSYC 2320	4	Public health core	4	Psychology elective	4
Area A course	4	Public health core	4	Area B course	4
Public health core	4	Area A course	4		
PSYC 3458	4	Psychology elective	4		
	16		16		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 2000 or EESC 2000	1	Co-op		Co-op		ENGW 3306	4
Psychology lab	4					PHTH 4540	4
PHIL 1165	4						
Open electives	8						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Public health core	4	Psychology seminar	4
Psychology elective	4	PSYC 3510, 4514, or CAEP 2012	4
Open electives	8	Open electives	8
	16		16

Total Hours: 133

**Four Years, Two Co-ops Plan (College: Bouvé)**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 1000 or HSCI 1000	1 PSYC Area A selective	4 PSYC Area B selective	4 Open electives	8
PHTH 1260 or 1261	4 BIOL 1113	4 public health core	4	
BIOL 1111	4 CHEM 1161 and CHEM 1162 and CHEM 1163	5		
BIOL 1112	1 BIOL 1114	1		
MATH 1241	4 ENGW 1111	4		
PSYC 1101	4			
	18	18	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 2320	4 Co-op	Co-op	PHIL 1165	4
Public health core	4		ENGW 3306	4
PSYC 3458	4			
Public health core	4			
HSCI 2000 or EESC 2000	1			
	17	0	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Public health core	4 Co-op	Co-op	Open electives	8
PSYC Area A selective	4			
PSYC elective	4			
Open elective	4			
	16	0	0	8
Year 4				
Fall	Hours Spring	Hours		
Public health core	4 PSYC 3510, 4514, or CAEP 2012	4		
PSYC lab	4 Psychology seminar	4		
PSYCH elective	4 PSYC elective	4		
Open elective	4 Open Elective	4		
	16	16		
Total Hours: 133				

**Four Years, Two Co-ops Plan (College: Science)**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 1000 or HSCI 1000	1 PSYC Area A selective	4 PSYC Area B selective	4 Open electives	8
PHTH 1260 or 1261	4 BIOL 1113	4 public health core	4	
BIOL 1111	4 BIOL 1114	1		
BIOL 1112	1 ENGW 1111	4		
MATH 1241	4 CHEM 1161 and CHEM 1162 and CHEM 1163	5		
PSYC 1101	4			
	18	18	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 2320	4 Public health core	4 PSYC elective	4 Co-op	
Public health core	4 Public health core	4 Open elective	4	
PSYC 3458	4 PSYC Area A selective	4		
PHIL 1165	4 PSYC elective	4		
	EESC 2000 or HSCI 2000	1		
	16	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Public health core	4 Open electives	8 Co-op	
	PSYC lab	4		
	ENGW 3306	4		
	PSYC 3510, 4514, or CAEP 2012	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours		
Co-op	Psychology seminar	4		
	PSYC elective	4		
	Open electives	8		
	0	16		
Total Hours: 133				

**Linguistics and Psychology, BS**

This combined major is designed to educate students in psychology, linguistics, and the interface between the two disciplines, which are core areas within the field of cognitive science. Students study the formal structures of human language; sociocultural aspects of language use; and the cognitive aspects of language representations, language

acquisition, and language processing. Students receive interdisciplinary training in the methods of experimental psychology, psycholinguistics, and linguistic analysis.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete three of the following (not counted elsewhere):		12
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3442	Sociolinguistics	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	
or LING 4971	Junior/Senior Honors Project 2	
or LING 4991	Directed Study Research	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	

### Psychology Requirements

Code	Title	Hours
<b>Introductory and Intermediate Psychology</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
<b>Advanced Psychology</b>		
PSYC 3402	Social Psychology	4
PSYC 3466	Cognition	4
<b>Psychology Lab</b>		
Complete one of the laboratory courses or, with prior approval, a directed study or honors project on a topic related to psycholinguistics or cognition:		4
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4970	Junior/Senior Honors Project 1	
PSYC 4971	Junior/Senior Honors Project 2	
PSYC 4991	Directed Study Research	
<b>Psychology Seminar</b>		
Complete one of the following:		4
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	
<b>Psychology Electives</b>		
A directed study on a topic related to psycholinguistics or cognition may be taken with prior approval.		
Complete two of the following (not counted elsewhere):		8
PSYC 3404	Developmental Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4628	Laboratory in Developmental Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4991	Directed Study Research	

### Integrative Requirements

Code	Title	Hours
PSYC 3464	Psychology of Language	4
<i>Experiential Learning</i>		
Complete one of the following options. Courses used to satisfy this requirement will also typically simultaneously satisfy a requirement above.		0-8
Study Abroad (not a Dialogue)		
International Co-op		
LING 4891	Research Seminar in Linguistics	
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	

LING 4991	Directed Study Research
PSYC 4970 and PSYC 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2
PSYC 4991	Directed Study Research

**Supporting Courses**

Code	Title	Hours
<b>Language Requirement</b>		
Complete two courses in the same language with a grade of C or higher. Proficiency at elementary level 2 or higher is required.		8
<b>Mathematics Requirement</b>		
Complete one of the following:		4
CS 1800	Discrete Structures	
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1242	Calculus 2	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342	Calculus 2 for Science and Engineering	

**Linguistics and Psychology Combined Major Credit Requirement**

Complete 72 semester hours in the major (excluding supporting courses).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 1150	4 LING 2350	4 Vacation	0 Vacation	0
PSYC 1101	4 PSYC 3464	4		
ENGW 1111	4 Foreign language course	4		
Math requirement	4 NUpath or elective	4		
	16	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 3412	4 Linguistics structure course	4 Vacation	0 Co-op	0
PSYC 2320	4 Linguistics elective	4		
PSYC 3466	4 PSYC 3402	4		
Foreign language course	4 Psychology elective	4		

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Linguistics structure course	4 NUpath or elective	4 Co-op	0
	Linguistics or psychology elective	4 Elective	4	
	Psychology laboratory	4		
	ENGW 3315	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Linguistics structure course	4 NUpath or elective	4 Co-op	0
	Linguistics elective	4 Elective	4	
	Linguistics or psychology elective	4		
	Psychology seminar	4		
	0	16	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	0 NUpath or elective	4
	Elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 129

**Sample Four Years, No Co-op**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 1150	4 LING 2350	4 Vacation	0 Vacation	0
PSYC 1101	4 PSYC 3464	4		
ENGW 1111	4 Foreign language course	4		
Math requirement	4 NUpath or elective	4		
	16	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 3412	4 Linguistics structure course	4 Vacation	0 Vacation	0
PSYC 2320	4 Linguistics elective	4		

804 Mathematics and Psychology, BS

PSYC 3466	4	PSYC 3402	4		
Foreign language course	4	Psychology elective	4		
	16		16	0	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Linguistics structure course	4	Linguistics structure course	4	Vacation	Vacation
Linguistics elective	4	Linguistics or psychology elective	4		
Psychology lab	4	NUpath or elective	4		
ENGW 3315	4	Elective	4		
	16		16	0	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Linguistics or psychology elective	4	NUpath or elective	4		
Psychology seminar	4	Elective	4		
NUpath or elective	4	Elective	4		
Elective	4	Elective	4		
	16		16		

Total Hours: 128

**Mathematics and Psychology, BS**

In the mathematics and psychology combined-major BS program, psychology and mathematics courses help lay the groundwork for strong basic training that seeks to prepare the student toward developing psychological models using mathematics.

**Program Requirements**

**Mathematics Requirements**

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Math Electives</b>		

Complete two courses in the following range that are not required in the requirements above: 8  
MATH 3001 to MATH 5999

**Psychology Requirements**

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
<b>Area A (Personality/Social Basis of Behavior)</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Area B (Biological/Cognitive Basis of Behavior)</b>		
Complete two of the following:		8
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Psychology Laboratory</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	
<b>Psychology Capstone Requirement</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	
<b>Psychology Elective</b>		
Any PSYC course in the 3000 range and up		4

**Integrative Requirement**

Code	Title	Hours
PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience	4

**Mathematics and Psychology Combined-Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1365	4 MATH 1341	4 Vacation	Vacation	
PSYC 1101	4 PSYC Area A	4		
NUpath EI	4 Open elective	4		
ENGW 1111	4 NUpath IC	4		
MATH 1000 or PSYC 1000	1			
	17	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1342	4 MATH 2321	4 Vacation	Co-op	
PSYC 2320	4 PSYC Area A	4		
PSYC Area B	4 Open elective	4		
NUpath DD	4 MATH elective	4		
	EESC 2000	1		
	16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	MATH 2331	4 MATH 2341	4 Co-op	
	PSYC Area B	4 Adv writing	4	
	PSYC elective	4		
	Open elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PSYC lab	4 Open elective	4 Co-op	
	MATH 3081	4 Open elective	4	
	PSYC 4540	4		
	NUpath ER	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	PSYC seminar	4

MATH elective	4
Open elective	4
Open elective	4
0	16

Total Hours: 130

**Psychology and Music, BS**

This combined major educates students in psychology and music and the interface between the two disciplines. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including such topics as cognition, psycholinguistics, perception, and the biological basis of behavior. Music courses provide a foundation in music theory, creative music in context, contemporary/ethnomusicology, music perception and cognition, and the psychoacoustics of music. Students completing this program of study should be able to understand how the two fields jointly contribute to explaining human behavior in the domain of music.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Difference and Diversity (DD), Ethical Reasoning (ER), and Advanced Writing in the Disciplines (WD) are not explicitly satisfied by the required courses. Difference and Diversity (DD) and Ethical Reasoning (ER) can be met through Music in Context. Students are responsible for satisfying any of these requirements not met within the major.

**Psychology Requirements**

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3452	Sensation and Perception	4
PSYC 3458	Biological Psychology	4
PSYC 3464	Psychology of Language	4
PSYC 3466	Cognition	4
<b>Required Lab</b>		
Complete one of the following:		
PSYC 4600	Laboratory in Research Design	4
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	

PSYC 4614	Laboratory in Social Psychology
PSYC 4616	Laboratory in Personality
PSYC 4622	Laboratory in Sensation and Perception
PSYC 4624	Laboratory in Affective Science
PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4628	Laboratory in Developmental Psychology

**Required Seminar**

Complete one of the following: 4

PSYC 4654	Seminar in Behavioral Modification
PSYC 4656	Seminar in Biological Psychology
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4662	Seminar in Personality
PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

**Psychology Electives**

Complete two PSYC courses not used to fulfill requirements above. 8

**Music Theory Requirements**

Code	Title	Hours
<b>Required Courses</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4

**Music in Context**

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4

**Creative Category**

Complete one of the following 4-semester-hour courses or choose four 1-semester-hour ensembles and/or lessons from the list: 4

MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2208	Jazz Improvisation
MUSC 2209	Conducting
MUSC 2210	Introduction to Songwriting
MUSC 1220	Introduction to Music Technology
MUST 1301	Introduction to Composition
MUST 2320	Sound Design

*Ensembles and Lessons*

MUSC 1901	Music Lessons 1
MUSC 1902	Music Lessons 2
MUSC 1904	Chorus
MUSC 1905	Concert Band
MUSC 1906	Orchestra
MUSC 1907	Wind Ensemble
MUSC 1911	Jazz Ensemble

MUSC 1912	Rock Ensemble
MUSC 1913	Blues/Rock Ensemble
MUSC 1914	Create Your Own Music
MUSC 1915	Chamber Ensemble
MUSC 1917	Jazz Choir and Combo
MUSC 1918	World Music Ensemble
MUSC 1919	Fusion Ensemble
MUSC 1920	Pep Band

**Contemporary / Popular Music or Global Music / Ethnomusicology Category**

Compete one of the following: 4

MUSC 2101	Black Popular Music
MUSC 2130	Music of Asia
MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2310	Popular Music Since 1945
MUSC 2311	Topics in American Music
MUSC 2313	Topics in World Music
MUSC 2317	Punk Rock
MUSC 2320	40,000 Years of Music Technology
MUSC 2330	Musical Communities of Boston
MUSC 2340	Divas, DJs, and Double Standards
MUSC 2351	Music, Sound, and the Screen
MUSC 2380	The World of Choral Music
MUSC 3353	Music and the Racial Imagination
MUSC 3560	Topics in Music since 1900
MUSI 3351	Music and Social Justice
MUSI 3360	Global Music Industries in Context
MUSI 3401	Hip Hop in the Music Industry
MUSI 5900	Ethnography in Creative Industries

*Note: MUSC 2150 can be used to meet either the creative or the ethnomusicology/contemporary requirement but not both.***Music Requirements**

Code	Title	Hours
MUSC 2350	Acoustics and Psychoacoustics of Music	4
or INAM 3200	Creative Cognition	
MUSC 3300	Music Perception and Cognition	4
<b>Capstone</b>		
MUSC 4510	Music and the Brain Research	4

**Music Electives**

Code	Title	Hours
Complete two courses from MUSC, MUSI, or MUST not used to fulfill the requirements above. 8		

**Other Requirements Outside Major**

Code	Title	Hours
PSYC 1000	Psychology at Northeastern	1
or MUSC 1000	Music at Northeastern	
EESC 2000	Professional Development for Co-op	1
or EEAM 2000	Professional Development for Co-op	
ENGW 1111	First-Year Writing	4
Complete one of the following: 4		

MATH 1213	Interactive Mathematics
MATH 1215	Mathematical Thinking
MATH 1241	Calculus 1

### Bridge/Integrative Courses

Code	Title	Hours
MUSC 3300	Music Perception and Cognition	

Note: MUSC 3300 is already required above.

### Music Major Grade Requirement

Students must maintain at least a 2.667 grade-point average (B–average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

### Program Requirement

130 total semester hours required

### Plan of Study

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 1101	4 PSYC 2320	4 PSYC 3466	4 Open elective	4
MUSC 1001	4 MUSC 1201	4 Music elective	4 Open elective	4
ENGW 1111	4 MATH 1213	4		
NUpath DD	4 NUpath ER	4		
MUSC 1000 or PSYC 1000	1			
	17	16	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 3458	4 PSYC 3464	4 Open elective	4 Co-op	0
MUSC 1202	4 MUSC 2350 or INAM 3200	4 PSYC elective	4	
Open elective	4 Contemporary/ethno course	4		
MUSC 3300	4 Open elective	4		
	EESC 2000 or EEAM 2000	1		
	16	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 PSYC 3452	4 PSYC lab	4 Co-op	0
	Creative MUSC course	4 PSYC elective	4	
	MUSC 4510	4		
	Open elective	4		
	0	16	8	0

### Year 4

Fall	Hours Spring	Hours
Co-op	0 PSYC seminar	4
	Music elective	4
	WD	4
	Open elective	4
	0	16

Total Hours: 130

### Psychology, Minor

The Department of Psychology offers a minor in psychology, which involves taking five psychology courses, some required and some elective, that focus on the multidisciplinary study of mind, brain, and behavior. The minor accommodates students with a broad range of interests in basic and applied psychology. Students can elect to take fundamental and advanced courses spanning biological psychology, cognition, social psychology, personality psychology, sensation and perception, clinical psychology, applied psychology, learning and motivation, developmental psychology, or other subfields of psychology to craft a minor that reflects their interests within this wide-ranging field.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* A maximum of two courses (or 8 semester hours) of transfer credit may count toward the minor. This minor is not available to students majoring in behavioral neuroscience or in any combined major that involves psychology. Courses taken pass/fail and receiving an S grade may not be used toward the minor.

Code	Title	Hours
<b>Required Course</b>		
PSYC 1101	Foundations of Psychology	4
<b>Personal/Social Bases of Behavior (Area A)</b>		
Transfer courses are not permitted to fulfill the Area A requirement.		
Complete one of the following: 4		
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Biological/Cognitive Bases of Behavior (Area B)</b>		
Transfer courses are not permitted to fulfill the Area B requirement.		
Complete one of the following: 4		
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	



**Elective Courses**

Code	Title	Hours
Complete two PSYC courses.		8

**GPA Requirement**

2.000 GPA required in the minor

**Interdisciplinary****Programs****Minors**

- Environmental Chemistry (p. 487)
- Scientific Commercialization (p. 808)

**Environmental Chemistry, Minor**

The minor in environmental chemistry offers an opportunity for students of any background interested in environmental sciences to better understand the chemistry of the environment. Students completing the minor in environmental chemistry have an opportunity to learn about the chemical processes of natural systems and environmental pollutants, while earning a credential that highlights their interest and expertise. This can be a useful course of study whether their primary degree and career will be in one of the traditional chemical, environmental, or engineering programs, or another allied field. No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

**Required Courses**

Code	Title	Hours
<b>Environmental Chemistry Core</b>		
Complete one of the following:		4
CIVE 2335	Environmental Engineering Chemistry	
ENVR 3410	Environmental Geochemistry	
<b>Chemistry Core</b>		
Complete one of the following:		5
CHEM 2321 and CHEM 2322 and CHEM 2323	Analytical Chemistry and Lab for CHEM 2321 and Recitation for CHEM 2321	
CHEM 3331 and CHEM 3332	Bioanalytical Chemistry and Lab for CHEM 3331	
<b>Research Experience</b>		
Complete one of the following:		4
CHEM 4750	Senior Research	
CHEM 4901	Undergraduate Research	
CHEM 4992	Directed Study	
CIVE 4991	Research	
CIVE 4992	Directed Study	
ENVR 4900	Earth and Environmental Science Capstone	

or ENVR 4997	Senior Thesis
ENVR 4992	Directed Study

**Electives**

Code	Title	Hours
Complete two of the following:		
CIVE 2335	Environmental Engineering Chemistry (If not used to satisfy Environmental Chemistry Core)	8-9
CIVE 3435	Environmental Pollution Fate and Transport	
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	
ENVR 3125	Global Oceanic Change	
ENVR 3410	Environmental Geochemistry (If not used to satisfy Environmental Chemistry Core)	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
ENVR 4504	Environmental Pollution	
ENVR 4505	Wetlands	
ENVR 5190	Soil Science	

**GPA Requirement**

Minimum 2.000 GPA required in all major courses

**Credit Requirement**

Minimum of 21 hours required

**Scientific Commercialization, Minor**

Science innovation—the creation of new scientific knowledge—and entrepreneurship—the translation and commercialization of such ideas into real-world solutions—each require distinctly different skills that are developed through years of experience. Though these undertakings are intimately linked, they are rarely taught together in an integrated academic setting. The minor in science commercialization brings these two sides together and is designed for students who are interested in ventures in science-related areas (the energy sector, biotech and pharmaceuticals, advanced materials, etc.).

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. DMSB students can double-count only one course toward both this minor and their concentration.

**Required Courses**

Code	Title	Hours
ENTR 2301	Innovation!	4
INSC 3000	Science Behind Innovation and Entrepreneurship	4
INSC 4000	Bridging Scientific Discovery and Innovation	4

## Electives

Code	Title	Hours
Complete two courses from the following:		8
ENTR 4505	Entrepreneurial Growth Strategy for Technology Ventures	
FINA 4610	Entrepreneurial Finance and Private Equity	
INSC 5000	Translating Scientific Discoveries: From Lab to Fab and Beyond	

## GPA Requirement

Minimum 2.000 GPA required in all major courses

## Credit Requirement

20 hours required

### Accelerated Bachelor/Graduate Degree Programs

The College of Science offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

### College of Social Sciences and Humanities

Website (<http://www.northeastern.edu/cssh/>)

**Uta Poiger, PhD**, Dean

**James Rollins, MBA**, Associate Dean, Administration and Finance

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**Laura Green, PhD**, Associate Dean, Teaching, Learning, and Experiential Education

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The College of Social Sciences and Humanities is a leader in the experiential liberal arts. Students deepen their understandings of culture, society, history, politics, language, and more through the integration of focused academic study and a wide range of experiential opportunities. They use familiar methods and new tools to hone their skills in close reading, interpretation, analysis, oral communication, and critical thinking.

By exploring society's most pressing challenges, students may gain a broad understanding of the relationships among peoples and nations; global economics and politics; the diversity of languages, literatures, religions, and cultures; and multiple perspectives in urban affairs, public policy, law, criminal justice, and the ethical dimensions of human behavior.

The college offers a wide variety of undergraduate programs, including 17 different majors as well as a diverse set of combined major options, concentrations, minors, and five-year bachelor's/master's degree PlusOne programs. The college also offers students the opportunity to create an independent major in cases where their interests and goals are not met by existing majors. Students in the college take elective classes to complement their chosen area of study and earn either a Bachelor of Arts or a Bachelor of Science degree.

All students in the college integrate experiential learning into their education—many students pursue multiple opportunities. Students may choose to conduct original student research, either independently or with a faculty member; to immerse themselves in communities and cultures either locally or around the world; to enhance their classroom learning through the co-op experience in a variety of fields; or to build more flexibility into their academic path with a Dialogue of Civilizations trip with a faculty member over the summer.

Programs in the college offer the flexibility for students to customize their academic experience around their intellectual and professional interests. A support system of department advisors, college advisors, co-op coordinators, and peer mentors helps students explore their options and shape their plan.

## Academic Advising

The College of Social Sciences and Humanities has an academic advising system that consists of academic advisors located in the Office of Student Academic Affairs in 180 Renaissance Park and faculty advisors located in the college's departments and program offices. Detailed advising information is available on the college website (<https://www.northeastern.edu/cssh/undergraduate/academic-advising/>). Pre-Law advising (<https://careers.northeastern.edu/article/pre-law/>) and premedical/predental advising (<http://www.northeastern.edu/prehealth/>) are also available.

## Academic Progression Standards

The College of Social Sciences and Humanities adheres to the university-wide Academic Progression Standards (p. 27). Some majors have additional specific requirements in order to progress from year to year (see major requirements in departmental listings).

## Graduation Clearance Process

Students in the College of Social Sciences and Humanities are required to meet with an academic advisor in the Office of Student Academic Affairs in 180 Renaissance Park to determine their remaining graduation requirements. Some departments also require a meeting with a faculty advisor in their major or program. This should be completed in the junior year to ensure ample time to complete any outstanding requirements.

## College Requirements

All students in the College of Social Sciences and Humanities must successfully complete their major, college, and university requirements for their specific degree.

### EXPERIENTIAL LIBERAL ARTS REQUIREMENT

The Experiential Liberal Arts course designation is part of a CSSH framework that emphasizes integration of experiential learning along

with diversity and inclusion at key points in the curriculum. Students will ordinarily fulfill this requirement through any CSSH course on a Dialogue of Civilizations; participation in the Data, Ethics, and Culture spring semester in London; any CSSH service-learning course; or an ELA-designated course as listed here:

Code	Title	Hours
ANTH 3410	Ethnographic Field Experience	4
INTP 4995	Interpreting Practicum	4
CRIM 2320	Youth Crime and Justice	4
CRIM 4120	Courts and Sentencing	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
ENGL 2690	Boston in Literature	4
ENGL 2740	Writing and Community Engagement	4
ENGL 3340	Technologies of Text	4
ENGL 3375	Writing Boston	4
ENGL 3381	The Practice and Theory of Teaching Writing	4
ENGL 3382	Publishing in the 21st Century	4
ENGL 3400	Opening the Archive	4
HIST 1120	Public History, Public Memory	4
HIST 2000	Native American Resistance: Past and Present	4
HIST 2311	Colonialism/Imperialism	4
HIST 2430	Digital Histories of Ethnic Boston	4
HUSV 1101	Social Change and Human Services	4
HUSV 3520	Child Intervention and Treatment	4
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	4
POLS 2357	Growth and Decline of Cities and Suburbs	4
SOCL 2323	Ethnographic Methods	4
SOCL 2485	Environment, Technology, and Society	4
SPNS 3501	Advanced Spanish Conversation: Global Communication	4

Additional options for completing the ELA requirement will become available as they are approved. For the most up-to-date list of courses for the ELA requirement and ELA options for your major, please consult your academic advisor and your degree audit.

## Interdisciplinary

### Interdisciplinary Majors

- Africana Studies, BA (p. 810)
- Africana Studies, BS (p. 813)
- Africana Studies and Political Science, BA (p. 815)
- History, Culture, and Law, BA (p. 818)
- Politics, Philosophy, and Economics, BS (p. 821)
- Religious Studies and Africana Studies, BA (p. 825)

### Interdisciplinary Minors

- African American Studies (p. 827)
- African Studies (p. 827)
- Africana Studies (p. 828)
- Black Feminist Studies (p. 828)

- Computational Social Science (p. 828)
- Digital Methods in the Humanities (p. 829)
- Food Systems Sustainability, Health, and Equity (p. 829)
- Global Health (p. 585)
- Health, Humanities, and Society (p. 539)
- Latino/a, Latin American, and Caribbean Studies (p. 831)
- Law and Public Policy (p. 832)
- Urban Studies (p. 834)
- Women's, Gender, and Sexuality Studies (p. 834)

## Africana Studies, BA

Africana studies is an interdisciplinary field of study devoted to the critical and systematic examination of the cultural, political, social, economic, and historical experiences of the African Diaspora across the globe. Students are able to focus on either African American or African Studies.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Concentrations

Complete one of the following:

- No Concentration Option (p. 810)
- African American Studies (p. 811)
- Africa Studies (p. 811)

### Africana Studies Major Credit Requirements

Complete 48 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirements

128 total semester hours required

### AFRICANA STUDIES (NO CONCENTRATION OPTION)

Code	Title	Hours
<b>Foundational Course</b>		
Complete one of the following:		

AFAM 1101	Introduction to African American and Africana Studies	
or AFRS 1101	Introduction to African Studies	
<b>Introductory Courses</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following, not already used for the introductory requirement:		8
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 2296	Early African-American Literature	
AFAM 2455	American Women Writers	
AFAM 3663	The African American Novel	
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
AFRS 3900	Gender and Black World Literatures	
<b>Social Sciences</b>		
Complete two of the following, not already used for the introductory requirement:		8
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
AFAM 2399	Black Community and Social Change	
AFAM 2549	Public Policy and Black America	
AFRS 2307	Africa Today	
AFRS 2464	Natural Resources and Sustainable Development	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
<b>Electives (can include cross-listed courses)</b>		
Complete three courses above 2000 level, not already taken		
Complete three courses above 3000 level, not already taken		
<b>Capstone</b>		
AFAM 4700	Capstone	
or AFRS 4700	Capstone	
AFRS 4700 to be reactivated		

**AFRICAN AMERICAN STUDIES CONCENTRATION**

Code	Title	Hours
<b>Foundational Course</b>		
AFAM 1101	Introduction to African American and Africana Studies	4
<b>Introductory Course</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	

AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following, not already used for the introductory requirement:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 2296	Early African-American Literature	
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
AFAM 2455	American Women Writers	
AFAM 3663	The African American Novel	
AFRS 3900	Gender and Black World Literatures	
<b>Social Sciences</b>		
Complete two of the following, not already used for the introductory requirement:		8
AFAM 1225	Gender, Race, and Medicine	
AFAM 2339	Analysis of American Racism	
AFAM 2399	Black Community and Social Change	
AFAM 2549	Public Policy and Black America	
AFAM 3270	Race and Ethnic Relations	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
<b>Electives (may include cross-listed courses)</b>		12
Complete three courses above the 2000 level, not already taken		
Complete three courses above the 3000 level, not already taken.		
<b>Capstone</b>		
AFAM 4700	Capstone	

**AFRICA STUDIES CONCENTRATION**

Code	Title	Hours
<b>Foundational Course</b>		
AFRS 1101	Introduction to African Studies	4
<b>Introductory Course</b>		
Complete one of the following:		4
AFAM 1113	Black Popular Culture	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following, not already used for the introductory requirement:		4
AFAM 1113	Black Popular Culture	
AFAM 2296	Early African-American Literature	
AFAM 3663	The African American Novel	
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
AFRS 3900	Gender and Black World Literatures	
<b>Social Sciences</b>		

Complete two of the following, not already used for the introductory requirement: **8**

AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health
AFRS 2307	Africa Today
AFRS 2464	Natural Resources and Sustainable Development
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
AFRS 3460	Contemporary Government and Politics in Africa

**Electives (may include cross-listed courses) 12**

Complete three courses above the 2000 level, not already taken.

Complete three courses above the 3000 level, not already taken.

**Capstone**

AFRS 4700	Capstone
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**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CLTR 1000	1 AFAM 1113	4 Vacation	0 Vacation	0
AFAM 1101	4 AFAM 1225	4		
AFAM 1104	4 AFAM 2296	4		
MATH 1215	4 Elective	4		
ENGW 1111	4			
	17	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
AFAM intermediate/advanced undergraduate elective	4 AFAM intermediate/advanced undergraduate elective	4 Vacation	0 Co-op	0
Foreign language course	4 Foreign language course	4		
AFAM intermediate/advanced undergraduate elective	4 AFAM intermediate/advanced undergraduate elective	4		
Elective	4 Elective	4		
	EESH 2000	1		
	16	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 AFAM 3663	4 Elective	4 Co-op	0
	ENGW 3315	4 Upper-division elective	4	

AFAM intermediate/advanced undergraduate elective	4			
Foreign language course	4			
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Elective	4 Elective	4 Co-op	0
	Elective	4 Elective	4	
	AFAM intermediate/advanced undergraduate elective	4		
	Upper-division elective	4		
	0	16	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	0 AFAM 4700	4
	Elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 130

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CLTR 1000	1 AFAM 2270	4 Vacation	0 Vacation	0
AFAM 1101	4 AFAM 1113	4		
MATH 1215	4 AFAM 1135	4		
AFAM 1104	4 AFAM 1225	4		
ENGW 1111	4			
	17	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
AFAM intermediate/advanced undergraduate elective	4 Co-op	0 Co-op	0 Elective	4
Foreign language course	4		Elective	4
AFAM intermediate/advanced undergraduate elective	4			
Elective	4			

EESH 2000	1				
	17	0	0		8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
AFAM intermediate/advanced undergraduate elective	4 Co-op	0 Co-op	0 Elective		4
Foreign language course	4		Elective		4
AFAM intermediate/advanced undergraduate elective	4				
Upper-division elective	4				
	16	0	0		8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>		<b>Hours</b>
AFAM 4700	4 Co-op	0 Co-op	0 Vacation		0
ENGW 3315	4				
AFAM intermediate/advanced undergraduate elective	4				
Foreign language course	4				
	16	0	0		0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Elective	4 Elective	4			
Elective	4 Elective	4			
AFAM intermediate/advanced undergraduate elective	4 Upper-division elective	4			
Upper-division elective	4 Elective	4			
	16	16			

Total Hours: 130

## Africana Studies, BS

Africana studies is an interdisciplinary field of study devoted to the critical and systematic examination of the cultural, political, social, economic, and historical experiences of Africans, African-Americans throughout the hemisphere, and peoples of African descent around the world. Students are able to choose focused concentrations in African American or Africa Studies.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Concentrations

Complete one of the following:

- No Concentration Option (p. 813)
- African American Studies (p. 814)
- Africa Studies (p. 814)

## Africana Studies Major Credit Requirements

Complete 48 semester hours in the major.

## Program Requirements

128 total semester hours required

### AFRICANA STUDIES (NO CONCENTRATION OPTION)

Code	Title	Hours
<b>Foundational Course</b>		
Complete one of the following:		4
AFAM 1101	Introduction to African American and Africana Studies	
or AFRS 1101	Introduction to African Studies	
<b>Introductory Courses</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
<b>Humanities Courses</b>		
Complete two of the following, not already used for the introductory requirement:		8
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 2455	American Women Writers	
AFAM 2296	Early African-American Literature	

AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
AFAM 3663	The African American Novel
AFRS 3900	Gender and Black World Literatures

**Social Science Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health
AFAM 2339	Analysis of American Racism
AFAM 2399	Black Community and Social Change
AFAM 2549	Public Policy and Black America
AFRS 2307	Africa Today
AFRS 2464	Natural Resources and Sustainable Development
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFAM 3270	Race and Ethnic Relations
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya

**Electives (6 courses)**

Complete three AFAM or AFRS courses above 2000 level, not already taken 24

Complete three AFAM or AFRS courses above 3000 level, not already taken 24

**Capstone**

AFAM 4700	Capstone	4
or AFRS 4700	Capstone	

**AFRICAN AMERICAN STUDIES CONCENTRATION**

Code	Title	Hours
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**Foundational Course**

AFAM 1101	Introduction to African American and Africana Studies	4
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**Introductory Courses**

Complete one of the following: 4

AFAM 1104	The African-American Experience through Music
AFAM 1113	Black Popular Culture
AFAM 1135	John Coltrane and the History of Jazz in the United States
AFAM 1225	Gender, Race, and Medicine

**Humanities Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1104	The African-American Experience through Music
AFAM 1113	Black Popular Culture
AFAM 1135	John Coltrane and the History of Jazz in the United States
AFAM 2455	American Women Writers

AFAM 2296	Early African-American Literature
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
AFAM 3663	The African American Novel

**Social Science Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health
AFAM 2339	Analysis of American Racism
AFAM 2399	Black Community and Social Change
AFAM 2549	Public Policy and Black America
AFAM 3270	Race and Ethnic Relations
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora

**Electives (6 courses)**

Complete three AFAM courses above 2000 level, not already taken 24

Complete three AFAM courses above 3000 level, not already taken 24

**Capstone**

AFAM 4700	Capstone
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**AFRICA STUDIES CONCENTRATION**

Code	Title	Hours
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**Foundational Course**

AFRS 1101	Introduction to African Studies	4
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**Introductory Courses**

Complete one of the following: 4

AFAM 1113	Black Popular Culture
AFRS 1180	African History
AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health

**Humanities Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1113	Black Popular Culture
AFRS 1180	African History
AFAM 2296	Early African-American Literature
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
AFAM 3663	The African American Novel
AFRS 3900	Gender and Black World Literatures

**Social Science Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health
AFRS 2307	Africa Today
AFRS 2464	Natural Resources and Sustainable Development
AFRS 2465	The Scope and Dynamics of Conflicts in Africa

AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya

**Electives (6 courses)**

Complete three AFRS courses above 2000 level, not already taken	24
Complete three AFRS courses above 3000 level, not already taken	24

**Capstone**

AFRS 4700	Capstone
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**Plan of Study****Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CLTR 1000	1 AFAM 1135	4 Vacation	0 Vacation	0
AFRS 1101	4 AFAM 3270	4		
AFAM 1225	4 AFAM 2296	4		
MATH 1215	4 Elective	4		
ENGW 1111	4			
	17	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
AFRS 1180	4 AFRS 2465	4 Vacation	0 Co-op	0
AFRS 1270	4 Elective	4		
AFRS 2307	4 AFRS 2410	4		
Elective	4 Elective	4		
	EESH 2000	1		
	16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3315	4 Elective	4 Co-op	0
	Elective	4 Elective	4	
	AFRS 3900	4		
	AFRS 3460	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 AFRS 3424	4 Elective	4 Co-op	0
	Upper-division elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 AFRS 4700	4

Upper-division elective	4
Upper-division elective	4
Elective	4
0	16

Total Hours: 130

**Africana Studies and Political Science, BA**

The combined major in Africana studies and political science offers students the opportunity to integrate their studies of both disciplines and explore the historical, practical, and theoretical relationships between the two disciplines. In addition to considering the significant points of contention, students explore the ways in which insights from Africana studies can be brought to bear on the disciplinary issues and questions of political science. Within the combined major, students may also choose to concentrate their studies on a range of topics related to political behaviors and institutional developments in the United States, the Americas, Europe, Africa, and across the global African diaspora.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Africana Studies Requirements**

Code	Title	Hours
<b>Foundational</b>		
Complete one of the following:		4
AFRS 1101	Introduction to African Studies	
AFAM 1101	Introduction to African American and Africana Studies	
<b>Introductory</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFRS 1185	Gender and Sexuality in the African Diaspora	
AFAM 1225	Gender, Race, and Medicine	



AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following:		8
AFAM 2296	Early African-American Literature	
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
AFAM 2455	American Women Writers	
AFAM 2690	Boston in Literature	
AFRS 3900	Gender and Black World Literatures	
<b>Social Sciences</b>		
Complete two of the following:		8
AFRS 2307	Africa Today	
AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 2464	Natural Resources and Sustainable Development	
<b>African American/African Studies Electives</b>		
Complete one AFAM/AFRS course at the 2000 level or above.		4
Complete one AFAM/AFRS course at the 3000 level or above.		4

### Political Science Requirements

Code	Title	Hours
<b>Core Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

<b>Political Science Electives</b>		
Complete three POLS courses at the 2000 level and above.		12

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 816)
- Campaigns and Elections (p. 816)
- Comparative Politics (p. 817)
- Identity, Culture, and Politics (p. 817)
- International Relations and Diplomacy (p. 817)
- Law and Legal Studies (p. 817)
- Public Policy (p. 817)
- Security Studies (p. 817)

### Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
Complete one course from each discipline.		
<i>Africana/African American Studies</i>		4
AFAM 2360	Politics of Poverty	
AFAM 2549	Public Policy and Black America	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFAM 5001	Special Topics in Race and the Law	
<i>Political Science</i>		4
POLS 3487	Politics of Developing Nations	
POLS 2385	U.S. Health and Welfare Policy	
POLS 3324	Law and Society	
POLS 3418	Nationalism	
POLS 3487	Politics of Developing Nations	
<b>Capstone Requirement</b>		
Complete one of the following:		4
AFAM 4700	Capstone	
AFRS 4700	Capstone	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

### Major Credit Requirement

Complete 80 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	

POLS 2350	State and Local Politics
POLS 2355	Intergovernmental Relations
POLS 3310	Public Opinion, Voting, and Elections
POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

**Regional Requirements**

Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

**Experiential/Practicum Requirement**

Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	

POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study****Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AFRS 1101 or AFAM 1101	4	MATH 1215	4	Foreign language course	4	POLS 3406	4
AFAM 1113	4	POLS 1160	4	AFAM 2360	4	Advanced Writing in the Discipline elective	4
POLS 1150	4	POLS 1155	4				

CLTR 1000 or POLS 1000	1	Foreign language course	4		
ENGW 1111	4				
	17		16	8	8
<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
AFAM 2296	4	AFRS 3424	4	Elective	4
AFRS 2307	4	AFAM 2690	4	Elective	4
POLS 2400	4	POLS 2399	4		
Foreign language course	4	POLS 2325	4		
	16		16	8	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	0	AFAM 3270	4	AFAM 2339	4
		POLS 3418	4	AFAM 3664	4
		AFRS 2464	4		
		PSYC 1101 (ND NUPath)	4		
	0		16	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Co-op	0	AFRS 3460	4		
		POLS 3487	4		
		POLS 2370	4		
		AFAM 4700 (or AFRS 4700)	4		
	0		16		

Total Hours: 129

## History, Culture, and Law, BA

History, Culture, and the Law is an interdisciplinary major that provides students the opportunity to understand how legal systems are shaped by cultural norms and historical developments, as well as how social change has been and can be created through legal processes. After studying principles of historical method and jurisprudence, students bring to bear the interdisciplinary frameworks they have begun to develop in one of six culturally-focused concentrations: Africana Studies and Culture; Asian Studies and Culture; Culture and Colonialism; Digital Humanities; Gender and Sexuality; and Latino/a, Latin American, and Caribbean Studies and Culture. Students have opportunities to develop flexibility in perspectives; to exercise ability to work in interdisciplinary frameworks; and to foster appreciation of cultural diversity that will enable them to make a positive impact in their chosen spheres of action.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Note: No more than two courses taken for this major may be counted toward another major or minor.

### Law and History Core

Code	Title	Hours
<b>Foundational Core Courses</b>		
Complete the following three courses:		12
ENGL 3325	Rhetoric of Law	
HIST 1100	Law and History	
LPSC 2301	Introduction to Law, Policy, and Society	
<b>Foundational Core Elective</b>		
Complete two of the following:		8
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
LPSC 3303	Topics in Law and Public Policy	
LPSC 3307	Understanding the Modern Supreme Court	
PHIL 2301	Philosophical Problems of Law and Justice	
POLS 3302	Judicial Process and Behavior	
POLS 3406	International Law	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

### Concentrations

Students will elect one four-course concentration from among these choices:

- Africana Studies and Culture (p. 819)
- Asian Studies and Culture (p. 819)
- Culture and Colonialism (p. 820)
- Digital Humanities (p. 820)
- Gender and Sexuality (p. 820)
- Latino/a, Latin American, and Caribbean Studies and Culture (p. 820)

### Major Electives

Code	Title	Hours
Complete three of the following not already used to fulfill one of the requirements above. Courses not used above to fulfill a requirement may also be used to fulfill this elective requirement. However, only one course used to fulfill this requirement may be at the 1000 level.		

AFAM 2399	Black Community and Social Change
ANTH 2305	Global Markets and Local Culture
AFAM 3120	Race, Crime, and Justice
CLTR 3418	Nationalism
CRIM 2350	Policing a Democratic Society
CRIM 3110	Gender, Crime, and Justice
ENGL 2690	Boston in Literature
ENGL 3325	Rhetoric of Law
ENGL 3375	Writing Boston
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or WMNS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues
HIST 2000	Native American Resistance: Past and Present
HIST 2011	Capitalism and Business: A Global History
HIST 2217	The Global Far-Right since 1945: Politics, Culture, Violence
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2282	The Holocaust and Comparative Genocide
HIST 2285	America and the Holocaust
HIST 2311	Colonialism/Imperialism
HIST 2332	Going Global: The United States, 1898-1945
HIST 3334	Assassinations in World History
LPSC 3303	Topics in Law and Public Policy
PHIL 1102	Introduction to Contemporary Moral Issues
PHIL 1112	Debating Ethical Controversies
PHIL 2303	Social and Political Philosophy
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 2330	Modern Philosophy
SOCL 4522	Environmental Justice

### Capstone

Code	Title	Hours
Complete one of the following capstone courses:		
AFAM 4700	Capstone	
AFRS 4700	Capstone	
ASNS 4900	Asian Studies Capstone Directed Study	
ENGL 4720	Capstone Project	
HIST 4701	Capstone Seminar	
PHIL 5001	Global Justice	

### Major GPA Requirement

Minimum 3.000 GPA required in all major courses

### Major Credit Requirement

Complete 52 hours in the major

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirements

128 total semester hours required

#### *Concentration in Africana Studies and Culture*

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete one of the following:		4
AFAM 1101	Introduction to African American and Africana Studies	
AFRS 1101	Introduction to African Studies	
Complete one of the following, as a Writing Intensive course:		4
AFRS 4510	Anthropology of Africa	
or ANTH 4510	Anthropology of Africa	
WMNS 4520	Race, Class, and Gender	
or SOCL 4520	Race, Class, and Gender	
Complete two of the following, at least one of which must be at the 3000 level of above:		8
AFAM 1104 - AFAM 5001		
AFRS 1270 - AFRS 4939		

#### *Concentration in Asian Studies and Culture*

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete the following course:		4
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
Complete one of the following, as a Writing Intensive course:		4
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2395	Japanese Buddhism	
Complete two of the following. If HIST 2308 or PHIL 2395 is the Writing Intensive course, at least one of these electives must be at the 3000 level or above:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4515	Culture and Politics in Modern India	
CLTR 1260	Japanese Film	
CLTR 1500	Modern Chinese History and Culture	
or HIST 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 2011	Capitalism and Business: A Global History	
HIST 2351	Modern Japan	
MUSC 2130	Music of Asia	
PHIL 1130	Ethics: East and West	

PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion

**Concentration in Culture and Colonialism**

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete the following course:		4
POLS 2325	Ancient Philosophy and Political Thought	
	or PHIL 2325 Ancient Philosophy and Political Thought	
Complete three of the following, at least one of which must be at the 3000 level or above:		12
CLTR 1501	Introduction to French Culture	
CLTR 1504	Cultural History of Spain	
CLTR 2451	Postcolonial Women Writers	
	or ENGL 2451 Postcolonial Women Writers	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1190	Picturing Modernity: The Photographic Image in Culture and Society	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 1286	History of the Soviet Union	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 2011	Capitalism and Business: A Global History	
HIST 2311	Colonialism/Imperialism	
HIST 3335	History of Modern Terrorism	
PHIL 1120	Understanding the Bible	
PHIL 3343	Existentialism	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	

**Concentration in Digital Humanities**

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete the following course:		4
ENGL 1450	Reading and Writing in the Digital Age	
Complete three of the following, at least one of which must be at the 3000 level or above:		12
CLTR 2850	Apps, Memes, and Bots: Global Literature in the Age of the Internet	
COMM 1255	Communication in a Digital Age	
COMM 2105	Social Networks	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3340	Technologies of Text	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
PHIL 1145	Technology and Human Values	

PHIL 2001	Ethics and Evolutionary Games
SOCL 4518	Law and Society in a Digital World
SOCL 4528	Computers and Society

**Concentration in Gender and Sexuality**

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete one of the following:		4
WMNS 1101	Sex, Gender, and Popular Culture	
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	
Complete one of the following as a Writing Intensive course:		4
WMNS 2505	Digital Feminisms	
WMNS 4520	Race, Class, and Gender	
	or SOCL 4520 Race, Class, and Gender	
Complete two of the following. If WMNS 2505 is the Writing Intensive course, at least one of these electives must be at the 3000 level or above:		8
AFAM 1225	Gender, Race, and Medicine	
	or HIST 1225 Gender, Race, and Medicine	
	or WMNS 1225 Gender, Race, and Medicine	
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
CLTR 2451	Postcolonial Women Writers	
	or WMNS 2451 Postcolonial Women Writers	
INTL 2480	Women and World Politics	
WMNS 1260	Gender in a Changing Society	
WMNS 2303	Gender and Reproductive Justice	
WMNS 3100	Gender, Social Justice, and Transnational Activism	
WMNS 3500	Sexuality, Gender, and the Law	
WMNS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	

**Concentration in Latino/a, Latin American, and Caribbean Studies and Culture**

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete the following course:		4
LACS 1220	Latino, Latin American, and Caribbean Studies	
Complete one of the following, as the Writing Intensive course:		4
ANTH 4500	Latin American Society and Development	
Complete two of the following:		8
CLTR 1261	Caribbean Literature and Culture	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3501	Caribbean Literature and Culture	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3725	Representing Violence and Human Rights in Latin America	
HIST 1187	Introduction to Latin American History	

HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 2025	Latin American History through Film

CLTR 1000	1			
	17	16	8	0

**Plan of Study**

**FOUR YEARS, TWO CO-OPS IN SUMMER 2 / FALL AFRICANA STUDIES AND CULTURE CONCENTRATION**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 Foreign Language	4 Elective	4 Elective	4
MATH 1215	4 LPSC 2301	4 Elective	4 Elective	4
Foreign Language	4 AFAM 1101	4		
HIST 1100	4 POLS 1160	4		
CLTR 1000	1			
	17	16	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EESH 2000	1 Co-op	Co-op	Elective	4
Foreign Language	4		Elective	4
ENGL 3325	4			
PHIL 2301	4			
LPSC 2302	4			
	17	0	0	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EESH 2000	1 Co-op	Co-op	Elective	4
ENGL 3325	4		Elective	4
PHIL 2301	4			
LPSC 2302	4			
Foreign Language	4			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGL 3340	4 ENGW 3315	4 Vacation	Vacation	
INSH 2102	4 Foreign Language	4		
Elective	4 HCL Elective	4		
HCL Elective	4 Elective	4		
	16	16	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
WMNS 4520	4 AFAM 1113	4 Elective	4 Co-op	
AFRS 1270	4 EESH 2000	1 Elective	4	
ENGW 3315	4 Elective	4		
HCL Elective	4 Elective	4		
	HCL Elective	4		
	16	17	8	0

**Year 4**

Fall	Hours Spring	Hours
HCL Elective	4 HCL Capstone	4
Foreign Language	4 Elective	4
Elective	4 Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 130

**Politics, Philosophy, and Economics, BS**

Website (<https://www.northeastern.edu/cssh/ppe/>)

617.373.3636  
617.373.4359 (fax)

The PPE major at Northeastern University brings together three of the most important approaches to understanding the world around us: political science, philosophy, and economics. The PPE major is an interdisciplinary degree that not only provides students with the analytic tools from three different disciplines but also teaches students to make connections across disciplines and to keep multiple perspectives in mind when analyzing complex social phenomena. This interdisciplinary perspective and set of skills are indispensable in our increasingly interconnected world and are essential in addressing the kinds of complex global problems future leaders will need to tackle.

There are a number of varieties of the PPE major that students may choose from in accordance with their own backgrounds and interests. These include:

- environment and energy policy
- international political economy
- law and justice

**FOUR YEARS, ONE CO-OP IN SPRING / SUMMER 1 DIGITAL HUMANITIES CONCENTRATION**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 Foreign Language	4 Elective	4 Vacation	
Foreign Language	4 LPSC 2301	4 Elective	4	
MATH 1215	4 ENGL 1450	4		
HIST 1100	4 COMM 1255	4		

- logic and game theory
- political philosophy
- public and economic policy

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Politics, Philosophy, and Economics Major Requirements

Code	Title	Hours
<b>Foundation Course</b>		
PHIL 1160	Introduction to Economic Justice	4
<b>Core Courses</b>		
<i>Philosophy</i>		
PHIL 2303	Social and Political Philosophy	4
or PHIL 3822	Philosophy of Race and Racism	
PHIL 1115	Introduction to Logic	4
PHIL 3435	Moral Philosophy	4
or PHIL 2325	Ancient Philosophy and Political Thought	
<i>Political Science</i>		
POLS 1160	International Relations	4
POLS 3405	International Political Economy	4
POLS 1150	American Government	4
or POLS 1155	Comparative Politics	
<i>Economics</i>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
or ECON 2316	Microeconomic Theory	
<b>Methods Course</b>		
PHIL 3000	Interdisciplinary Methods for Politics, Philosophy, and Economics	4
<b>Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
PHIL 4550	Philosophy of Economics	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

## Major Electives

Code	Title	Hours
Complete two of the following:		8
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		
PHIL 2000 to PHIL 5999		
POLS 2000 to POLS 5999		

## Concentration

Complete one of the following concentrations:

- Environment and Energy Policy (p. )
- International Political Economy (p. )
- Law and Justice (p. )
- Logic and Game Theory (p. )
- Political Philosophy (p. )
- Public and Economic Policy (p. )

## Supporting Courses

Code	Title	Hours
<b>Racial or Gender Justice</b>		
Complete one of the following:		4
AFAM 1101	Introduction to African American and Africana Studies	
AFAM 2339	Analysis of American Racism	
AFAM 2355	Race, Identity, Social Change, and Empowerment	
AFAM 2360	Politics of Poverty	
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
CRIM 3110	Gender, Crime, and Justice	
ECON 3412	Women's Labor and the Economy	
HIST 1225	Gender, Race, and Medicine	
HIST 2000	Native American Resistance: Past and Present	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 3500	Sexuality, Gender, and the Law	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
SOCL/WMNS 1260	Gender in a Changing Society	
SOCL 3270	Race and Ethnic Relations	
SOCL 4520	Race, Class, and Gender	
WMNS 1101	Sex, Gender, and Popular Culture	
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	
WMNS 1441	Topics in Women's, Gender, and Sexuality Studies	
WMNS 2304	Communication and Gender	
WMNS/HIST 2373	Gender and Sexuality in World History	
WMNS/INTL 2480	Women and World Politics	
WMNS 2505	Digital Feminisms	
WMNS/HUSV 2800	Sexual Orientation and Gender Expression	

WMNS 3100	Gender, Social Justice, and Transnational Activism	
WMNS/COMM 3304	Communication and Inclusion	
WMNS 3500	Sexuality, Gender, and the Law	

**Statistics and Mathematics**

MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	
or MATH 2280	Statistics and Software	

**Experiential Learning Requirement**

Complete one co-op, study abroad, qualifying Dialogue of Civilizations, or one of the following:		4
ECON 4991	Research	
ECON 4994	Internship	
ECON 4996	Experiential Education Directed Study	
POLS 4970	Junior/Senior Honors Project 1	
POLS 4971	Junior/Senior Honors Project 2	
POLS 4942	Internship in Politics	
POLS 4996	Experiential Education Directed Study	

**Major GPA/Credit Requirement**

Complete 68 semester hours in the major with a 3.000 GPA.

Code	Title	Hours
<b>Economics GPA Requirement:</b>		
Grades in the following courses must average to a minimum of C (2.000):		
ECON 2315	Macroeconomic Theory	
or ECON 2316	Microeconomic Theory	
ECON 2350	Statistics	
or POLS 2400	Quantitative Techniques	
or MATH 2280	Statistics and Software	

**Course Distribution Requirement**

Complete at least four courses in each of the following subject areas: ECON, PHIL, and POLS.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Concentrations****CONCENTRATION IN ENVIRONMENT AND ENERGY POLICY**

Code	Title	Hours
Complete two of the following:		
ECON 1711	Economics of Sustainability	8

ECON 3423	Environmental Economics	
or ECON 3425	Energy Economics	
PHIL 1180	Environmental Ethics	
or PHIL 1185	The Ethics of Food	
POLS 2395	Environmental Politics and Policy	
Complete one of the following:		4
ECON 3423	Environmental Economics	
ECON 3425	Energy Economics	
PHIL 1180	Environmental Ethics	
PHIL 1185	The Ethics of Food	

**CONCENTRATION IN INTERNATIONAL POLITICAL ECONOMY**

Code	Title	Hours
Complete two of the following:		
ECON 1291	Development Economics	
ECON 2316	Microeconomic Theory	
ECON 3290	History of the Global Economy	
ECON 3404	International Food Policy	
ECON 4635	International Economics	
ECON 5200	Topics in Applied Economics	
PHIL 1185	The Ethics of Food	
PHIL 1170	Business, Ethics, and Human Rights	
POLS 3406	International Law	
POLS 3487	Politics of Developing Nations	
Complete one of the following:		4
ECON 1292	Economic History of the Middle East	
HIST 2360	History of Capitalism in East Asia	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
HIST 2011	Capitalism and Business: A Global History	

**CONCENTRATION IN LAW AND JUSTICE**

Code	Title	Hours
Complete three of the following, only two of which may be POLS courses:		
ECON 3424	Law and Economics	
ECON 1240	Economics of Crime	
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2155	Human Rights	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 3500	Sexuality, Gender, and the Law	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	
WMNS 3500	Sexuality, Gender, and the Law	
HIST 2280	Hitler, Germany, and the Holocaust	



HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 3335	History of Modern Terrorism

**CONCENTRATION IN LOGIC AND GAME THEORY**

Code	Title	Hours
Complete three courses from the following:		12
ECON 2316	Microeconomic Theory	
ECON 3416	Behavioral Economics	
ECON 4680	Competition Policy and Regulation	
ECON 4681	Information Economics and Game Theory	
ECON 5105	Math and Statistics for Economists	
ECON 5110	Microeconomic Theory	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 3050	Information and Uncertainty	
PHIL 4500	Theory of Knowledge	
PHIL 4515	Advanced Logic	
PHIL 4550	Philosophy of Economics	

**CONCENTRATION IN POLITICAL PHILOSOPHY**

Code	Title	Hours
<b>Economics Course</b>		
ECON 3490	Public Choice Economics	4
<b>Politics Courses</b>		
Complete two of the following:		8
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Philosophy Course</b>		
Complete one of the following:		4
PHIL 2155	Human Rights	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 3435	Moral Philosophy	
PHIL 3500	Sexuality, Gender, and the Law	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	

**CONCENTRATION IN PUBLIC AND ECONOMIC POLICY**

Code	Title	Hours
<b>Required Course</b>		
POLS 3307	Public Policy and Administration	4
<b>Elective Courses</b>		
Complete two of the following:		8
ECON 1240	Economics of Crime	
ECON 1281	Economics of the Creative Industries	
ECON 2315	Macroeconomic Theory	
ECON 3410	Labor Economics	
ECON 3413	Health Economics and Healthcare Policy	
ECON 3414	Economics of Human Capital	
ECON 3420	Urban Economic Issues	

ECON 3422	Economics of Transportation
ECON 3423	Environmental Economics
ECON 3425	Energy Economics
ECON 3440	Public Finance
ECON 3462	Bubbles, Busts, and Bailouts: Market and Regulatory Failures in the Financial Crisis
ECON 3490	Public Choice Economics
ECON 4680	Competition Policy and Regulation
HIST 2331	The Civil War and Reconstruction
HIST 2339	America's Gilded Age, 1865-1896
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
POLS 2340	Business and Government
POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 2335	Budgeting and Taxation
POLS 2357	Growth and Decline of Cities and Suburbs
POLS 3425	U.S. Foreign Policy

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops Summer 2/ Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
PHIL 1160	4	ENGW 1111	4	Elective	4	Vacation	4	
PHIL 1000	1	ECON 1116	4	Elective	4		4	
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4	PHIL 1115	4					
POLS 1160	4	PHIL 2303	4					
General Elective								
General Elective	4							
			17		16		8	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
ECON 1115	4	Statistics and Mathematics Requirement	4	Elective	4	Co-op	4	
POLS 1150 or 1155	4	ECON 2315 or 2316	4	Elective	4		4	
PHIL 3435 or 2325	4	Major Elective	4					
Supporting Course in Race or Gender Justice	4	Concentration Course	4					
			16		16		8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHIL 3000	4 General Elective	4 Co-op	
	General Elective	4 General Elective	4	
	Major Elective	4		
	Concentration Course	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
Co-op	Concentration Course	4 General Elective	4
	Capstone Requirement	4 General Elective	4
	General Elective	4	
	General Elective	4	
	0	16	8

Total Hours: 129

## Religious Studies and Africana Studies, BA

The Department of Philosophy and Religion and the Program in Africana Studies offer an interdisciplinary combined major in religious studies and Africana studies. Students interested in the combined major integrate the study of religious traditions, religious praxis, and religious ethics with critical and systematic examination of the cultural, political, social, economic, and historical experiences of African Americans throughout the hemisphere and peoples of African descent around the world.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Religious Studies Major Requirements

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
<b>Comparative Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2395	Japanese Buddhism	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
<b>Electives</b>		
Complete five of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement:		20
PHIL 1111	Introduction to World Religions	
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1285	Jewish Religion and Culture	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 2390	Cults and Sects	

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4903	Seminar in Religion
PHIL 4992	Directed Study

**Capstone**

Complete the following course that is not used to satisfy another requirement: 4

PHIL 4903	Seminar in Religion
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**Africana Studies Requirements**

Code	Title	Hours
<b>Foundational</b>		
AFAM 1101	Introduction to African American and Africana Studies	4
or AFRS 1101	Introduction to African Studies	

**Introductory**

Complete one of the following: 4

AFAM 1101	Introduction to African American and Africana Studies
AFAM 1104	The African-American Experience through Music
AFAM 1113	Black Popular Culture
AFAM 1135	John Coltrane and the History of Jazz in the United States
AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health

**Humanities**

Complete two of the following: 8

AFAM 2296	Early African-American Literature
AFAM 2455	American Women Writers
AFAM 3663	The African American Novel

**Social Sciences**

Complete two of the following: 8

AFRS 2307	Africa Today
AFAM 2399	Black Community and Social Change
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
AFRS 2464	Natural Resources and Sustainable Development
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora

**Electives**

Note: Electives may not double count for other AFAM or HIST combined-major requirements.

Complete one AFAM/AFRS course at the 2000 level or above	4
Complete one AFAM/AFRS course at the 3000 level or above	4

**Senior Capstone**

Choose one capstone course from the list below. 4

AFAM 4700	Capstone
PHIL 4903	Seminar in Religion

**Integrative Requirement**

Code	Title	Hours
Complete the following course: 4		
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	4
or AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	

**Program Requirement**

128 total semester hours required

**Plan of Study**  
**Four Years, Two Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 Lived Religion Elective	4 Elective	4 Elective	4
PHIL 1110	4 Introductory Course	4 Elective	4 Elective	4
Elective	4 Elective	4		
AFAM 1101 or AFRS 1101	4 Elective	4		
16		16	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Comparative Religion Elective	4 Co-op	Co-op	Elective	4
Social Sciences Course	4		Elective	4
PHIL 2000 Level Elective	4			
Elective	4			
16		0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	Co-op	Elective	4
Humanities Course	4		Elective	4
Social Sciences Course	4			
AFAM/AFRS 2000 Level Elective	4			
16		0	0	8

**Year 4**

Fall	Hours Spring	Hours
AFAM/AFRS 3000 Level Elective	4 Humanities Course	4
PHIL 3000 Level Elective	4 Integrative Requirement Course	4

Elective	4 PHIL Advanced Level Elective	4
Elective	4 Capstone	4
	16	16

Total Hours: 128

### African American Studies, Minor

The African American studies minor offers students the opportunity to engage in focused analysis devoted to the critical and systematic examination of the cultural, political, social, economic, and historical theories, frameworks, and experiences of African-descended people in the United States of America.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

#### Required Courses

Code	Title	Hours
<b>Foundational</b>		
AFAM 1101	Introduction to African American and Africana Studies	4
<b>Humanities</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 2296	Early African-American Literature	
AFAM 2339	Analysis of American Racism	
AFAM 2360	Politics of Poverty	
AFAM 2362	Modern and Contemporary African-American Literature	
AFAM 2690	Boston in Literature	
AFAM 3120	Race, Crime, and Justice	
AFAM 3404	African American Rhetorical Traditions	
AFAM 3664	Black Poetry and the Spoken Word	
AFAM 2455	American Women Writers	
<b>Social Sciences</b>		
Complete one of the following:		4
AFAM 1225	Gender, Race, and Medicine	
AFAM 2355	Race, Identity, Social Change, and Empowerment	
AFAM 2399	Black Community and Social Change	
AFAM 2549	Public Policy and Black America	
AFAM 2600	Issues in Race, Science, and Technology	
AFAM 2618	Community Psychology	
AFAM 3270	Race and Ethnic Relations	
AFAM 5001	Special Topics in Race and the Law	

### Electives

Code	Title	Hours
	Complete one AFAM or AFRS course at the 2000 level or above, not already taken.	4
	Complete one AFAM or AFRS course at the 3000 level or above, not already taken.	4

#### GPA Requirement

2.000 GPA required in the minor

### African Studies, Minor

The mission of the African and African-American Studies Program is to mentor intellectual leaders, to develop emerging scholars, and to train global citizens who are able to explore the world from diverse perspectives in an ever increasingly global and interdisciplinary world. In our experiential liberal arts education model, students study culture, history, politics, and society as they relate to African and African-American studies to cultivate their thinking, reading, and writing skills through interdisciplinary class-based and experiential learning opportunities. Some of the major areas of interest and research of our faculty include the public humanities and public policy, critical race theory and empire/colonialism, criminal justice and carceral state, global public health and neglected tropical diseases, gender, sexuality, and women's studies.

Through rigorous study, co-op, study abroad, Dialogue of Civilizations, and service-learning, students have an opportunity to acquire use-inspired knowledge and competencies that will equip them with endless possibilities to flexibly fit any profession and graduate studies they may pursue in the social sciences and humanities.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

#### Required Course

Code	Title	Hours
AFRS 1101	Introduction to African Studies (A grade of C or higher is required)	4

#### Social Sciences

Code	Title	Hours
Complete two of the following:		
AFRS 1185	Gender and Sexuality in the African Diaspora	
AFRS 2307	Africa Today	
AFRS 2414		
AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	

INTL 3565	Morocco: History, Cultures, and Economic Development in the Mediterranean Basin
POLS 3487	Politics of Developing Nations

## Humanities

Code	Title	Hours
AFAM 1109		4
AFRS 1180	African History	4

## GPA Requirement

2.000 GPA required in the minor

### Africana Studies, Minor

The Africana studies minor offers students the opportunity to explore the interdisciplinary analysis of the cultural, political, social, economic, and historical aspects of the diaspora of African-descended people across the globe.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Courses

Code	Title	Hours
<b>Foundational</b>		
AFAM 1101	Introduction to African American and Africana Studies	4
<b>Humanities</b>		
Complete one of the following: 4		
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 2296	Early African-American Literature	
AFAM 2455	American Women Writers	
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
<b>Social Sciences</b>		
Complete one of the following: 4		
AFAM 1225	Gender, Race, and Medicine	
AFAM 2399	Black Community and Social Change	
AFAM 2549	Public Policy and Black America	
AFAM 3270	Race and Ethnic Relations	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	

## Electives

Code	Title	Hours
Complete one AFAM or AFRS course at the 2000 level or above, not already taken.		4
Complete one AFAM or AFRS course at the 3000 level or above, not already taken.		4

## GPA Requirement

2.000 GPA required in the minor

### Black Feminist Studies, Minor

This interdisciplinary minor offers students opportunities to critically engage with the histories and theories that sit at the intersections of race, gender, class, and sexuality. This minor will allow students to centralize the study of Black women from diverse disciplinary perspectives and provide students with opportunities to engage comparative and transnational Black feminist studies frameworks for analyzing gender, sexuality, and other concepts within the broader disciplines of Africana and women's, gender, and sexuality studies.

## Minor Requirements

Code	Title	Hours
<b>Required Courses</b>		
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	4
AFAM 1101	Introduction to African American and Africana Studies	4
or AFRS 1101	Introduction to African Studies	
<b>Electives</b>		
Complete two of the following:		
AFAM 1113	Black Popular Culture	4
AFRS 3900	Gender and Black World Literatures	4
ENGL 2451	Postcolonial Women Writers	4
ENGL 2455	American Women Writers	4
SOCL 4520	Race, Class, and Gender	4
WMNS 1225	Gender, Race, and Medicine	4
WMNS 2505	Digital Feminisms	4
WMNS 3100	Gender, Social Justice, and Transnational Activism	4

### Computational Social Science, Minor

This minor introduces and develops the essential skills for employing mathematical, formal, and computational methods in the social sciences. Students completing this minor will have a grasp of the fundamentals necessary for pursuing more in-depth studies in the emerging fields of computational social science and big data. The foundational courses emphasize skills in probability, statistics, and introductory programming. Other courses focus on the application of formal and computational methods in the social sciences including digital analysis of texts, maps, and networks. An additional elective provides breadth in social scientific studies of computation or the foundational principles of logic and computation.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Foundational Courses

Code	Title	Hours
MATH 2280	Statistics and Software	4
or ECON 2350	Statistics	
or CRIM 3700	Analyzing and Using Data on Crime and Justice	

or SOCL 2320	Statistical Analysis in Sociology	
or POLS 2400	Quantitative Techniques	
or PSYC 2320	Statistics in Psychological Research	
INSH 1500	Digital Methods for Social Sciences and Humanities	4
or CS 2500	Fundamentals of Computer Science 1	
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	

### Applications of Computational Approaches in the Social Sciences

Code	Title	Hours
Complete two courses from the following:		8
<i>(Students may complete a capstone project under the direction of a faculty member in lieu of an application course.)</i>		
COMM 2105	Social Networks	
DS 3000	Foundations of Data Science	
or DS 4200	Information Presentation and Visualization	
or DS 4300	Large-Scale Information Storage and Retrieval	
or DS 4400	Machine Learning and Data Mining 1	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
MISM 2301	Management Information Systems	
or MISM 2510	Fundamentals of Information Analytics	
PHIL 2001	Ethics and Evolutionary Games	
POLS 3310	Public Opinion, Voting, and Elections	
PPUA 5262	Big Data for Cities	

### Elective in Social Inquiry, Computation, and Logic

Code	Title	Hours
Complete one course from the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CS 2800	Logic and Computation	
ECON 4681	Information Economics and Game Theory	
IS 2000	Principles of Information Science	
PHIL 1115	Introduction to Logic	
or MATH 1215	Mathematical Thinking	
MATH 3081	Probability and Statistics	
PHIL 4515	Advanced Logic	
SOCL 4528	Computers and Society	

### GPA Requirement

2.000 GPA required in the minor

### Digital Methods in the Humanities, Minor

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
Take two courses from each group and an additional course from either group.		20

#### Digital and Computational Methods

INSH 1500	Digital Methods for Social Sciences and Humanities	
or CS 2500	Fundamentals of Computer Science 1	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 3340	Technologies of Text	
COMM 2105	Social Networks	
JRNL 3610	Digital Storytelling and Social Media	
PHIL 2001	Ethics and Evolutionary Games	

#### Culture, Society, and Value in the Digital Age

PHIL 1145	Technology and Human Values	
COMM 1255	Communication in a Digital Age	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3340	Technologies of Text	
WMNS 2505	Digital Feminisms	
MSCR 3420	Digital Media Culture	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3418	Nationalism	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 4528	Computers and Society	

### GPA Requirement

2.000 GPA required in the minor

### Food Systems Sustainability, Health, and Equity, Minor

The minor in food systems sustainability, health, and equity is an interdisciplinary exploration of the contemporary food system, with particular attention to how the system evolved; its diverse societal, health, and environmental impacts; and ideas for making the food system more sustainable, healthy, and equitable for all.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
Complete four courses from the list below. Two of the courses must be upper-level (numbered 3000 or higher). Only one course can be from the major.		16-17
<i>Upper-Level Courses</i>		
ECON 3404	International Food Policy	
ENTR 4506	Advanced Studies in Social Innovation Entrepreneurship	

ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300
ENVR 3150	Food Security and Sustainability
PPUA 4701	Food Systems Sustainability, Health, and Equity Practicum
PPUA 5263	Geographic Information Systems for Urban and Regional Policy
PPUA 5270	Food Systems and Public Policy
<b>Additional Courses</b>	
EEMB 2420	Fisheries Biology, Policy, and Conservation
ENTR 2206	Global Social Enterprise
ENVR 1101	Environmental Science
HSCI 1106	Contemporary Issues in Nutrition
INSH 1102	Food in Contemporary Context
PHIL 1185	The Ethics of Food

### GPA Requirement

2.000 GPA required in the minor

### Global Health, Minor

The area of global health has become a critical field of study across and within diverse disciplines, because of the cross-border and cross-national implications of health-related risks for national security, commerce, transportation, and healthcare delivery itself. In collaboration with the College of Social Sciences and Humanities, the minor in global health is designed to provide undergraduate students an opportunity to explore and discuss the implications with an interdisciplinary lens. The minor is comprised of five courses: one foundation and one core course, three electives, and a global health experience to be approved by the global health minor advisor.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Foundation Course

Code	Title	Hours
AFRS 1270 or PHTH 1270	Introduction to Global Health	4

### Core Course

Code	Title	Hours
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	3-4
PHTH 4120	Global Perspectives on Discrimination and Health	
PHTH 5230	Global Health	

### Elective Courses

Code	Title	Hours
Complete three courses from the following areas. Only two courses from any one area may count toward the minor electives. No more than two required courses in the student's major may count toward the minor electives. At least one of the minor electives must be at the 3000-level or above.		9-12

#### Area 1: Community and Public Health

AFRS 4939	Community Health, Culture, and Development in Kenya <small>(Dialogue Only)</small>
CAEP 2010	Counseling and Applied Educational Psychology in a Global Context <small>(Dialogue only)</small>
ENVR 1110	Global Climate Change
PHTH 1261	Comparative Healthcare Systems <small>(Dialogue only)</small>
PHTH 2301	Communication Skills for the Health Professions—Global <small>(Dialogue Only)</small>
PHTH 2350 or PHTH 2351 or NRSR 4604	Community and Public Health Community and Public Health - Global Public Health Community Nursing
PHTH 4202 or PHTH 5202	Principles of Epidemiology in Medicine and Public Health Introduction to Epidemiology
PHTH 4540	Health Education and Program Planning

#### Area 2: Biology of Health and Disease

BIOL 1141	Microbes and Society
BIOL 1143	Biology and Society
BIOL 2327	Human Parasitology
EEMB 3466	Disease Ecology

#### Area 3: Society and Cultural Health / Area Studies

AFRS 2900	Swahili, Culture, and Politics in Kenya <small>(Dialogue only)</small>
ANTH 4350	Ethnography of Southeast Asia
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India
ECON 1230	Healthcare and Medical Economics
HIST 2233	The History of Medicine in North America
LACS 1220	Latino, Latin American, and Caribbean Studies
PHIL 1165	Moral and Social Problems in Healthcare

#### Area 4: Globalization and Development

CRIM 1400	Human Trafficking
ECON 1291	Development Economics
ECON 3404	International Food Policy
ECON 3413	Health Economics and Healthcare Policy
ECON 3416	Behavioral Economics
ECON 5292	Gender and Development Economics
HLTH 1510 or HLTH 2100	Introduction to Healthcare Ethics Interprofessional Ethics for Individual and Population Health

HUSV 4945	Leadership and International Program Development <sup>(Dialogue only)</sup>
INTL 1101	Globalization and International Affairs
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations

## Global Health Experience

Complete a global health experience that has been approved by the global health minor adviser.

## Recommended

Competency in another language other than English is recommended.

## Completion of the Minor

All coursework must be completed at a minimum grade of B and courses may not be taken Pass/Fail.

Complete a minimum of 16 semester hours.

3.000 GPA required in the minor.

## Health, Humanities, and Society, Minor

The health, humanities, and society minor is designed for students who would like to learn how to think capaciously and creatively about health using the rigorous, precise, and flexible skills trained by the social sciences and the humanities. The social sciences teach students to think about the social, economic, and political factors that structure health conditions and outcomes in particular societies, while the humanities train students to navigate the complexities of interpersonal interaction and their ethical implications, to relate the micro to the macro and texts to contexts, to historicize encounters, to communicate accurately and effectively across a variety of media, and to engage in creative analytical thinking about healthcare. The landscape of healthcare is quickly changing, and this training will equip students well not only for the diverse forms of health work that exist today, but for as yet unimaginable varieties of health-related work in the future.

This minor is structured around the particular competencies that the social sciences and humanities train. Those competencies are narrative and historical perspective, critical attention and observation, ethics and judgment, performance and creativity, and social and structural proficiency. Rather than adopting the more traditional approach of connecting particular skills to particular disciplines (say, narrative to literature and observation to art history), this minor builds from discipline-specific health knowledge while training students to think across disciplines. Thus, it will not be unusual for students to find a single course addressing multiple competencies or to take courses in different disciplines that address the same competency from distinct but complementary perspectives.

This minor is housed in the Humanities Center of the College of Social Sciences and Humanities in partnership with the Bouvé College of Health Sciences.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Courses

No more than two courses, in addition to the introductory course, may be taken under the 2000 level.

Code	Title	Hours
<b>Introductory Course</b>		
INSH 1300	Introduction to Health and Humanities	4
<b>Humanities Requirement</b>		
Complete two of the following:		8
ENGL 2770	Writing to Heal	
ENGL 3140	19th-Century Literatures	
ENGL 3700	Narrative Medicine	
ENGL 4710	Capstone Seminar	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1295	Religious Perspectives on Health and Healing	
WMNS 1225	Gender, Race, and Medicine	
<b>Social Sciences Requirement</b>		
Complete two of the following:		8
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4580	Special Topics in Anthropology	
ECON 1230	Healthcare and Medical Economics	
HLTH 5280	The (in)Visibility of (dis)Ability in Society	
PHTH 1270	Introduction to Global Health	
PHTH 2300	Communication Skills for the Health Professions	
or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 4120	Global Perspectives on Discrimination and Health	
PHTH 5202	Introduction to Epidemiology	
PHTH 5234	Economic Perspectives on Health Policy	
SOCL 1295	Drugs and Society	
SOCL 2303	Gender and Reproductive Justice	
SOCL 3441	Sociology of Health and Illness	
Total Hours		20

## GPA Requirement

2.000 GPA required in the minor

## Latino/a, Latin American and Caribbean Studies, Minor

### Overview

The LLACS (Latino/a, Latin American, and Caribbean Studies) program offers an interdisciplinary minor. It explores the historical, cultural, social, political, and economic foundations of and linkages between U.S. Latino society, Latin America, and the Caribbean. It draws from the heritages of the Americas that are grounded in predominantly indigenous, African, and European cultures.



## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* Proficiency in Spanish or Portuguese to course number 3101 or above is strongly encouraged.

### Required Courses

Code	Title	Hours
LACS 1220	Latino, Latin American, and Caribbean Studies	4
Complete one of the following:		4
CLTR 1505	Latin American Culture, History, and Politics	
HIST 1187	Introduction to Latin American History	

### Culture and Literature Electives

Code	Title	Hours
Complete two of the following:		8
CLTR 1240	Latin American Film	
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3725	Representing Violence and Human Rights in Latin America	
CLTR 4655	Latin American Literature	
MUSC 1131	Music of Latin America and the Caribbean	

### History and Social Sciences Electives

*Note:* With the approval of the director of Latino/a, Latin American, and Caribbean Studies, up to four study-abroad or Dialogue of Civilization courses may be used toward the minor.

Code	Title	Hours
Complete two of the following:		8
ANTH 2365	Sport, Culture, and Society	
ANTH 4500	Latin American Society and Development	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
SOCL 3270	Race and Ethnic Relations	

### GPA Requirement

2.000 GPA required in the minor

## Law and Public Policy, Minor

### Overview

The law and public policy (LPP) minor offers students an opportunity to obtain a deep understanding of the U.S. legal system and apply that knowledge to current law and policy debates. In the LPP minor core courses, students have the opportunity to watch a criminal and/or civil trial, debate their classmates, and listen to speakers from both the

public and private sector (state and federal judges, public defenders, and government lawyers). While the minor is well suited for students interested in pursuing a career in law and/or policy, it is invaluable for students in any field of practice, as law affects all professions and society at large.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
A grade of B or higher is required in the following two courses:		
LPSC 1101	Introduction to Law	4
LPSC 2301	Introduction to Law, Policy, and Society	4

### Law and Public Policy Course

Code	Title	Hours
Complete one of the following:		4
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
LPSC 3303	Topics in Law and Public Policy	
LPSC 3307	Understanding the Modern Supreme Court	

### Elective Courses

Code	Title	Hours
Complete two of the following courses not used to satisfy the requirements above:		8
AFAM 1225	Gender, Race, and Medicine	
AFAM 2339	Analysis of American Racism	
AFAM 2360	Politics of Poverty	
AFAM 2549	Public Policy and Black America	
ANTH 4580	Special Topics in Anthropology	
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 1412	Social Movement Communication	
COMM 2501	Communication Law	
COMM 2525	Communication and Privacy	
COMM 2551	Free Speech in Cyberspace	
COMM 2625	Communication, Technology, and Society	
COMM 3501	Free Speech: Law and Practice	
CRIM 1110	Criminal Due Process	
CRIM 1120	Criminology	
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2350	Policing a Democratic Society	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	

CRIM 3110	Gender, Crime, and Justice	LPSC 5201	Law and the City
CRIM 3120	Race, Crime, and Justice	MUSI 2235	Copyright in the Creative Industries
CRIM 4040	Crime Prevention	PHIL 1160	Introduction to Economic Justice
CRIM 4120	Courts and Sentencing	PHIL 1165	Moral and Social Problems in Healthcare
CRIM 4660	Communities and Crime	PHIL 1170	Business, Ethics, and Human Rights
CRIM 4900	Advanced Seminar in Criminology and Criminal Justice	PHIL 1180	Environmental Ethics
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	PHIL 1185	The Ethics of Food
ECON 1230	Healthcare and Medical Economics	PHIL 2301	Philosophical Problems of Law and Justice
ECON 1240	Economics of Crime	PHIL 2303	Social and Political Philosophy
ECON 1260	Contested Issues in the U.S. Economy	PHIL 3500	Sexuality, Gender, and the Law
ECON 1291	Development Economics	PHIL 4901	Topics in Philosophy Seminar
ECON 3404	International Food Policy	POLS 2340	Business and Government
ECON 3405	A Critique of Capitalism	POLS 2345	Urban Policies and Politics
ECON 3410	Labor Economics	POLS 2355	Intergovernmental Relations
ECON 3412	Women's Labor and the Economy	POLS 2356	Democratic Erosion
ECON 3414	Economics of Human Capital	POLS 2357	Growth and Decline of Cities and Suburbs
ECON 3420	Urban Economic Issues	POLS 2358	Current Issues in Cities and Suburbs
ECON 3422	Economics of Transportation	POLS 2375	Gender and Politics
ECON 3423	Environmental Economics	POLS 2385	U.S. Health and Welfare Policy
ECON 3424	Law and Economics	POLS 2390	Science, Technology, and Public Policy
ENGL 3325	Rhetoric of Law	POLS 2395	Environmental Politics and Policy
ENGW 3311	Advanced Writing for Prelaw	POLS 3100	Gender, Social Justice, and Transnational Activism
ENVR 5210	Environmental Planning	POLS 3302	Judicial Process and Behavior
FINA 4312	Issues in Corporate Governance (for business students only)	POLS 3307	Public Policy and Administration
HIST 1206	Drug Trade and Drug War: History, Security, Culture	POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
HIST 2011	Capitalism and Business: A Global History	POLS 3324	Law and Society
HIST 2217	The Global Far-Right since 1945: Politics, Culture, Violence	POLS 3405	International Political Economy
HIST 2299	Uses and Abuses of History: Historical Reasoning in U.S. Global and Domestic Policy	POLS 3406	International Law
HIST 2303	Gender and Reproductive Justice	POLS 3408	International Security
HIST 2308	Law, Justice, and Society in Modern China	POLS 3409	Global Governance
HIST 2360	History of Capitalism in East Asia	POLS 3418	Nationalism
HIST 3335	History of Modern Terrorism	POLS 3420	U.S. National Security Policy
HIST 5238	Managing Nonprofit Organizations	POLS 3423	Terrorism and Counterterrorism
HUSV 2800	Sexual Orientation and Gender Expression	POLS 4500	U.S. Constitutional Law
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	POLS 4505	U.S. Civil Liberties
HUSV 3580	Sexual Violence: Counseling, Programs, and Policy	PPUA 5264	Energy Democracy and Climate Resilience: Technology, Policy, and Social Change
HUSV 3900	Social Policy	SOCL 1228	Social Problems
INTL 3400	International Conflict and Negotiation	SOCL 1245	Sociology of Poverty
JRNL 3550	The First Amendment and the Media	SOCL 1246	Environment and Society
LPSC 2302	Global Human Rights: A Social and Economic Perspective	SOCL 1260	Gender in a Changing Society
LPSC 3303	Topics in Law and Public Policy	SOCL 1280	The Twenty-First-Century Workplace
LPSC 3307	Understanding the Modern Supreme Court	SOCL 2205	Law and Social Justice
		SOCL 3270	Race and Ethnic Relations
		SOCL 2303	Gender and Reproductive Justice
		SOCL 3100	Gender, Social Justice, and Transnational Activism
		SOCL 4518	Law and Society in a Digital World
		WMNS 2303	Gender and Reproductive Justice

WMNS 3100	Gender, Social Justice, and Transnational Activism
WMNS 3500	Sexuality, Gender, and the Law

### GPA Requirement

3.000 GPA required in the minor

## Urban Studies, Minor

### Overview

The urban studies minor offers students interested in cities an opportunity to take advantage of the resources of an urban university situated in a major metropolitan area. The minor seeks to equip students with an understanding of the dynamics of urban growth and development and includes the study of urban social and political institutions. Many courses cover climate change, sustainability, housing, and the urban economy. The minor complements many social science majors as well as architecture, business, and engineering. The minor is designed to provide a solid background for graduate study and professional careers in urban planning and policy, social work, and related fields.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
POLS 2357	Growth and Decline of Cities and Suburbs	4
SOCL 2358	Current Issues in Cities and Suburbs	4

### Elective Courses

Code	Title	Hours
Complete two of the following:		8
AFAM 2360	Politics of Poverty	
AFAM 2399	Black Community and Social Change	
ANTH 2305	Global Markets and Local Culture	
ARCH 2330	Architecture and the City in the Nineteenth Century	
ARCH 2340	Modern Architecture	
ARCH 4850	Urban and Architectural History Abroad	
ECON 1240	Economics of Crime	
ECON 3420	Urban Economic Issues	
ECON 3422	Economics of Transportation	
POLS 2345	Urban Policies and Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 3307	Public Policy and Administration	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
SOCL 2358	Current Issues in Cities and Suburbs	
SOCL 3200	Cities in Global Context	
SOCL 4522	Environmental Justice	

### GPA Requirement

2.000 GPA required in the minor

## Women's, Gender, and Sexuality Studies, Minor

### Overview

Northeastern offers an interdisciplinary minor for undergraduate students who wish to explore gender and sexuality in relation to other axes of power and identity, including race, class, ethnicity, and dis/ability. Women's, gender, and sexuality studies (WGSS) covers a wide variety of theoretical and empirical scholarship both within traditional disciplines and in cutting-edge, interdisciplinary frames. WGSS students have an opportunity to:

- Learn about approaches to gender and sexuality in the social sciences and humanities and through frameworks that bridge traditional fields
- Explore gender and sexuality in the global community by dipping into disciplines ranging throughout the social sciences, arts, humanities, and physical sciences
- Study politics and pop culture, sociology and psychology, writing and religion, and much more
- Open up new ways of thinking, bringing gender and sexuality studies to bear on important social and intellectual questions

For more information, visit the WGSS website (<http://www.northeastern.edu/wgss/>), call the program coordinator at 617.373.4984, or email [wgss@northeastern.edu](mailto:wgss@northeastern.edu).

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Please note that special topics courses in some areas may also count as electives toward a WGSS minor in certain semesters, pending approval of the syllabus by the WGSS program director. In the case of cross-listed courses, students may enroll under any of the departmental designations, regardless of major or minor affiliation.

### Required Course

Code	Title	Hours
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	4

### Elective Courses

Code	Title	Hours
Complete three of the following:		12
At least one elective must be taken at the 2000 level or above and electives must be drawn from at least two different departments:		
AFRS 3900	Gender and Black World Literatures	
or WMNS 3900	Gender and Black World Literatures	
or ENGL 3900	Gender and Black World Literatures	
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
or WMNS 2302	Gender and Sexuality: A Cross-Cultural Perspective	
COMM 2304	Communication and Gender	
or WMNS 2304	Communication and Gender	
COMM 3530	Communication and Sexualities	
ECON 3412	Women's Labor and the Economy	
ECON 5292	Gender and Development Economics	
ENGL 2451	Postcolonial Women Writers	
or WMNS 2451	Postcolonial Women Writers	

ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or WMNS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
HUSV 2800	Sexual Orientation and Gender Expression
or WMNS 2800	Sexual Orientation and Gender Expression
HUSV 3580	Sexual Violence: Counseling, Programs, and Policy
or WMNS 3580	Sexual Violence: Counseling, Programs, and Policy
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LING 3456	Language and Gender
MSCR 3392	Gender and Film
or WMNS 3392	Gender and Film
MUSC 2340	Divas, DJs, and Double Standards
NRSRG 3302	Nursing with Women and Families
NRSRG 3303	Clinical for NRSRG 3302 (When taken with NRSRG 3302)
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
or WMNS 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
or WMNS 1271	Sex in Judaism, Christianity, and Islam
POLS 2375	Gender and Politics
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
SOCL 1255	Sociology of the Family
or WMNS 1255	Sociology of the Family
SOCL 1260	Gender in a Changing Society
or WMNS 1260	Gender in a Changing Society
SOCL 4520	Race, Class, and Gender
or WMNS 4520	Race, Class, and Gender
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
or WMNS 2501	Breaking the Glass Ceiling: Women in Theatre
THTR 3200	Queer Theatre and Performance
or WMNS 3200	Queer Theatre and Performance
WMNS 1101	Sex, Gender, and Popular Culture
WMNS 1225	Gender, Race, and Medicine
or AFAM 1225	Gender, Race, and Medicine
or HIST 1225	Gender, Race, and Medicine
WMNS 1990	Elective
WMNS 2303	Gender and Reproductive Justice
or SOCL 2303	Gender and Reproductive Justice
or HIST 2303	Gender and Reproductive Justice
WMNS 2373	Gender and Sexuality in World History
or HIST 2373	Gender and Sexuality in World History
WMNS 2455	American Women Writers
or AFAM 2455	American Women Writers
or ENGL 2455	American Women Writers

WMNS 2505	Digital Feminisms
or MSCR 2505	Digital Feminisms
WMNS 2990	Elective
WMNS 3100	Gender, Social Justice, and Transnational Activism
or POLS 3100	Gender, Social Justice, and Transnational Activism
or SOCL 3100	Gender, Social Justice, and Transnational Activism
WMNS 3500	Sexuality, Gender, and the Law
or POLS 3500	Sexuality, Gender, and the Law
or PHIL 3500	Sexuality, Gender, and the Law
WMNS 3990	Elective
WMNS 4990	Elective
WMNS 4992	Directed Study
WMNS 5240	Feminist Resistance
or HIST 5240	Feminist Resistance
or SOCL 5240	Feminist Resistance

## GPA Requirement

2.000 GPA required in the minor

## Asian Studies

Website (<http://www.northeastern.edu/asianstudies/>)

The Asian Studies Program promotes a cosmopolitan understanding of the regional, national, and local cultures in the fastest-growing continent in the world. Our interdisciplinary program is based on an excellent core of faculty who are drawn from a range of departments (including languages, literatures, and cultures; English; history; music; political science; philosophy and religion; public policy; and sociology and anthropology) and the World Languages Center. Our students are strongly encouraged to accelerate their language acquisition process and gain firsthand knowledge of Asian cultures and societies through participation in a university-sponsored study-abroad program, an international co-op, a Dialogue of Civilizations program, or an experiential learning experience. Students can also take advantage of the outstanding Asian cultural resources available in the Boston metropolitan area, particularly at the Museum of Fine Arts and the Peabody Essex Museum in Salem.

## Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 27)."

## Programs

### Bachelor of Arts (BA)

- Asian Studies (p. 835)
- History and Asian Studies (p. 837)

### Minor

- East Asian Studies (p. 838)

## Asian Studies, BA

The Bachelor of Arts in Asian Studies offers undergraduates a broad liberal arts education in the histories, politics, cultures, and societies of Asia. Asian studies majors complete at least two years of an Asian language in addition to pursuing a rigorous course of study covering a number of disciplines and national traditions. The core course work provides foundational knowledge in the history, politics, and societies of

East Asian nations, Asia's place within a globalizing world, and skills in research and analysis. Majors are also required to develop expertise in one of the following focus areas: history; society and politics; language, literature, and culture; or religious studies. Finally, students are required to complete academic study or a professional experience abroad.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Asian Studies Requirements

Code	Title	Hours
<b>Required Courses</b>		
ASNS 1150	East Asian Studies	4
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	4
<b>Asia in Global Context</b>		
Complete one of the following:		4
ECON 3290	History of the Global Economy	
ENGL 2451	Postcolonial Women Writers	
INTL 2240	Global Population and Development	
POLS 3487	Politics of Developing Nations	
<b>Capstone</b>		
ASNS 4900	Asian Studies Capstone Directed Study	4
<b>International Experience</b>		
Complete a professional or academic experience abroad in consultation with your advisor.		

## Language and Elective Requirements

Code	Title	Hours
<b>Language Courses</b>		
Complete the following courses in either Chinese or Japanese:		16
<i>Chinese</i>		
Select one of the following:		
CHNS 1101	Elementary Chinese 1	
Please contact department for Chinese Dialogue Options		
Select one of the following:		
CHNS 1102	Elementary Chinese 2	
Please contact department for Chinese Dialogue Options		
Select one of the following:		
CHNS 2101	Intermediate Chinese 1	
CHNS 2301	Intermediate Chinese Immersion 1	

Select one of the following:

CHNS 2102	Intermediate Chinese 2
CHNS 2302	Intermediate Chinese Immersion 2
<i>Japanese</i>	
JPNS 1101	Elementary Japanese 1
JPNS 1102	Elementary Japanese 2
JPNS 2101	Intermediate Japanese 1
or JPNS 2301	Intermediate Japanese Immersion 1
JPNS 2102	Intermediate Japanese 2
or JPNS 2302	Intermediate Japanese Immersion 2

## Asian Studies Electives

Complete six courses from the following focus areas. Choose at least three courses from one focus area: 24

### History Focus Area

HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan

### Society and Politics Focus Area

ANTH 4350	Ethnography of Southeast Asia
ANTH 4515	Culture and Politics in Modern India
ASNS 2245	The Asian-American Experience
INTB 2501	Competing to Win in Emerging Markets
MKTG 4220	Marketing in Asia
PHIL 1130	Ethics: East and West
INTL 2240	Global Population and Development
POLS 3487	Politics of Developing Nations

### Language, Literature, and Culture Focus Area

CLTR 1260	Japanese Film
CLTR 1700	Introduction to Japanese Pop Culture
ENGL 2451	Postcolonial Women Writers
MUSC 2130	Music of Asia
PHIL 1130	Ethics: East and West

### Religious Studies Focus Area

PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

## Asian Studies Major Credit Requirement

Complete 56 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ASNS 1150	4 HIST 2304	4 ASNS 2245	4 Advanced Writing in the Discipline Elective	4
HIST 1215	4 HIST 1246	4 Elective	4 Elective	4
CLTR 1000	1 PHIL 1290	4		
HIST 1500	4 CHNS 1101	4		
Elective	4			
	17	16	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 2240	4 CHNS 2101	4 Elective	4 Co-op	
HIST 2308	4 ENGL 2451	4 Elective	4	
Elective	4 INTB 2501	4		
CHNS 1102	4 Elective	4		
	16	16	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ARCH 2310	4 Elective	4 Co-op	
	INSH 1500 (ND NUPath)	4 Elective	4	
	PHIL 1115 (AD NUPath)	4		
	Elective	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours		
Co-op	POLS 3487	4		
	ASNS 4900	4		
	POLS 2325 (ER NUPath)	4		
	Elective	4		
	0	16		

Total Hours: 129

## History and Asian Studies, BA

History and Asian studies offers an interdisciplinary combined major. Students interested in the combined major in history and Asian studies integrate the exploration of human history with the rigorous study of Asian cultures, societies, languages, and economies.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
	Choose one course from the 1000 level except HIST 1215, which is required by Asian studies.	4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
	Choose one course from the following:	4
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 2370	Renaissance to Enlightenment	
HIST 1185	Introduction to Middle Eastern History	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
<b>Advanced History</b>		
	Complete one history course 3000 level or above	4

### History Cluster

In conjunction with your history advisor, define a history cluster by the first semester of your junior year of study. A cluster comprises four history courses with no more than two courses in the 1200–1299 range. These courses may double-count in the requirements above (except History Colloquium).

### Asian Studies Requirements

Code	Title	Hours
<b>Required Courses</b>		
ASNS 1150	East Asian Studies	4
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	4
<b>Asia in Global Context</b>		
	Complete one of the following:	4
ECON 3290	History of the Global Economy	
INTL 2240	Global Population and Development	
POLS 3487	Politics of Developing Nations	

Complete a professional or academic experience abroad in consultation with your advisor.

## Language and Elective Requirements

Code	Title	Hours
<b>Language Courses</b>		
Complete the following courses in either Chinese or Japanese:		16
<i>Chinese</i>		
CHNS 1101	Elementary Chinese 1	
CHNS 1102	Elementary Chinese 2	
CHNS 2101	Intermediate Chinese 1	
or CHNS 2301	Intermediate Chinese Immersion 1	
CHNS 2102	Intermediate Chinese 2	
or CHNS 2302	Intermediate Chinese Immersion 2	
<i>Japanese</i>		
JPNS 1101	Elementary Japanese 1	
JPNS 1102	Elementary Japanese 2	
JPNS 2101	Intermediate Japanese 1	
or JPNS 2301	Intermediate Japanese Immersion 1	
JPNS 2102	Intermediate Japanese 2	
or JPNS 2302	Intermediate Japanese Immersion 2	
<b>Asian Studies Electives</b>		
Complete three courses from the following focus areas.		12
<i>Society and Politics Focus Area</i>		
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4515	Culture and Politics in Modern India	
ASNS 2245	The Asian-American Experience	
INTB 2501	Competing to Win in Emerging Markets	
MKTG 4220	Marketing in Asia	
PHIL 1130	Ethics: East and West	
INTL 2240	Global Population and Development	
POLS 3487	Politics of Developing Nations	
<i>Language, Literature, and Culture Focus Area</i>		
CLTR 1260	Japanese Film	
CLTR 1700	Introduction to Japanese Pop Culture	
MUSC 2130	Music of Asia	
PHIL 1130	Ethics: East and West	
<i>Religious Studies Focus Area</i>		
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 2395	Japanese Buddhism	

## Capstone

Code	Title	Hours
Complete one of the following:		4
HIST 4701	Capstone Seminar	
ASNS 4900	Asian Studies Capstone Directed Study	

## Integrative Requirement

Note: Public history concentrators satisfy this requirement within the concentration with Fieldwork in History 1 (HIST 4903).

Code	Title	Hours
HIST 2351	Modern Japan	4
or ASNS 2245	The Asian-American Experience	

## History and Asian Studies Major Credit Requirement

Complete 82 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

### East Asian Studies, Minor

East Asian studies minors can choose from either a nonlanguage or a language track. For the nonlanguage track, minors focus on gaining a broad interdisciplinary understanding of Asian societies, economies, politics, and cultures. The core course, East Asian studies, provides students with an understanding of the interlinkages in the historical, social, and political development of China, Korea, and Japan. Students can then choose from elective courses that represent a spectrum of disciplinary knowledge of Asian societies. For the language track, students are required to achieve at least first-year proficiency in an Asian language and also take East Asian studies and two elective courses of their choosing.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Complete either the nonlanguage track or the language track.

## Nonlanguage Track

Code	Title	Hours
<b>Core Course</b>		
ASNS 1150	East Asian Studies	4
<b>Elective Courses</b>		
Complete four of the following. They may include up to two courses taken as part of an approved study-abroad program:		16
ASNS 2245	The Asian-American Experience	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 1252	Japanese Literature and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
CHNS 1101	Elementary Chinese 1	
CHNS 1102	Elementary Chinese 2	
CHNS 2101	Intermediate Chinese 1	
CHNS 2301	Intermediate Chinese Immersion 1	
CLTR 1500	Modern Chinese History and Culture	
JPNS 1101	Elementary Japanese 1	
JPNS 1102	Elementary Japanese 2	
JPNS 2101	Intermediate Japanese 1	
CLTR 1700	Introduction to Japanese Pop Culture	
CLTR 1260	Japanese Film	

PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 2395	Japanese Buddhism

## Language Track

Code	Title	Hours
<b>Core Course</b>		
ASNS 1150	East Asian Studies	4
<b>Required Courses</b>		
Complete the following two courses in either Chinese or Japanese:		8
<i>Chinese</i>		
CHNS 1101 and CHNS 1102	Elementary Chinese 1 and Elementary Chinese 2	
<i>Japanese</i>		
JPNS 1101 and JPNS 1102	Elementary Japanese 1 and Elementary Japanese 2	
<b>Elective Courses</b>		
Complete two of the following. They may include up to two courses taken as part of an approved study-abroad program:		8
ASNS 2245	The Asian-American Experience	
HIST 1253	History of Vietnam Wars	
HIST 1252	Japanese Literature and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
CLTR 1500	Modern Chinese History and Culture	
CHNS 2101	Intermediate Chinese 1	
CHNS 2301	Intermediate Chinese Immersion 1	
CLTR 1700	Introduction to Japanese Pop Culture	
CLTR 1260	Japanese Film	
JPNS 2101	Intermediate Japanese 1	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 2395	Japanese Buddhism	

## GPA Requirement

2.000 GPA required in the minor

## School of Criminology and Criminal Justice

Website (<http://www.northeastern.edu/sccj/>)

**Amy Farrell, PhD**  
Professor and Director

**Kevin Drakulich, PhD**  
Associate Professor and Associate Director

617.373.3327  
617.373.8723 (fax)  
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The School of Criminology and Criminal Justice prepares students for meaningful careers in criminology, justice policy, the law, criminal justice, and related fields, including professional research careers. We do this by applying multidisciplinary social science tools that predict and explain crime, as well as deepening the understanding of policies that improve our systems of justice. We encourage each student to plan

a program of study consistent with their interests and future aims. Our approach is experiential and our methods for teaching are rooted in knowledge creation as a top-tier research program. Our goal is to create ethical problem solvers who are prepared to tackle important crime and justice issues facing society. Our educational goals for students include a commitment to identify and address the role of systemic racism and intersecting dimensions of oppression in the development and application of justice system policies and practices, crime and justice theory, and research.

Our student interests traverse a diverse range of fields and careers. Our program is flexibly designed to allow students to take different paths to pursue different goals and interests:

- **Understand, investigate, and stop crime.** Develop cutting-edge skills in fields such as psychology of crime, cybercrime and cybersecurity, white-collar crime investigation, corporate security, and national security.
- **Build a foundation for law school.** Pursue a career in criminal law as a prosecutor, defense attorney, a judge, or explore another area of the law or politics.
- **Reform justice policies and practices.** Effect change and address systemic problems in our laws and justice systems. Explore the broader goal of helping to fix or reform the criminal justice system by working with politicians, policymakers and researchers, advocacy groups, and other political organizations.
- **Help victims of crime or those harmed by the justice system.** Become involved with victim advocacy groups and victim assistance programs. Help those harmed by their contact with the criminal justice system by working with vulnerable populations. Help those who are incarcerated and those transitioning from prison.
- **Improve national security, the administration of justice and protect human rights on a global scale.** Prepare for careers in Interpol, the United Nations, the Department of Justice, and similar organizations.

Our curriculum is structured into four levels of learning, across multiple pathways. The first, or foundations level, is where students acquire a base understanding of three substantive pillars of our field: crime, the law, and the justice system. This level also introduces students to topical issues related to crime and justice and guidance to develop digital skills.

In our second level, institutions and systems, students develop a solid understanding of the systems and institutions tasked with providing justice. We do so by promoting experience and interaction with local criminal justice institutions.

Our third level, crime problems and justice system challenges, engages students with specific crime problems such as violence, drug addiction, organized crime, or terrorism. This level cultivates knowledge that deals with problems in the criminal justice system, focusing on disparities and biases, including those related to gender and race.

Finally, in solutions and reform, our fourth level, students apply all the skills and knowledge obtained through the three previous levels. Students will learn how to navigate and solve problems encountered through capstone projects, research, theses, study cases, and other work. Our curriculum enables students to explore and analyze crime and justice issues through courses on computational methods, statistical data, analytical techniques, and experiential practice. The skills students learn will continue to serve them throughout their professional life.

Our faculty are renowned scholars in their fields and are dedicated to exploring and analyzing pressing issues facing our society. They are actively engaged in research, and undergraduates have opportunities to work closely with faculty to collaborate on projects related to crime and



justice issues: crime prevention, human trafficking, police accountability, hate crimes, mass incarceration, and much more.

The School of Criminology and Criminal Justice was established in 1967 as one of the first schools devoted to matters of crime and justice. It remains one of the top-ranked research programs in criminology, something that is unique to universities with highly ranked undergraduate programs. We invite you to further explore our course offerings and combined major degrees with psychology, cybersecurity, political science, and others.

### Academic Progression Standards

Same as university-wide standards described under “Academic Status (p. 27).”

### Programs

#### Bachelor of Arts (BA)

- English and Criminal Justice (p. 840)
- History and Criminal Justice (p. 842)
- International Affairs and Criminal Justice (p. 844)

#### Bachelor of Science (BS)

- Criminal Justice (p. 848)
- Computer Science and Criminal Justice (p. 346)
- Criminal Justice and Journalism (p. 197)
- Criminal Justice and Philosophy (p. 855)
- Criminal Justice and Political Science (p. 857)
- Criminal Justice and Psychology (p. 793)
- Criminal Justice and Sociology (p. 861)
- Cybersecurity and Criminal Justice (p. 392)
- Human Services and Criminal Justice (p. 866)

### Minor

- Criminal Justice (p. 868)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## English and Criminal Justice, BA

The Department of English and School of Criminology and Criminal Justice offer a combined major in English and criminal justice. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. English courses prepare students to analyze and interpret various representations of crime, criminality, the law, justice, and ethics in both literary and nonliterary texts as they study the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures; analyze writing practices and related media; and practice a variety of approaches to the study of language, rhetoric, writing, and literature.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 2470	Asian-American Literature	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3618	Milton	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2301	The Graphic Novel	
ENGL 2330	The American Renaissance	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	

ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3140	19th-Century Literatures
ENGL 3619	Emerson and Thoreau
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3720	19th-Century Major Figure
ENGL 3730	20th- and 21st-Century Major Figure

### Theories and Methods

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3700	Narrative Medicine
ENGL 4410	Research in Rhetoric and Writing
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

### Comparative Literature

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1500	British Literature to 1800
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

### Writing

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement

ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

### English Electives

Complete two additional ENGL electives. 8

### Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses successful students will develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4

### Current Crime and Justice Issues

These courses introduce students to topical issues related to crime and justice.

Complete one of the following: 4

CRIM 1300	The Death Penalty
CRIM 1400	Human Trafficking
CRIM 1500	Corruption, Integrity, and Accountability
CRIM 1700	Crime, Media, and Politics

### Crime Problems and Criminal Justice Institutions

The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students a deeper look at a range of crime problems.

Complete one of the following: 4

CRIM 2310	Courts: The Third Branch of Government
CRIM 2320	Youth Crime and Justice
CRIM 2330	Punishment in the Age of Mass Incarceration
CRIM 2340	Corporate Security: Securing the Private Sector
CRIM 2350	Policing a Democratic Society
CRIM 3010	Criminal Violence
CRIM 3030	Global Criminology
CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3060	Political Crime and Terrorism

CRIM 3070	Corporate and White-Collar Crime	
CRIM 3540	Addiction and Recovery	

**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 3110	Gender, Crime, and Justice
CRIM 3120	Race, Crime, and Justice

**Criminal Justice Electives**

Rounding out knowledge of crime and justice.

Complete two additional criminal justice electives from the 3000, 4000, or 5000 level. 8

**Other Requirements**

Code	Title	Hours
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**Introduction to College**

Complete one of the following: 1

CRIM 1000	Criminal Justice at Northeastern	1
ENGL 1000	English at Northeastern	1

**Integrative Course**

Complete one of the following: 4

ENGL 3325	Rhetoric of Law
ENGL 3426	British and American Literature and Politics

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	
or CRIM 4949	Senior Capstone Seminar	

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirements**

128 total semester hours required

**Plan of Study****Sample Four Years, One Co-op Plan****Year 1**

Fall	Hours	Spring	Hours
CRIM 1000 or ENGL 1000	1	ENGL 1160 or 1410	4
ENGL 1111	4	CRIM 1110	4
CRIM 1100	4	CRIM 1120	4
ENGL 1400	4	Elective	4

Current crime and justice issues CRIM course	4			
	17	16		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Pre-19th- century ENGL	4	19th-, 20th-, or 21st- century ENGL	4	Elective	4	Elective	4
Systems and institutions CRIM course	4	Crime problems elective	4				
ENGL theory/ methods	4	Elective	4				
Elective	4	Elective	4				
	16		16			4	4

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3600	4	Co-op	4	Co-op	4	Elective	4
CRIM 3700	4					Elective	4
ENGL comparative literature	4						
ENGL writing	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Systemic issues CRIM elective	4	Solutions and reform course	4
ENGL elective	4	ENGL diversity	4
ENGL elective	4	Capstone	4
Elective	4	Elective	4
	16		16

Total Hours: 129

**History and Criminal Justice, BA**

This combined major educates students in criminal justice and history, emphasizing the complementarity between these two disciplines. Students successfully completing this program will be able to critically evaluate and draw connections between past and present practices in law, punishment, incarceration, justice, and the social institutions and cultural contexts in which these systems operate.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

## History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one other course from HIST 1001 to HIST 1999 (excluding HIST 1100, HIST 1200, and HIST 1201).		4
<b>Intermediate/Advanced Level</b>		
Complete four HIST courses numbered 2000 or above (excluding HIST 2301 and HIST 2302).		16
<b>Advanced Level</b>		
Complete one HIST course numbered 3000 or above.		4
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 2311	Colonialism/Imperialism	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	

## Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses successful students will develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	

## Crime Problems and Criminal Justice Institutions

The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students a deeper look at a range of crime problems.

Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	
CRIM 3540	Addiction and Recovery	

## Creating Knowledge about Crime and Justice

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3700	Analyzing and Using Data on Crime and Justice	4
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## Systemic Issues

A consideration of systemic issues facing the criminal justice system.

Complete one of the following:		4
CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	

## Criminal Justice Electives

Rounding out knowledge of crime and justice.

Complete two additional criminal justice electives from the 3000, 4000 or 5000-level.		8
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## Other Requirements

Code	Title	Hours
A minimum of one history course must be taken between the methods and capstone requirements.		
<b>Methods</b>		
Complete one of the following:		4
CRIM 3600	Criminal Justice Research Methods	
HIST 2301	The History Seminar	
<b>Capstone</b>		
Complete one of the following:		4
HIST 4701	Capstone Seminar	
CRIM 4949	Senior Capstone Seminar	
<b>Integrative Course</b>		
HIST 1100	Law and History	4

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

## Plan of Study

### Example plan of study with One Co-op

#### Year 1

Fall	Hours	Spring	Hours
HIST 1200	1	HIST 1100	4
HIST 1201	4	CRIM 1110	4
CRIM 1100	4	CRIM 1120	4
Current crime and justice issues CRIM course	4	Introductory-level history course	4
ENGW 1111	4		
	17		16

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours
Systems and institutions CRIM course	4	Intermediate/advanced history elective	4	Elective	4
Pre-1800 history elective	4	Methods course	4	Elective	4
Intermediate history elective	4	Elective	4		
Elective	4	Elective	4		
	16		16		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3700	4	Co-op		Co-op		Elective	4
Crime problems elective	4						
Intermediate/advanced history elective	4						
Elective	4						
EESH 2000	1						
	17		0		0		4

#### Year 4

Fall	Hours	Spring	Hours
Systemic issues CRIM elective	4	Solutions and reform CRIM course	4
Intermediate/advanced history elective	4	Capstone	4

Advanced history course	4	Elective	4
Elective	4	Elective	4
CRIM 3000	1	Elective	1
	17		17

Total Hours: 128

## International Affairs and Criminal Justice, BA

This combined major fosters an awareness of crime and justice issues within their international, transnational, and global contexts since the early 20th century. The scope and sequence of international affairs courses provide students with a foundation in topics such as interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; and state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship). Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Upon graduation, students are equipped with the skills and knowledge needed to work across national cultures in fields that relate to understanding and addressing criminal behavior.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## International Affairs Requirements

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
ANTH 1101	Peoples and Cultures	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

## International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

## International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

### International Affairs Elective

Code	Title	Hours
Complete one of the following:		
		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

### Global Dynamics

Code	Title	Hours
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		
		4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	

HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804

INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Regional Analysis Requirement**

**Code**                      **Title**    **Hours**  
 Complete two of the following, both of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	8
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	

INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa
<i>Asia</i>	
ANTH 4350	Ethnography of Southeast Asia
ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

*Europe*

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East

HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<i>Russia</i>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

## Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Crime Problems and Criminal Justice Institutions</b>		
The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students a deeper look at a range of crime problems.		
Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
CRIM 3010	Criminal Violence	

CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3060	Political Crime and Terrorism
CRIM 3070	Corporate and White-Collar Crime
CRIM 3540	Addiction and Recovery

### Creating Knowledge about Crime and Justice

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3700	Analyzing and Using Data on Crime and Justice	4
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### Systemic Issues

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 3110	Gender, Crime, and Justice
CRIM 3120	Race, Crime, and Justice

### Criminal Justice Electives

Rounding out knowledge of crime and justice.

Complete two additional criminal justice electives from the 3000, 4000 or 5000-level. 8

## Introduction and Methods Options

Code	Title	Hours
<b>Introduction</b>		
Complete one of the following:		1
INTL 1000	International Affairs at Northeastern	
CRIM 1000	Criminal Justice at Northeastern	
<b>Research Methods</b>		
Complete one of the following:		4
INTL 2718	Research Methods in International Affairs	
CRIM 3600	Criminal Justice Research Methods	

## Supporting Courses

Code	Title	Hours
<b>Computer or Data Science</b>		
Complete one of the following:		4
CS 1100	Computer Science and Its Applications	
DS 2000	Programming with Data	
<b>Co-op Integration Requirements</b>		
Complete before the first co-op:		1
EESH 2000	Professional Development for Co-op	
Complete after the first co-op:		1
CRIM 3000	Co-op Integration Seminar 2	
Complete after the second co-op:		1
CRIM 4000	Co-op Integration Seminar 3	

## Integrative Requirement

Code	Title	Hours
<b>Integrative Course and Capstone</b>		
CRIM 3030	Global Criminology	4



INTL 4700	Senior Capstone Seminar in International Affairs	4
or CRIM 4949	Senior Capstone Seminar	

### Combined Major Credit Requirement

Complete 84 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops Spring/Summer 1

##### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000 or CRIM 1000	1 ANTH 1101, HIST 2211, or HIST 2311	4 Elective	4 Elective (Dialogue of Civilizations possible)	4
INTL 1101	4 ECON 1115 or 1116	4 Elective	4 Elective (Dialogue of Civilizations possible)	4
ENGW 1111	4 CRIM thematic elective	4		
CRIM 1100	4 Foreign language course	4		
Foreign language course	4			
	17	16	8	8

##### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1155	4 Co-op	Co-op	CRIM elective	4
CRIM 1110	4		INTL elective	4
CRIM 1120	4			
Foreign language course	4			
EESH 2000	1			
	17	0	0	8

##### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 2718 or CRIM 3600	4 Co-op	Co-op	INTL elective (Dialogue of Civilizations possible)	4
INTL 3400	4		Elective (Dialogue of Civilizations possible)	4

Foreign language course	4			
CRIM 1700	4			
CRIM 3000	1			
	17	0	0	8

##### Year 4

Fall	Hours Spring	Hours
CRIM 3030	4 INTL 4700 or CRIM 4949	4
CRIM 3700	4 INTL elective	4
CRIM elective	4 CRIM elective	4
INTL elective	4 CRIM elective	4
CRIM 4000	1	
	17	16

Total Hours: 132

## Criminal Justice, BS

The Bachelor of Science in Criminal Justice degree is designed to prepare students for professional and research careers in criminal justice, criminology, and related fields by applying multidisciplinary and comparative social science to understand, predict, and explain crime and contribute to the development of public policy. Using an experiential learning approach, the criminal justice major seeks to develop its students intellectually and ethically, while providing them with a keen appreciation for the complexities of crime and public and private efforts to make communities safer and ensure justice.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Fundamentals

Code	Title	Hours
<b>Introduction to College</b>		
CRIM 1000	Criminal Justice at Northeastern	1
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses successful students will develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4

**Current Crime and Justice Issues**

These courses introduce students to topical issues related to crime and justice.

Complete one of the following: 4

CRIM 1300	The Death Penalty
CRIM 1400	Human Trafficking
CRIM 1500	Corruption, Integrity, and Accountability
CRIM 1700	Crime, Media, and Politics

**Digital Skills**

Successful students develop digital skills and master digital tools useful for careers related to crime and justice. Students choose one of two courses (each has a required lab). The computer science course introduces students to spreadsheets and databases. The data science course introduces students to programming with data.

Complete one of the following (and the appropriate lab): 4 or 5

CS 1100 and CS 1101	Computer Science and Its Applications and Lab for CS 1101
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum (Social Science Practicum section)

**Criminal Justice Institutions and Systems**

Code	Title	Hours
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**Understanding and Experiencing Criminal Justice Institutions and Systems**

How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.

Complete two of the following: 8

CRIM 2310	Courts: The Third Branch of Government
CRIM 2320	Youth Crime and Justice
CRIM 2330	Punishment in the Age of Mass Incarceration
CRIM 2340	Corporate Security: Securing the Private Sector
CRIM 2350	Policing a Democratic Society

**Preparing for Co-op**

The following course is designed to prepare students to apply for and embark on their first co-op. Students who do not take a co-op may replace EESH 2000, CRIM 3000, and CRIM 4000 with an additional CRIM elective.

EESH 2000	Professional Development for Co-op	1
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**Crime Problems and Justice System Challenges**

Code	Title	Hours
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**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

**Crime Problems**

The following courses offer students a deeper look at a range of crime problems.

Complete one of the following: 4

CRIM 3010	Criminal Violence
CRIM 3030	Global Criminology
CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3540	Addiction and Recovery
CRIM 3060	Political Crime and Terrorism
CRIM 3070	Corporate and White-Collar Crime

**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 3110	Gender, Crime, and Justice
CRIM 3120	Race, Crime, and Justice

**Returning from Co-op**

Allows students the opportunity to reflect on their co-op experience and its connection to their ongoing coursework and future plans:

CRIM 3000	Co-op Integration Seminar 2 (required after first co-op)	1
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**Solutions and Reform**

Code	Title	Hours
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**Solutions and Reform**

How do we reinvent criminal justice institutions and their practice? The capstone experience is project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.

CRIM 4949	Senior Capstone Seminar	4
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**Student-Generated Knowledge**

Opportunities for student research (optional):

CRIM 4991	Research
CRIM 4970	Junior/Senior Honors Project 1 (may serve as a substitute for the "Solutions and Reform" requirement)
CRIM 4971	Junior/Senior Honors Project 2

**Returning from Co-op**

Allows students the opportunity to reflect on their co-op experience and its connection to their ongoing coursework and future plans:

CRIM 4000	Co-op Integration Seminar 3	1
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**Criminal Justice Electives**

Rounding out knowledge of crime and justice.

Complete four additional criminal justice electives. Three must be from the 3000, 4000 or 5000-level. 16

**Criminal Justice Sequence Requirements**

Complete three courses from the same department, two of which must be numbered 2000 or above, or complete a minor.

**Criminal Justice Credit Requirement**

Complete 63 credit hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, One Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1000	1	CRIM 1110	4	Elective	4	Vacation	4
CRIM 1100	4	CRIM 1120	4				
Current crime and justice issues course	4	Digital skills course and lab	5				
ENGW 1111	4	Elective	4				
Elective	4						
	17		17		4		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Systems and institutions course	4	Systems and institutions course	4	Elective	4	Vacation	4
CRIM elective	4	CRIM 3600	4				
Sequence elective	4	CRIM elective	4				
Elective	4	Elective	4				
	16		16		4		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3700	4	Co-op	0	Co-op	0	Elective	4
Crime problems elective	4						
Systemic issues elective	4						
Elective	4						
EESH 2000	1						
	17		0		0		4
Year 4							
Fall	Hours	Spring	Hours				
CRIM elective	4	Solutions and reform course	4				
Sequence elective	4	CRIM elective	4				
Elective	4	Sequence elective	4				
Elective	4	Elective	4				
	17		17				

CRIM 3000	1		
	17		16

Total Hours: 128

#### Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1000	1	CRIM 1110	4	Sequence elective	4	Elective	4
CRIM 1100	4	CRIM 1120	4	Elective	4		
Current crime and justice issues course	4	Digital skills course and lab	4				
ENGW 1111	4	Elective	4				
Elective	4						
	17		16		8		4
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Systems and institutions course	4	Systems and institutions course	4	Elective	4	Co-op	4
CRIM elective	4	CRIM 3600	4	Elective	4		
Sequence elective	4	CRIM elective	4				
Elective	4	Elective	4				
	16		17		8		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CRIM 3700	4	CRIM elective	4		
		Crime problems elective	4	Elective	4		
		Systemic issues elective	4				
		Elective	4				
		CRIM 4000	1				
	0		17		8		0
Year 4							
Fall	Hours	Spring	Hours				
		Solutions and reform course	4				
		CRIM elective	4				
		Sequence elective	4				
		Elective	4				
		CRIM 4000	1				
	0		17				

Total Hours: 128

## Computer Science and Criminal Justice, BS

For students interested in criminal justice in an increasingly digital world, the computer science and criminal justice combined degree offers a strong programming foundation coupled with academic and experiential knowledge of the criminal justice system. Successful students will learn the principles, practices, and responsibilities of criminal justice professionals alongside the computer science skills necessary for practical applications in the field.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
IS 2000	Principles of Information Science	4
<b>Khoury Elective Courses</b>		
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 16 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges:		16
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

### Criminal Justice Courses

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Crime Problems and Criminal Justice Institutions</b>		
The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students with a deeper look at a range of crime problems.		
Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3070	Corporate and White-Collar Crime	
<b>Systemic Issues</b>		
These courses consider systemic issues facing the criminal justice system.		
Complete one of the following:		4
CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	
<b>Creating Knowledge about Crime and Justice</b>		
How do we know what we know about crime and justice—and how do we develop new knowledge? These courses cover how to harness data to learn about issues, identify solutions, and advocate for change.		
CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

**Criminal Justice Capstone**

CRIM 4949	Senior Capstone Seminar	4
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**Criminal Justice Elective**

These courses round out our knowledge of crime and justice.

Complete one additional criminal justice elective from the 3000, 4000, or 5000 level.	4
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**Integrative Course Requirement**

Code	Title	Hours
Complete one of the following:		
CRIM 3060	Political Crime and Terrorism	
CRIM 4040	Crime Prevention	
CRIM 4900	Advanced Seminar in Criminology and Criminal Justice	

**Supporting Course**

Code	Title	Hours
<b>Computing and Social Issues</b>		
Complete one of the following:		
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one of the following:		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, 2 Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3200	4 Vacation	
CS 1800 and CS 1802	5 IS 2000	4 CS 3500 and CS 3501	5	
CS 2500 and CS 2501	5 CRIM 1110	4		
CRIM 1100	4 CRIM 1120	4		
ENGW 1111	4			
	19	17	9	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210 or EESH 2000	1 Co-op	Co-op	ENGW 3302, 3308, or 3315	4
CS 3000	4		Elective	4
CRIM 3600	4			
CJ thematic elective	4			
Elective	4			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Khoury elective 1	4 Co-op	Co-op	Elective	4
CRIM 3700	4		Elective	4
CJ survey elective	4			
Khoury elective 2	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
Khoury elective 3	4 Khoury elective 4	4 Elective	4
CJ systemwide elective	4 CRIM 4949	4 Elective	4
CJ elective	4 Elective	4	
Computing and social issues	4 CJ integrative course	4	
	16	16	8

Total Hours: 134

**Five Years, 3 Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 IS 2000	4		
CS 2500 and CS 2501	5 CRIM 1110	4		
CRIM 1100	4 CRIM 1120	4		
ENGW 1111	4			
	19	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210 or EESH 2000	1 Co-op	Co-op	Vacation	
CS 3000	4			
CS 3200	4			
CS 3500 and CS 3501	5			
CRIM 3600	4			
	18	0	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CRIM 3700	4 Co-op	Co-op	ENGW 3302, 3308, or 3315	4
Khoury elective 1	4		Elective	4
CJ thematic elective	4			

CJ survey elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Khoury elective 2	4 Co-op	Co-op	Elective	4
CJ systemwide elective	4		Elective	4
Elective	4			
Computing and social issues	4			
	16	0	0	8

**Year 5**

Fall	Hours Spring	Hours
CJ integrative course	4 Khoury elective 4	4
CJ elective	4 CRIM 4949	4
Elective	4 Elective	4
Khoury elective 3	4 Elective	4
	16	16

Total Hours: 134

**Criminal Justice and Journalism, BS**

The School of Criminology and Criminal Justice and School of Journalism offer a combined major in criminal justice and journalism. Criminology and criminal justice courses provide a foundation for understanding crime and our criminal justice system. Journalism courses provide students with the skills and experience needed to succeed as a journalist. Together, the combined major is designed to prepare students to report important stories about crime and justice.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
<b>Crime Problems and Criminal Justice Institutions</b>		
The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students with a deeper look at a range of crime problems.		
Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	
CRIM 3540	Addiction and Recovery	
<b>Systemic Issues</b>		
These courses consider systemic issues facing the criminal justice system.		
Complete one of the following:		4
CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	
<b>Creating Knowledge about Crime and Justice</b>		
How do we know what we know about crime and justice—and how do we develop new knowledge? These courses study harnessing data to learn about issues, identify solutions, and advocate for change.		
CRIM 3600	Criminal Justice Research Methods	4

CRIM 3700	Analyzing and Using Data on Crime and Justice	4
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### Solutions and Reform

How do we reinvent criminal justice institutions and their practice? The capstone experience is project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.

CRIM 4949	Senior Capstone Seminar	4
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### Criminal Justice Elective

These courses round out our knowledge of crime and justice.

Complete one additional criminal justice elective from the 3000, 4000, or 5000 level.		4
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## Journalism Requirements

Code	Title	Hours
<b>Introductory Journalism Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundation Courses</b>		
A grade of C or better is required.		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Ethics</b>		
JRNL 4650	Ethics and Issues in Journalism	4

### Journalism Electives

Code	Title	Hours
Complete three additional journalism courses.		12

## Supporting Courses

Code	Title	Hours
<b>Introduction</b>		
CRIM 1000 or JRNL 1000	Criminal Justice at Northeastern or Journalism at Northeastern	1
<b>Computer or Data Science</b>		
Complete one of the following:		4
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
JRNL 3700	Data Storytelling	

### Co-op Integration Requirements

Complete before the first co-op:

EESH 2000 or EEAM 2000	Professional Development for Co-op	
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Complete after a criminal justice co-op:

CRIM 3000	Co-op Integration Seminar 2	
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## Integrative Requirements

Code	Title	Hours
JRNL 3550	The First Amendment and the Media	4
CRIM 1700	Crime, Media, and Politics	4

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

129 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops

#### Spring/Summer 1

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1000 or JRNL 1000	1	Criminology thematic elective	4	Elective	4	Elective	4
CRIM 1100	4	JRNL 1101 and JRNL 1102	5	Elective	4	Elective	4
JRNL 1150	4	Computer or data requirement	4				
ENGW 1111	4	Elective	4				
Elective	4						
	17		17		8		8

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1110	4	Co-op	Co-op			Criminology survey elective	4
CRIM 1120	4					Elective	4
JRNL 2201	4						
Journalism elective 1	4						
EESH 2000 or EEAM 2000	1						
	17		0		0		8

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1700	4	Co-op	Co-op			Elective	4
CRIM 3600	4					Elective	4
JRNL 2301	4						
Journalism elective 2	4						
CRIM 3000	1						
	17		0		0		8

##### Year 4

Fall	Hours	Spring	Hours
CRIM 3700	4	CRIM 4949	4
Criminology systemwide elective	4	Criminology elective	4
JRNL 3550	4	JRNL 4650	4

JRNL 3610	4	Journalism elective 3	4
	16		16

Total Hours: 132

## Criminal Justice and Philosophy, BS

The School of Criminology and Criminal Justice and the Department of Philosophy and Religion offer a combined major in criminal justice and philosophy. This combined major educates students in criminal justice and philosophy and in the interface between the two disciplines. The scope and sequence of philosophy courses provide students with a foundation in topics such as social and political philosophy, philosophy of law, and moral philosophy, while also developing robust analytical and evaluative skills. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should have depth of knowledge with respect to analyzing and addressing criminal behavior, as well as with respect to the philosophical and ethical aspects of topics such as law, punishment, justice, and social institutions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Criminal Justice Major Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Crime Problems and Criminal Justice Institutions</b>		



The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students with a deeper look at a range of crime problems.

Complete one of the following: 4

CRIM 2310	Courts: The Third Branch of Government
CRIM 2320	Youth Crime and Justice
CRIM 2330	Punishment in the Age of Mass Incarceration
CRIM 2340	Corporate Security: Securing the Private Sector
CRIM 2350	Policing a Democratic Society
CRIM 3010	Criminal Violence
CRIM 3030	Global Criminology
CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3060	Political Crime and Terrorism
CRIM 3070	Corporate and White-Collar Crime
CRIM 3540	Addiction and Recovery

#### Systemic Issues

These courses consider systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 3110	Gender, Crime, and Justice
CRIM 3120	Race, Crime, and Justice

#### Creating Knowledge about Crime and Justice

How do we know what we know about crime and justice—and how do we develop new knowledge? These courses study how to harness data to learn about issues, identify solutions, and advocate for change.

CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

#### Co-op Integration Seminars

Co-op students should complete the seminars below. Non-co-op students should complete a 4-semester-hour CRIM elective.

Complete two of the following courses. CRIM 2000 and CRIM 3000 are required for the first co-op. CRIM 4000 is required if a second co-op is taken. 2-4

EESH 2000	Professional Development for Co-op
CRIM 3000	Co-op Integration Seminar 2
CRIM 4000	Co-op Integration Seminar 3

#### Solutions and Reform

How do we reinvent criminal justice institutions and their practice? The capstone experience is project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.

CRIM 4949	Senior Capstone Seminar	4
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#### Criminal Justice Elective

These courses round out our knowledge of crime and justice.

Complete one additional criminal justice elective from the 3000, 4000, or 5000 level. 4

### Philosophy Requirements

Code	Title	Hours
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#### Required Courses

PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
	or POLS 2325	Ancient Philosophy and Political Thought
PHIL 2303	Social and Political Philosophy	4
PHIL 2330	Modern Philosophy	4

#### Intermediate/Advanced Electives

Complete two of the following:

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3343	Existentialism
PHIL 3360	Scientific Approaches to Philosophy
PHIL 3435	Moral Philosophy
PHIL 3460	Philosophy and Literature
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

#### Philosophy 4000/5000 Elective

Complete one of the following not used to satisfy previous requirements: 4

PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

#### Philosophy Electives

Complete two additional PHIL courses. 8

### Integrative Requirement

Code	Title	Hours
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#### Philosophy Integrative Course

PHIL 2301	Philosophical Problems of Law and Justice	4
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**Criminal Justice Integrative Course**

CRIM 1400	Human Trafficking	4
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**Criminal Justice and Philosophy Major Credit Requirement**

Complete 80 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CRIM 1100	4 CRIM 1110	4 Elective	4 Vacation	
PHIL 1115	4 CRIM 1120	4 Elective	4	
ENGW 1111	4 PHIL 2325 or POLS 2325	4		
PHIL 1000	1 PHIL 2303	4		
Criminology thematic elective	4			
	17	16	8	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CRIM 3600	4 Criminology thematic elective	4 Vacation	Co-op	
EESH 2000	1 Elective	4		
PHIL 2330	4 Elective	4		
Criminology survey elective	4 Philosophy intermediate/advanced elective	4		
Philosophy intermediate/advanced elective	4			
	17	16	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CRIM 3700	4 Elective	4 Co-op	
	CRIM 3000	1 Elective	4	
	Philosophy 4000/5000 elective	4		
	Criminology systemwide elective	4		
	Philosophy 4000/5000 elective	4		
	0	17	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Criminology elective	4 Vacation	Co-op	
	PHIL 2301	4		
	CRIM 1400	4		
	Philosophy elective	4		
	CRIM 4000	1		
	0	17	0	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	Philosophy capstone	4
	CRIM 4949	4
	Philosophy intermediate/advanced elective	4
	Elective	4
	0	16

Total Hours: 132

**Criminal Justice and Political Science, BS**

This combined major educates students in criminal justice and political science and in the interface between the two disciplines. The scope and sequence of political science courses provide students with a foundation in topics such as American government, comparative politics, international relations, and security and resilience. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should be able to understand the relationships between the fields as they relate to understanding and addressing criminal behavior.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Criminal Justice Requirements**

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
	What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.	

CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4

**Current Crime and Justice Issues**

These courses introduce students to topical issues related to crime and justice.

Complete one of the following: 4

CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	

**Understanding and Experiencing Criminal Justice Institutions and Systems**

How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.

Complete one of the following: 4

CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	

**Crime Problems**

The following courses provide students a deeper look at a range of crime problems.

Complete one of the following: 4

CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	
CRIM 3540	Addiction and Recovery	

**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	

**Digital Skills**

Successful students develop digital skills and master digital tools useful for careers related to crime and justice. Students choose one of two courses (each has a required lab). The computer science course introduces students to spreadsheets and databases. The data science course introduces students to programming with data.

Complete one of the following (and the appropriate lab): 4 or 5

CS 1100 and CS 1101	Computer Science and Its Applications and Lab for CS 1100	
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DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum ((Social Science Practicum section))	
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**Political Science Requirements**

Code	Title	Hours
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**Political Science Requirements**

POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4

**Political Theory**

Complete one of the following: 4

POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Research Methods and Electives**

Complete Option A, Option B, or Option C, below. *Note:* These options enable the student to take research methods courses (including statistics/quantitative techniques) as either CRIM courses or as POLS courses.

**OPTION A**

Code	Title	Hours
<i>Research Methods</i>		
CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

*Criminal Justice Electives*

Complete two additional courses in the following range: 8

CRIM 3001 to CRIM 5999

*Political Science Electives*

Complete five courses in the following range: 20

POLS 2000 to POLS 5999

**OPTION B**

Code	Title	Hours
<i>Research Methods</i>		
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4

*Criminal Justice Electives*

Complete three additional courses in the following range: 12

CRIM 3001 to CRIM 5999

*Political Science Electives*

Complete four courses in the following range: 20

POLS 2000 to POLS 5999

**OPTION C**

Code	Title	Hours
<i>Research Methods</i>		
Complete one of the following sequences: 8		
CRIM 3600 and POLS 2400	Criminal Justice Research Methods and Quantitative Techniques	

CRIM 3700 and POLS 2399	Analyzing and Using Data on Crime and Justice and Research Methods in Political Science	
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**Criminal Justice Electives**

Complete two additional courses in the following range: CRIM 3001 to CRIM 5999	8
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**Political Science Electives**

Complete four courses in the following range: POLS 2000 to POLS 5999	20
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**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 859).

- American Political Institutions (p. 859)
- Campaigns and Elections (p. 859)
- Comparative Politics (p. 859)
- Identity, Culture, and Politics (p. 859)
- International Relations and Diplomacy (p. 860)
- Law and Legal Studies (p. 860)
- Public Policy (p. 860)
- Security Studies (p. 860)

**Integrative Requirement**

Code	Title	Hours
<b>Senior Capstone Requirement</b>		
CRIM 4949 or POLS 4701	Senior Capstone Seminar Political Science Senior Capstone	4

**Due Process**

CRIM 1110	Criminal Due Process	4
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**Integrative Elective Courses**

Complete two of the following:	8	
CRIM 1700	Crime, Media, and Politics	
CRIM 2310	Courts: The Third Branch of Government	
CRIM 4120	Courts and Sentencing	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**Combined Major Credit Requirement**

Complete 84 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Political Science Concentrations (Optional)****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	16

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	8

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	4
<b>Regional Requirements</b>		
Complete two of the following:		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	8
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	4

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		

Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Criminal Justice and Psychology, BS**

This combined major educates students in criminal justice and psychology and the interface between the two disciplines. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including the biological and psychosocial bases of behavior, learning, personality, and cognition. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should be able to understand the relationships between the fields, as they relate to understanding and addressing criminal behavior.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 46).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Criminal Justice Requirements**

Code	Title	Hours
<b>Criminal Justice Core Requirements</b>		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100		4
CRIM 2200		4
CRIM 3600	Criminal Justice Research Methods	4
<b>Thematic Elective</b>		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Survey Elective</b>		

Complete one of the following: 4

CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3050	Organized Crime	
CRIM 3200		
CRIM 3300		
CRIM 3400		
CRIM 3500		

#### System-Wide Elective

Complete one of the following: 4

CRIM 4010		
CRIM 4020		
CRIM 4040	Crime Prevention	

#### Computer Science

CS 1100 Computer Science and Its Applications 4

#### Mathematics

Complete one of the following: 4

MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

#### Electives

Complete two courses in the following range: 8

CRIM 4000 to CRIM 5999

### Psychology Requirements

Code	Title	Hours
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#### Introductory Course

PSYC 1101	Foundations of Psychology	4
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#### Statistics

PSYC 2320	Statistics in Psychological Research	4
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#### Personality/Social Bases of Behavior

Complete two of the following: 8

PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	

#### Biological/Cognitive Bases of Behavior

Complete two of the following: 8

PSYC 3450	Learning and Motivation	
or PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	

#### Research Experience

Complete one of the following: 4

PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	

PSYC 4626	Laboratory in Life-Span Emotional Development	
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#### Psychology Seminar

Complete one of the following: 4

PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	

#### Electives

Complete two PSYC courses. 8

### Integrative Requirement

Code	Title	Hours
CRIM 3040	Psychology of Crime	4

### Criminal Justice and Psychology Combined-Major Credit Requirement

Complete 84 semester hours in the major.

### Program Requirement

128 total semester hours required

### Criminal Justice and Sociology, BS

This combined major educates students in criminal justice and sociology and in the interface between the two disciplines. The scope and sequence of sociology courses provide students with a foundation in social theory and social systems. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students successfully completing this program should be able to understand the ways that crime and the justice system are situated in larger social systems and structures.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Criminal Justice Requirements**

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Understanding and Experiencing Criminal Justice Institutions and Systems</b>		
How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.		
Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
<b>Crime Problems</b>		
The following courses provide students with a deeper look at a range of crime problems.		
Complete one of the following:		4
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	
CRIM 3540	Addiction and Recovery	
<b>Criminal Justice Electives</b>		
These courses round out our knowledge of crime and justice.		
Complete three additional criminal justice electives. Two must be from the 3000, 4000, or 5000 level.		12

**Sociology Requirements**

Code	Title	Hours
Complete a minimum of nine courses in sociology from the requirements below.		
<b>Sociology Requirements</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
<b>Sociology Introductory Electives</b>		
Complete two courses in the following range:		8
SOCL 1200 to SOCL 1999		
<b>Sociology Intermediate Electives</b>		
Complete two courses in the following range:		8
SOCL 2000 to SOCL 3999		
<b>Sociology Advanced Elective</b>		
Complete one course in the following range:		4
SOCL 4000 to SOCL 5999		
<b>Introduction, Methods, and Statistics</b>		
<b>Code</b>		
<b>Title</b>		
<b>Hours</b>		
<b>Introduction</b>		
Complete one of the following:		1
CRIM 1000	Criminal Justice at Northeastern	
SOCL 1000	Sociology at Northeastern	
<b>Research Methods</b>		
SOCL 2321	Research Methods in Sociology	4
<b>Statistics</b>		
CRIM 3700	Analyzing and Using Data on Crime and Justice	4
<b>Supporting Courses</b>		
<b>Code</b>		
<b>Title</b>		
<b>Hours</b>		
<b>Digital Skills</b>		
Successful students develop digital skills and master digital tools useful for careers related to crime and justice. Students choose one of two courses (each has a required lab). The computer science course introduces students to spreadsheets and databases. The data science course introduces students to programming with data.		
Complete one of the following (and the appropriate lab):		4 or 5
CS 1100 and CS 1101	Computer Science and Its Applications and Lab for CS 1100	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum ((Social Science Practicum section))	
<b>Co-op Integration Requirements</b>		
Complete before the first co-op:		1
EESH 2000	Professional Development for Co-op	
Complete after the first co-op:		1
CRIM 3000	Co-op Integration Seminar 2	
Complete after the second co-op:		1
CRIM 4000	Co-op Integration Seminar 3	

**Integrative Requirement**

Code	Title	Hours
<b>Senior Capstone Requirement</b>		
CRIM 4949 or SOCL 4600	Senior Capstone Seminar Senior Seminar	4
<b>Integrative Elective Courses</b>		
Complete one of the following:		4
CRIM 3030	Global Criminology	
CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	
Complete one of the following:		4
SOCL 1245	Sociology of Poverty	
SOCL 1228	Social Problems	

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Four Years, Two Co-ops**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CRIM 1000 or SOCL 1000	1	SOCL 3300	4	Vacation	0
CRIM 1100	4	Criminology thematic elective	4	Elective	4
SOCL 1101	4	Sociology introductory elective	4		
CS 1100 or DS 2000	4	Elective	4		
MATH 1215	4				
		17	16	0	8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
CRIM 1110	4	Co-op		Co-op	
CRIM 1120	4			Sociology intermediate elective	4
Sociology introductory elective	4				
Elective	4				
EESH 2000	1				
		17	0	0	8
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
SOCL 2321	4	Co-op		Co-op	
				Elective	4

CRIM 3700	4			Criminal justice elective	4
Elective	4				
Elective	4				
CRIM 3000	1				
		17	0	0	8
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Criminology systemwide elective	4	CRIM 4949 or SOCL 4600	4	Elective	4
Sociology advanced elective	4	Integrative course 2	4		
Integrative course 1	4	Elective	4		
Criminal justice elective	4	Elective	4		
		16	16	4	

Total Hours: 127

**Cybersecurity and Criminal Justice, BS**

The cybersecurity and criminal justice combined degree applies a multidisciplinary approach to ensuring the reliability and security of cyberspace. The program will provide students with a strong programming foundation coupled with academic and experiential knowledge of the criminal justice system. Students learn how social behavior, policy, and legal rules can affect cybersecurity and utilize comparative social science to understand, predict, and explain crime.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Cybersecurity Major Requirements**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or CRIM 1000	First Year Seminar Criminal Justice at Northeastern	1
CS 1210	Professional Development for Hourly Co-op	1
<b>Computer Science Fundamentals Courses</b>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5



CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5

**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4

**Cybersecurity Required Courses**

CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4740	Network Security	4

**Cybersecurity Elective**

Complete one of the following: 4

CS 2800	Logic and Computation	
CS 4710 or CS 6710	Mobile and Wireless Systems Wireless Network	
CS 4400	Programming Languages	
CS 4500	Software Development	
CS 4240	Large-Scale Parallel Data Processing	
CY 4770	Cryptography	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
CY 5200	Security Risk Management and Assessment	
CY 5210	Information System Forensics	
CY 5770	Software Vulnerabilities and Security	
IS 4300	Human Computer Interaction	
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 3324	Computer Architecture and Organization	
EECE 4534 and EECE 4535	Microprocessor-Based Design and Lab for EECE 4534	
MATH 3527	Number Theory 1	
MATH 4575	Introduction to Cryptography	
COMM 2551	Free Speech in Cyberspace	
LPSC 1101	Introduction to Law	
LPSC 2301	Introduction to Law, Policy, and Society	
LPSC 3303	Topics in Law and Public Policy	
PHIL 1145	Technology and Human Values	
POLS 2390	Science, Technology, and Public Policy	
POLS 3307	Public Policy and Administration	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	

**Supporting Courses**

Code	Title	Hours
Complete the following course:		
MATH 1341	Calculus 1 for Science and Engineering	4

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
Complete one of the following: 4		
ENGW 1111	First-Year Writing	
ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one of the following: 4		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3311	Advanced Writing for Prelaw	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Criminal Justice Requirements**

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4

**Current Crime and Justice Issues**

These courses introduce students to topical issues related to crime and justice.		
Complete one of the following: 4		
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	

**Crime Problems and Criminal Justice Institutions**

The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students a deeper look at a range of crime problems.		
Complete one of the following: 4		
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 3010	Criminal Violence	

CRIM 3030	Global Criminology
CRIM 3040	Psychology of Crime
CRIM 3070	Corporate and White-Collar Crime
CRIM 3540	Addiction and Recovery

**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 3110	Gender, Crime, and Justice	4
CRIM 3120	Race, Crime, and Justice	4

**Criminal Justice Elective**

Rounding out knowledge of crime and justice.

Complete one additional criminal justice elective from the 3000, 4000 or 5000-level. 4

**Criminal Justice Capstone**

Complete one of the following: 4

CRIM 4949	Senior Capstone Seminar	4
CY 4930	Cybersecurity Capstone	4
CY 4940	Research Projects on National Security	4

**Criminal Justice Co-op Integration**

Code	Title	Hours
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Co-op students should complete at least one of the following courses. CRIM 3000 is required for the first co-op. CRIM 4000 is required if a second co-op is taken:

CRIM 3000	Co-op Integration Seminar 2	1
CRIM 4000	Co-op Integration Seminar 3	1

**Integrative Requirement**

Code	Title	Hours
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**Cybersecurity Integrative Course**

CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	4

**Criminal Justice Integrative Course**

Complete one of the following: 4

CRIM 2340	Corporate Security: Securing the Private Sector	4
CRIM 2350	Policing a Democratic Society	4
CRIM 3050	Organized Crime	4
CRIM 3060	Political Crime and Terrorism	4
CRIM 4040	Crime Prevention	4
CRIM 5900	Topics in Criminal Justice and Criminology	4

**Required General Electives**

Code	Title	Hours
Complete 24 credits of general electives.		24

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

134 total semester hours required.

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	5	Vacation	5
CS 1800 and CS 1802	5	CY 2550	4				
CS 2500 and CS 2501	5	CRIM 1110	4				
CRIM 1100	4	CRIM 1120	4				
ENGW 1111	4						
		19		17		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 and CS 3501	5	CS 3000	4	Vacation	5	Co-op	5
CS 3650	4	CS 1210	1				
MATH 1341	4	CS 3700	4				
CRIM 3600	4	CRIM 3700	4				
		CRIM Elective: Thematic	4				
		17		17		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CY 3740	4	General Elective	4	Co-op	4
		CRIM 3000	1	General Elective	4		
		CRIM Elective: Survey	4				
		CRIM Elective: System-wide	4				
		General Elective	4				
		0		17		8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CY 4740	4	ENGW 3302	4	Co-op	4

CY 4170	4 General Elective	4
CRIM 4000	1	
CRIM Integrative Course	4	
General Elective	4	
0	17	8

**Year 5**

Fall	Hours Spring	Hours
Co-op	Capstone	4
	Cybersecurity Elective	4
	CRIM Elective: General	4
	General Elective	4
0	16	

Total Hours: 136

## Human Services and Criminal Justice, BS

A combined major in human services and criminal justice appeals to students interested in the intersection of social and legal issues and institutions. The human services major prepares students for careers in social change by providing students with the theoretical and skill-based background necessary for practice and research. Students with criminal justice course work gain a rigorous interdisciplinary and experiential education in the causes and consequences of crime and the responses of criminal justice. The addition of human services course work complements a criminal justice perspective and considers the role of social services and community-based organizations to prevent, intervene, and treat the causes and consequences of crime. The degree allows students to combine interests in the justice system, political advocacy, and community development. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, and internship opportunities.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Human Services Requirements

Code	Title	Hours
<b>Required Human Services Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4

HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
<b>Human Services Internship</b>		
HUSV 4994	Human Services Internship	6
<b>Human Services Electives</b>		
Complete four additional HUSV courses.		16

### Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Understanding and Experiencing Criminal Justice Institutions and Systems</b>		
How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.		
Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
<b>Crime Problems</b>		
The following courses offer students a deeper look at a range of crime problems.		
Complete one of the following:		4
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	
<b>Creating Knowledge about Crime and Justice</b>		

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3700	Analyzing and Using Data on Crime and Justice	4
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#### Systemic Issues

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 3110	Gender, Crime, and Justice
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CRIM 3120	Race, Crime, and Justice
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#### Digital Skills

Successful students develop digital skills and master digital tools useful for careers related to crime and justice. Students choose one of two courses (each has a required lab). The computer science course introduces students to spreadsheets and databases. The data science course introduces students to programming with data.

Complete one of the following (and the appropriate lab): 4-5

CS 1100 and CS 1101	Computer Science and Its Applications and Lab for CS 1100
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DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum (Social Science practicum section)
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#### Criminal Justice Electives

Rounding out knowledge of crime and justice.

Complete two additional criminal justice electives. One must be from the 3000, 4000 or 5000-level 8

#### Additional Courses

Code	Title	Hours
CRIM 1000	Criminal Justice at Northeastern	1
or HUSV 1000	Human Services at Northeastern	

#### Research Methods

CRIM 3600	Criminal Justice Research Methods	4
or HUSV 2970	Research Methods for Human Services	

#### Cooperative Education

Students going on co-op should take:

EESH 2000	Professional Development for Co-op	1
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Students returning from co-op should take:

CRIM 3000	Co-op Integration Seminar 2	1
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CRIM 4000	Co-op Integration Seminar 3	1
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#### Additional Elective

Complete one additional course in either CRIM or HUSV. 4

Integrative Course

Code	Title	Hours
CRIM 4949	Senior Capstone Seminar	4
or HUSV 4700	Senior Seminar in Human Services	

#### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1000	1	CRIM 1300, 1400, 1500, or 1700	4	Vacation	0	Vacation	0
CRIM 1100	4	HUSV 2300	4				
HUSV 1101	4	CS 1100	4				
ENGW 1111	4	HSVC elective	4				
MATH 1215	4						
	17		16		0		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1110	4	EESH 2000	1	Vacation	0	Co-op	0
CRIM 1120	4	CJ concentration elective	4				
HSVC intermediate/advanced undergraduate elective	4	CJ concentration elective	4				
Elective	4	Elective	4				
	16	Elective	4				
	16		17		0		0

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CRIM 3000	1	CRIM 3600	4	Co-op	0
		Elective	8	Elective	4		
		HUSV 3900	4				
		HSVC organization course	4				
	0		17		8		0

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CRIM 4000	1	Elective	4	Co-op	0
		CJ system-wide elective	4	Elective	4		
		ENGW 3315	4				
		Elective	4				
		CRIM 3700	4				
	0		17		8		0

##### Year 5

Fall	Hours	Spring	Hours
Co-op	0	HUSV 4994	6
		Elective	4
		CRIM 4949 or HUSV 4700	4

Elective	4
0	18

Total Hours: 134

### Five Years, Three Co-ops in Spring/Summer 1

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HUSV 1000	1 CRIM 1300, 1400, 1500, or 1700	4 Vacation	0 Vacation	0
CRIM 1100	4 HUSV 2300	4		
HUSV 1101	4 CS 1100	4		
ENGW 1111	4 HSVC elective	4		
MATH 1215	4			
	17	16	0	0

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CRIM 1110	4 Co-op	0 Co-op	0 Elective	4
CRIM 1120	4		Elective	4
HUSV 2300	4			
Elective	4			
EESH 2000	1			
	17	0	0	8

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CJ concentration elective	4 Co-op	0 Co-op	0 Elective	4
CJ concentration elective	4		HUSV 3900	4
Elective	4			
Elective	4			
CRIM 3000	1			
	17	0	0	8

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CRIM 3600	4 Co-op	0 Co-op	0 Vacation	0
HSVC organization course	4			
CJ system-wide elective	4			
Elective	4			
CRIM 4000	1			
	17	0	0	0

#### Year 5

Fall	Hours Spring	Hours
CRIM 3700	4 Elective	4
HUSV 4994	6 Elective	4
ENGW 3315	4 CRIM 4949 or HUSV 4700	4

Elective	4	Elective	4
	18		16

Total Hours: 134

### Criminal Justice, Minor

Minors in the School of Criminology and Criminal Justice (SCCJ) take the foundational courses in criminology and criminal justice. Minors can also specialize further in their elective courses. These may include courses covering topics such as policing democratic societies, corporate security, punishment and mass incarceration, and juvenile justice. A minor in criminology and criminal justice in combination with a student's major can enhance the student's career possibilities and open new avenues for research experiences.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4

### Criminal Justice Electives

Code	Title	Hours
Complete two of the following:		8
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	
CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	
CRIM 4040	Crime Prevention	
CRIM 4120	Courts and Sentencing	
CRIM 4660	Communities and Crime	
CRIM 4710	Law and Psychology	

### GPA Requirement

2.000 GPA required in the minor

### Cultures, Societies, and Global Studies

The Department of Cultures, Societies, and Global Studies is an open and dynamic academic platform for interdisciplinary research and teaching

on the transformative power of culture as an instrument for social change and innovation. We approach the challenges facing humanity through perspectives that are primarily, though not exclusively, informed by the experiences of the peoples from the Global South (Africa, Asia, the Caribbean, and Latin America) and its diasporas. As we search for the tools to foster sustainable economic growth and social well-being on a global scale, we aim to reevaluate and learn from the historical experiences, belief systems, intellectual traditions, and pressing concerns of the greater part of the world's population. This requires a critical reexamination of the persistence of Eurocentric postulates that were developed to support modern colonialism and nationalism with their variegated world of "otherness". As such, we adhere to the broadest and most inclusive definition of languages and cultures as we aim to understand, shape, and thrive in a global community characterized by increased social connectivity, economic integration, intellectual exchange, and cultural hybridity.

## Programs

### Bachelor of Arts (BA)

- Africana Studies (p. 810)
- Africana Studies and Political Science (p. 815)
- Asian Studies (p. 835)
- History and Asian Studies (p. 837)
- History, Culture, and Law (p. 818)
- Religious Studies and Africana Studies (p. 825)
- Spanish (p. 880)
- Spanish and International Affairs (p. 881)

### Bachelor of Science (BS)

- Africana Studies (p. 813)
- American Sign Language (p. 887)—English Interpreting
- American Sign Language and Human Services (p. 889)
- American Sign Language and Linguistics (p. 673)
- American Sign Language and Psychology (p. 788)
- American Sign Language and Theatre (p. 239)

## Minors

- African American Studies (p. 827)
- African Studies (p. 827)
- Africana Studies (p. 828)
- American Sign Language (p. 897)
- Arabic (p. 897)
- Black Feminist Studies (p. 828)
- Chinese (p. 898)
- East Asian Studies (p. 838)
- Film and International Cultures (p. 898)
- French (p. 900)
- German (p. 899)
- Italian (p. 899)
- Japanese (p. 900)
- Portuguese (p. 901)
- Russian (p. 901)
- Spanish (p. 901)

### Africana Studies, BA

Africana studies is an interdisciplinary field of study devoted to the critical and systematic examination of the cultural, political, social,

economic, and historical experiences of the African Diaspora across the globe. Students are able to focus on either African American or African Studies.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Concentrations

Complete one of the following:

- No Concentration Option (p. 810)
- African American Studies (p. 811)
- Africa Studies (p. 811)

## Africana Studies Major Credit Requirements

Complete 48 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

### AFRICANA STUDIES (NO CONCENTRATION OPTION)

Code	Title	Hours
<b>Foundational Course</b>		
Complete one of the following:		
AFAM 1101	Introduction to African American and Africana Studies	
or AFRS 1101	Introduction to African Studies	
<b>Introductory Courses</b>		
Complete one of the following: 4		
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following, not already used for the introductory requirement: 8		

AFAM 1104	The African-American Experience through Music
AFAM 1113	Black Popular Culture
AFAM 1135	John Coltrane and the History of Jazz in the United States
AFAM 2296	Early African-American Literature
AFAM 2455	American Women Writers
AFAM 3663	The African American Novel
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
AFRS 3900	Gender and Black World Literatures

**Social Sciences**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health
AFAM 2399	Black Community and Social Change
AFAM 2549	Public Policy and Black America
AFRS 2307	Africa Today
AFRS 2464	Natural Resources and Sustainable Development
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora

**Electives (can include cross-listed courses)**

Complete three courses above 2000 level, not already taken

Complete three courses above 3000 level, not already taken

**Capstone**

AFAM 4700	Capstone
or AFRS 4700	Capstone
AFRS 4700 to be reactivated	

**AFRICAN AMERICAN STUDIES CONCENTRATION**

Code	Title	Hours
<b>Foundational Course</b>		
AFAM 1101	Introduction to African American and Africana Studies	4
<b>Introductory Course</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following, not already used for the introductory requirement:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 2296	Early African-American Literature	
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	

AFAM 2455	American Women Writers
AFAM 3663	The African American Novel
AFRS 3900	Gender and Black World Literatures

**Social Sciences**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1225	Gender, Race, and Medicine
AFAM 2339	Analysis of American Racism
AFAM 2399	Black Community and Social Change
AFAM 2549	Public Policy and Black America
AFAM 3270	Race and Ethnic Relations
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora

**Electives (may include cross-listed courses) 12**

Complete three courses above the 2000 level, not already taken

Complete three courses above the 3000 level, not already taken.

**Capstone**

AFAM 4700	Capstone
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**AFRICA STUDIES CONCENTRATION**

Code	Title	Hours
<b>Foundational Course</b>		
AFRS 1101	Introduction to African Studies	4
<b>Introductory Course</b>		
Complete one of the following:		4
AFAM 1113	Black Popular Culture	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following, not already used for the introductory requirement:		4
AFAM 1113	Black Popular Culture	
AFAM 2296	Early African-American Literature	
AFAM 3663	The African American Novel	
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
AFRS 3900	Gender and Black World Literatures	
<b>Social Sciences</b>		
Complete two of the following, not already used for the introductory requirement:		8
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
AFRS 2307	Africa Today	
AFRS 2464	Natural Resources and Sustainable Development	
AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 3460	Contemporary Government and Politics in Africa	
<b>Electives (may include cross-listed courses)</b>		<b>12</b>

Complete three courses above the 2000 level, not already taken.

Complete three courses above the 3000 level, not already taken.

**Capstone**

AFRS 4700 Capstone

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CLTR 1000	1 AFAM 1113	4 Vacation	0 Vacation	0
AFAM 1101	4 AFAM 1225	4		
AFAM 1104	4 AFAM 2296	4		
MATH 1215	4 Elective	4		
ENGW 1111	4			
	17	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
AFAM intermediate/advanced undergraduate elective	4 AFAM intermediate/advanced undergraduate elective	4 Vacation	0 Co-op	0
Foreign language course	4 Foreign language course	4		
AFAM intermediate/advanced undergraduate elective	4 AFAM intermediate/advanced undergraduate elective	4		
Elective	4 Elective	4		
	EESH 2000	1		
	16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 AFAM 3663	4 Elective	4 Co-op	0
	ENGW 3315	4 Upper-division elective	4	
	AFAM intermediate/advanced undergraduate elective	4		
	Foreign language course	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Elective	4 Elective	4 Co-op	0
	Elective	4 Elective	4	

AFAM intermediate/advanced undergraduate elective 4

Upper-division elective 4

0 16 8 0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 AFAM 4700	4
	Elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 130

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CLTR 1000	1 AFAM 2270	4 Vacation	0 Vacation	0
AFAM 1101	4 AFAM 1113	4		
MATH 1215	4 AFAM 1135	4		
AFAM 1104	4 AFAM 1225	4		
ENGW 1111	4			
	17	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
AFAM intermediate/advanced undergraduate elective	4 Co-op	0 Co-op	0 Elective	4
Foreign language course	4		Elective	4
AFAM intermediate/advanced undergraduate elective	4			
Elective	4			
EESH 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
AFAM intermediate/advanced undergraduate elective	4 Co-op	0 Co-op	0 Elective	4
Foreign language course	4		Elective	4



AFAM intermediate/ advanced undergraduate elective	4				
Upper- division elective	4				
	16	0	0		8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
AFAM 4700	4	Co-op	0	Co-op	0
ENGW 3315	4				
AFAM intermediate/ advanced undergraduate elective	4				
Foreign language course	4				
	16	0	0		0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Elective	4	Elective	4		
Elective	4	Elective	4		
AFAM intermediate/ advanced undergraduate elective	4	Upper- division elective	4		
Upper- division elective	4	Elective	4		
	16		16		

Total Hours: 130

### Africana Studies and Political Science, BA

The combined major in Africana studies and political science offers students the opportunity to integrate their studies of both disciplines and explore the historical, practical, and theoretical relationships between the two disciplines. In addition to considering the significant points of contention, students explore the ways in which insights from Africana studies can be brought to bear on the disciplinary issues and questions of political science. Within the combined major, students may also choose to concentrate their studies on a range of topics related to political behaviors and institutional developments in the United States, the Americas, Europe, Africa, and across the global African diaspora.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Africana Studies Requirements

Code	Title	Hours
<b>Foundational</b>		
Complete one of the following:		4
AFRS 1101	Introduction to African Studies	
AFAM 1101	Introduction to African American and Africana Studies	
<b>Introductory</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFRS 1185	Gender and Sexuality in the African Diaspora	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following:		8
AFAM 2296	Early African-American Literature	
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
AFAM 2455	American Women Writers	
AFAM 2690	Boston in Literature	
AFRS 3900	Gender and Black World Literatures	
<b>Social Sciences</b>		
Complete two of the following:		8
AFRS 2307	Africa Today	
AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 2464	Natural Resources and Sustainable Development	
<b>African American/Africana Studies Electives</b>		
Complete one AFAM/AFRS course at the 2000 level or above.		4
Complete one AFAM/AFRS course at the 3000 level or above.		4

### Political Science Requirements

Code	Title	Hours
<b>Core Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4

POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4

**Political Theory**

Complete one of the following: 4

POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Electives**

Complete three POLS courses at the 2000 level and above. 12

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 816)
- Campaigns and Elections (p. 816)
- Comparative Politics (p. 817)
- Identity, Culture, and Politics (p. 817)
- International Relations and Diplomacy (p. 817)
- Law and Legal Studies (p. 817)
- Public Policy (p. 817)
- Security Studies (p. 817)

**Integrative Requirements**

Code	Title	Hours
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**Integrative Courses**

Complete one course from each discipline.

*Africana/African American Studies* 4

AFAM 2360	Politics of Poverty	
AFAM 2549	Public Policy and Black America	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFAM 5001	Special Topics in Race and the Law	

*Political Science* 4

POLS 3487	Politics of Developing Nations	
POLS 2385	U.S. Health and Welfare Policy	
POLS 3324	Law and Society	
POLS 3418	Nationalism	
POLS 3487	Politics of Developing Nations	

**Capstone Requirement**

Complete one of the following: 4

AFAM 4700	Capstone	
AFRS 4700	Capstone	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**Major Credit Requirement**

Complete 80 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
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**Required Courses**

POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
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**Theoretical Requirement**

Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

**Regional Requirements**

Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

**Experiential/Practicum Requirement**

Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	

POLS 4937	Dialogue of Civilizations: Government and Politics Abroad
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**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	

POLS 2357	Growth and Decline of Cities and Suburbs
POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 3425	U.S. Foreign Policy

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
AFRS 1101 or AFAM 1101	4	MATH 1215	4	Foreign language course	4
AFAM 1113	4	POLS 1160	4	AFAM 2360	4
				Advanced Writing in the Discipline elective	4
POLS 1150	4	POLS 1155	4		
CLTR 1000 or POLS 1000	1	Foreign language course	4		
ENGW 1111	4				
	17		16		8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
AFAM 2296	4	AFRS 3424	4	Elective	4
AFRS 2307	4	AFAM 2690	4	Elective	4
POLS 2400	4	POLS 2399	4		
Foreign language course	4	POLS 2325	4		
	16		16		8
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	AFAM 3270	4	AFAM 2339	4
		POLS 3418	4	AFAM 3664	4
		AFRS 2464	4		
		PSYC 1101 (ND NUPath)	4		
	0		16		8
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	AFRS 3460	4		

POLS 3487	4
POLS 2370	4
AFAM 4700 (or AFRS 4700)	4
0	16

Total Hours: 129

## History, Culture, and Law, BA

History, Culture, and the Law is an interdisciplinary major that provides students the opportunity to understand how legal systems are shaped by cultural norms and historical developments, as well as how social change has been and can be created through legal processes. After studying principles of historical method and jurisprudence, students bring to bear the interdisciplinary frameworks they have begun to develop in one of six culturally-focused concentrations: Africana Studies and Culture; Asian Studies and Culture; Culture and Colonialism; Digital Humanities; Gender and Sexuality; and Latino/a, Latin American, and Caribbean Studies and Culture. Students have opportunities to develop flexibility in perspectives; to exercise ability to work in interdisciplinary frameworks; and to foster appreciation of cultural diversity that will enable them to make a positive impact in their chosen spheres of action.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Note: No more than two courses taken for this major may be counted toward another major or minor.

### Law and History Core

Code	Title	Hours
<b>Foundational Core Courses</b>		
Complete the following three courses:		12
ENGL 3325	Rhetoric of Law	
HIST 1100	Law and History	
LPSC 2301	Introduction to Law, Policy, and Society	
<b>Foundational Core Elective</b>		
Complete two of the following:		8
LPSC 2302	Global Human Rights: A Social and Economic Perspective	

LPSC 3303	Topics in Law and Public Policy
LPSC 3307	Understanding the Modern Supreme Court
PHIL 2301	Philosophical Problems of Law and Justice
POLS 3302	Judicial Process and Behavior
POLS 3406	International Law
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

### Concentrations

Students will elect one four-course concentration from among these choices:

- Africana Studies and Culture (p. 819)
- Asian Studies and Culture (p. 819)
- Culture and Colonialism (p. 820)
- Digital Humanities (p. 820)
- Gender and Sexuality (p. 820)
- Latino/a, Latin American, and Caribbean Studies and Culture (p. 820)

### Major Electives

Code	Title	Hours
<i>Complete three of the following not already used to fulfill one of the requirements above. Courses not used above to fulfill a requirement may also be used to fulfill this elective requirement. However, only one course used to fulfill this requirement may be at the 1000 level.</i>		
AFAM 2399	Black Community and Social Change	
ANTH 2305	Global Markets and Local Culture	
AFAM 3120	Race, Crime, and Justice	
CLTR 3418	Nationalism	
CRIM 2350	Policing a Democratic Society	
CRIM 3110	Gender, Crime, and Justice	
ENGL 2690	Boston in Literature	
ENGL 3325	Rhetoric of Law	
ENGL 3375	Writing Boston	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or WMNS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	
HIST 2000	Native American Resistance: Past and Present	
HIST 2011	Capitalism and Business: A Global History	
HIST 2217	The Global Far-Right since 1945: Politics, Culture, Violence	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2282	The Holocaust and Comparative Genocide	
HIST 2285	America and the Holocaust	

HIST 2311	Colonialism/Imperialism
HIST 2332	Going Global: The United States, 1898-1945
HIST 3334	Assassinations in World History
LPSC 3303	Topics in Law and Public Policy
PHIL 1102	Introduction to Contemporary Moral Issues
PHIL 1112	Debating Ethical Controversies
PHIL 2303	Social and Political Philosophy
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 2330	Modern Philosophy
SOCL 4522	Environmental Justice

### Capstone

Code	Title	Hours
Complete one of the following capstone courses:		
AFAM 4700	Capstone	
AFRS 4700	Capstone	
ASNS 4900	Asian Studies Capstone Directed Study	
ENGL 4720	Capstone Project	
HIST 4701	Capstone Seminar	
PHIL 5001	Global Justice	

### Major GPA Requirement

Minimum 3.000 GPA required in all major courses

### Major Credit Requirement

Complete 52 hours in the major

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirements

128 total semester hours required

#### **Concentration in Africana Studies and Culture**

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete one of the following:		4
AFAM 1101	Introduction to African American and Africana Studies	
AFRS 1101	Introduction to African Studies	
Complete one of the following, as a Writing Intensive course:		4
AFRS 4510	Anthropology of Africa	
or ANTH 4510	Anthropology of Africa	
WMNS 4520	Race, Class, and Gender	
or SOCL 4520	Race, Class, and Gender	
Complete two of the following, at least one of which must be at the 3000 level or above:		8
AFAM 1104 - AFAM 5001		
AFRS 1270 - AFRS 4939		

#### **Concentration in Asian Studies and Culture**

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete the following course:		4
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
Complete one of the following, as a Writing Intensive course:		4
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2395	Japanese Buddhism	
Complete two of the following. If HIST 2308 or PHIL 2395 is the Writing Intensive course, at least one of these electives must be at the 3000 level or above:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4515	Culture and Politics in Modern India	
CLTR 1260	Japanese Film	
CLTR 1500	Modern Chinese History and Culture	
or HIST 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 2011	Capitalism and Business: A Global History	
HIST 2351	Modern Japan	
MUSC 2130	Music of Asia	
PHIL 1130	Ethics: East and West	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	

#### **Concentration in Culture and Colonialism**

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete the following course:		4
POLS 2325	Ancient Philosophy and Political Thought	
or PHIL 2325	Ancient Philosophy and Political Thought	
Complete three of the following, at least one of which must be at the 3000 level or above:		12
CLTR 1501	Introduction to French Culture	
CLTR 1504	Cultural History of Spain	
CLTR 2451	Postcolonial Women Writers	
or ENGL 2451	Postcolonial Women Writers	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1190	Picturing Modernity: The Photographic Image in Culture and Society	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 1286	History of the Soviet Union	
HIST 1389	History of Espionage 1: Antiquity to World War II	

HIST 1390	History of Espionage 2: Cold War Spies
HIST 2011	Capitalism and Business: A Global History
HIST 2311	Colonialism/Imperialism
HIST 3335	History of Modern Terrorism
PHIL 1120	Understanding the Bible
PHIL 3343	Existentialism
PHIL 3435	Moral Philosophy
PHIL 3460	Philosophy and Literature

**Concentration in Digital Humanities**

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete the following course:		4
ENGL 1450	Reading and Writing in the Digital Age	
Complete three of the following, at least one of which must be at the 3000 level or above:		12
CLTR 2850	Apps, Memes, and Bots: Global Literature in the Age of the Internet	
COMM 1255	Communication in a Digital Age	
COMM 2105	Social Networks	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3340	Technologies of Text	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
PHIL 1145	Technology and Human Values	
PHIL 2001	Ethics and Evolutionary Games	
SOCL 4518	Law and Society in a Digital World	
SOCL 4528	Computers and Society	

**Concentration in Gender and Sexuality**

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete one of the following:		4
WMNS 1101	Sex, Gender, and Popular Culture	
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	
Complete one of the following as a Writing Intensive course:		4
WMNS 2505	Digital Feminisms	
WMNS 4520	Race, Class, and Gender	
or SOCL 4520	Race, Class, and Gender	
Complete two of the following. If WMNS 2505 is the Writing Intensive course, at least one of these electives must be at the 3000 level or above:		8
AFAM 1225	Gender, Race, and Medicine	
or HIST 1225	Gender, Race, and Medicine	
or WMNS 1225	Gender, Race, and Medicine	
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
CLTR 2451	Postcolonial Women Writers	
or WMNS 2451	Postcolonial Women Writers	
INTL 2480	Women and World Politics	
WMNS 1260	Gender in a Changing Society	

WMNS 2303	Gender and Reproductive Justice
WMNS 3100	Gender, Social Justice, and Transnational Activism
WMNS 3500	Sexuality, Gender, and the Law
WMNS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

**Concentration in Latino/a, Latin American, and Caribbean Studies and Culture**

Code	Title	Hours
<b>Complete four courses as follows:</b>		
Complete the following course:		4
LACS 1220	Latino, Latin American, and Caribbean Studies	
Complete one of the following, as the Writing Intensive course:		4
ANTH 4500	Latin American Society and Development	
Complete two of the following:		8
CLTR 1261	Caribbean Literature and Culture	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3501	Caribbean Literature and Culture	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3725	Representing Violence and Human Rights in Latin America	
HIST 1187	Introduction to Latin American History	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 2025	Latin American History through Film	

**Plan of Study****FOUR YEARS, TWO CO-OPS IN SUMMER 2 / FALL AFRICANA STUDIES AND CULTURE CONCENTRATION**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ENGW 1111	4	Foreign Language	4	Elective	4
MATH 1215	4	LPSC 2301	4	Elective	4
Foreign Language	4	AFAM 1101	4		
HIST 1100	4	POLS 1160	4		
CLTR 1000	1				
		17	16	8	8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
EESH 2000	1	Co-op	4	Co-op	4
ENGL 3325	4			Elective	4
PHIL 2301	4				
LPSC 2302	4				
Foreign Language	4				
		17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
WMNS 4520	4 AFAM 1113	4 Elective	4 Co-op	
AFRS 1270	4 EESH 2000	1 Elective	4	
ENGW 3315	4 Elective	4		
HCL Elective	4 Elective	4		
	HCL Elective	4		
	16	17	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	HCL Capstone	4
	Foreign Language	4
	HCL Elective	4
	Elective	4
	0	16

Total Hours: 131

**FOUR YEARS, ONE CO-OP IN SPRING / SUMMER 1  
DIGITAL HUMANITIES CONCENTRATION****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 Foreign Language	4 Elective	4 Vacation	
Foreign Language	4 LPSC 2301	4 Elective	4	
MATH 1215	4 ENGL 1450	4		
HIST 1100	4 COMM 1255	4		
CLTR 1000	1			
	17	16	8	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EESH 2000	1 Co-op	Co-op	Elective	4
Foreign Language	4		Elective	4
ENGL 3325	4			
PHIL 2301	4			
LPSC 2302	4			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGL 3340	4 ENGW 3315	4 Vacation	Vacation	
INSH 2102	4 Foreign Language	4		
Elective	4 HCL Elective	4		
HCL Elective	4 Elective	4		
	16	16	0	0

**Year 4**

Fall	Hours Spring	Hours
HCL Elective	4 HCL Capstone	4
Foreign Language	4 Elective	4

Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

**Religious Studies and Africana Studies, BA**

The Department of Philosophy and Religion and the Program in Africana Studies offer an interdisciplinary combined major in religious studies and Africana studies. Students interested in the combined major integrate the study of religious traditions, religious praxis, and religious ethics with critical and systematic examination of the cultural, political, social, economic, and historical experiences of African Americans throughout the hemisphere and peoples of African descent around the world.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Religious Studies Major Requirements**

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	

**Comparative Religion Elective**

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1220	The Meaning of Death
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

**Electives**

Complete five of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement: 20

PHIL 1111	Introduction to World Religions
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 2390	Cults and Sects
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4903	Seminar in Religion
PHIL 4992	Directed Study

**Capstone**

Complete the following course that is not used to satisfy another requirement: 4

PHIL 4903	Seminar in Religion
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**Africana Studies Requirements**

Code	Title	Hours
<b>Foundational</b>		
AFAM 1101	Introduction to African American and Africana Studies	4
or AFRS 1101	Introduction to African Studies	
<b>Introductory</b>		
Complete one of the following: 4		
AFAM 1101	Introduction to African American and Africana Studies	
AFAM 1104	The African-American Experience through Music	

AFAM 1113	Black Popular Culture
AFAM 1135	John Coltrane and the History of Jazz in the United States
AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health

**Humanities**

Complete two of the following: 8

AFAM 2296	Early African-American Literature
AFAM 2455	American Women Writers
AFAM 3663	The African American Novel

**Social Sciences**

Complete two of the following: 8

AFRS 2307	Africa Today
AFAM 2399	Black Community and Social Change
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
AFRS 2464	Natural Resources and Sustainable Development
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora

**Electives**

Note: Electives may not double count for other AFAM or HIST combined-major requirements.

Complete one AFAM/AFRS course at the 2000 level or above 4

Complete one AFAM/ AFRS course at the 3000 level or above 4

**Senior Capstone**

Choose one capstone course from the list below. 4

AFAM 4700	Capstone
PHIL 4903	Seminar in Religion

**Integrative Requirement**

Code	Title	Hours
Complete the following course: 4		
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	4
or AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	

**Program Requirement**

128 total semester hours required

**Plan of Study****Four Years, Two Co-ops in Spring/Summer 1**

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ENGW 1111	4 Lived Religion Elective	4 Elective	4 Elective	4	
PHIL 1110	4 Introductory Course	4 Elective	4 Elective	4	
Elective	4 Elective	4			



AFAM 1101 or AFRS 1101	4 Elective	4		
	16	16	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Comparative Religion Elective	4 Co-op	Co-op	Elective	4
Social Sciences Course	4		Elective	4
PHIL 2000 Level Elective	4			
Elective	4			
	16	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	Co-op	Elective	4
Humanities Course	4		Elective	4
Social Sciences Course	4			
AFAM/AFRS 2000 Level Elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours
AFAM/AFRS 3000 Level Elective	4 Humanities Course	4
PHIL 3000 Level Elective	4 Integrative Requirement Course	4
Elective	4 PHIL Advanced Level Elective	4
Elective	4 Capstone	4
	16	16

Total Hours: 128

**Spanish, BA**

Spanish is the second most spoken language in the world. It is used in more than twenty countries, including the United States. In fact, in terms of the number of speakers, the United States is the second largest Spanish-speaking country in the planet. Being a Spanish speaker is a major professional and cultural asset as it prepares you to be successful in any career path. Yet, in our society, knowing Spanish is not just an asset; it is increasingly a necessity. Not only does proficiency in Spanish prepare you to be a leader in a country where Hispanics are the fastest growing segment of the population and where Spanish-speakers are the vast majority of the population in the hemisphere. Knowing Spanish also makes you a truly global citizen. Our Spanish BA certifies that you have attained advanced levels of listening, speaking, reading and writing

proficiency in the language. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Spanish Major Requirements**

Code	Title	Hours
<b>Spanish Requirements</b>		
SPNS 2102	Intermediate Spanish 2	4
SPNS 3101	Advanced Spanish 1	4
SPNS 3102	Advanced Spanish 2: Hispanic and Latinx Identity	4
<b>Language and Linguistics</b>		
CLTR 1120	Introduction to Languages, Literature, and Culture	4
LING 1150	Introduction to Language and Linguistics	4
<b>Culture, Literature &amp; History</b>		
Complete five of the following:		20
ANTH 4500	Latin American Society and Development	
CLTR 1240	Latin American Film	
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 2001	World Cultures through Film	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3720	Literature, Arts, and Poverty in Latin America	
CLTR 3725	Representing Violence and Human Rights in Latin America	
CLTR 3805	Culture, Politics, and Media in Spain	
CLTR 4655	Latin American Literature	
CLTR 4944	Cultural Engagement Abroad	
HIST 1187	Introduction to Latin American History	
LACS 1220	Latino, Latin American, and Caribbean Studies	
<b>Spanish Electives</b>		

Complete two of the following courses.		8
SPNS 2900	Specialized Instruction in Spanish	
SPNS 3401	Advanced Spanish 1 for Healthcare Professionals	
SPNS 3501	Advanced Spanish Conversation: Global Communication	
SPNS 3601	Exploring Spoken Spanish	
SPNS 3800	Special Topics in Spanish	
SPNS 3900	Specialized Instruction in Spanish	
<b>Spanish Seminar</b>		
SPNS 4992	Directed Study	1-4
<b>Study Abroad/Experiential Learning</b>		
SPNS 3501	Advanced Spanish Conversation: Global Communication	4
See department for further details.		
<b>Capstone</b>		
LANG 4700	Capstone Seminar	4

### Spanish Major Credit Requirement

Complete 53 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 CLTR 1120	4 CLTR 1504	4 NUpath course or elective	4
MATH 1215	4 SPNS 2102	4 SPNS 3101	4 NUpath course or elective	4
SPNS 2101	4 LING 1150	4		
CLTR 1504	4 CLTR 1240	4		
CLTR 1000	1			
	17	16	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
NUpath course or elective	4 NUpath course or elective	4 NUPath Course	4 Co-op	0
CLTR 1505	4 CLTR 2715	4 Elective	4	
CLTR 3715	4 SPNS 3102	4		
CLTR 3805	4 EESH 2000	1		
	LACS 1220	4		
	16	17	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 SPNS 2900	4 ENGW 3315	4 Co-op	0

	Elective	4 NUpath course or elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours	Hours	Hours
Co-op	0 CLTR 4655	4		
	SPNS 3401	4		
	SPNS 3501	4		
	LANG 4700	4		
	0	16		

Total Hours: 130

### Spanish and International Affairs, BA

This combined major offers undergraduates the opportunity to develop an awareness of global affairs and international issues since the 19th century through diverse and cross-disciplinary theories of: (1) Interstate relations: conflict, cooperation, hierarchies; (2) Civil society, transnational advocacy networks, global social movements; and (3) the politics of culture, linguistic and cultural diversity, religious and ideological divides; (4) State-society relations: democracy, authoritarianism, inequalities, citizenship.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Spanish Language Requirements

Code	Title	Hours
<b>Spanish Language Requirements</b>		
SPNS 2102	Intermediate Spanish 2	4
SPNS 3101	Advanced Spanish 1	4
SPNS 3102	Advanced Spanish 2: Hispanic and Latinx Identity	4

### Language and Linguistics

Complete one of the following courses:		4
CLTR 1120	Introduction to Languages, Literature, and Culture	4
LING 1150	Introduction to Language and Linguistics	4

**Culture, Literature, and History**

Complete four of the following courses:		16
ANTH 4500	Latin American Society and Development	
CLTR 1240	Latin American Film	
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 2001	World Cultures through Film	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3720	Literature, Arts, and Poverty in Latin America	
CLTR 3725	Representing Violence and Human Rights in Latin America	
CLTR 3805	Culture, Politics, and Media in Spain	
CLTR 4655	Latin American Literature	
CLTR 4944	Cultural Engagement Abroad	
HIST 1187	Introduction to Latin American History	
LACS 1220	Latino, Latin American, and Caribbean Studies	

**Spanish Electives**

Complete two of the following courses:		8
SPNS 2900	Specialized Instruction in Spanish	
SPNS 3401	Advanced Spanish 1 for Healthcare Professionals	
SPNS 3501	Advanced Spanish Conversation: Global Communication	
SPNS 3601	Exploring Spoken Spanish	
SPNS 3800	Special Topics in Spanish	
SPNS 3900	Specialized Instruction in Spanish	

**Study Abroad/Experiential Learning**

See department for details

**International Affairs Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
ECON 1115 or ECON 1116	Principles of Macroeconomics Principles of Microeconomics	4

**International Experiential Learning**

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

**International Affairs Elective**

Code	Title	Hours
Complete one of the following courses:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

**Global Dynamics Requirement**

Code	Title	Hours
Complete two of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		8

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268 or PPUA 5268	International Environmental Policy International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	

*Human Rights and Social Justice*

HIST 2373	Gender and Sexuality in World History	
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	

*Conflict and Security*

CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	

INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture

ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### Regional Analysis Requirement

Complete three of the following courses, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	

HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

*Europe*

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture

POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<i>Russia</i>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**Integrative Courses**

Code	Title	Hours
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
<b>Capstone</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4

**Spanish and International Affairs Combined Major Credit/GPA Requirements**

Complete 84 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
INTL 1000	1	MATH 1215	4	Vacation	0	Vacation	0	0
ENGW 1111	4	ECON 1115 or 1116	4					
INTL 1101	4	Elective	4					
CLTR 1120	4	SPNS 2102	4					
SPNS 2101	4							
	17		16		0		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
INTL elective	4	INTL elective	4	Vacation	0	Co-op	0	0
Elective	4	Elective	4					
Elective	4	Elective	4					
SPNS 3101	4	Spanish elective 3000-5000	4					
	16		16		0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
Co-op	0	INTL elective	4	INTL elective	4	Co-op	0	0
		INTL elective	4	Upper division elective	4			

	Advanced literature/cultural course	4			
	Advanced literature/cultural course	4			
	0	16	8	0	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	0 ENGW 3315	4 Upper division elective	4 Co-op	0	
	INTL 3400	4 INTL elective	4		
	Elective	4			
	Spanish elective 3000-5000	4			
	0	16	8	0	
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	0 INTL 4700	4			
	Upper division elective	4			
	Spanish elective 3000-5000	4			
	CLTR 4655	4			
	0	16			

Total Hours: 129

### Five Years, Three Co-ops in Spring/Summer 1

<b>Year 1</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
INTL 1000	1 MATH 1215	4 Vacation	0 Vacation	0	
ENGW 1111	4 ECON 1115 or 1116	4			
INTL 1101	4 SPNS 2102	4			
CLTR 1120	4 Elective	4			
SPNS 2101	4				
	17	16	0	0	
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Elective	4 Co-op	0 Co-op	0 INTL elective	4	
Elective	4		Elective	4	
Spanish elective 3000-5000	4				
SPNS 3101	4				
	16	0	0	8	
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
INTL elective	4 Co-op	0 Co-op	0 INTL elective	4	

INTL elective	4		Upper division elective	4
Advanced literature/cultural course	4			
Advanced literature/cultural course	4			
16		0	0	8

<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
INTL 3400	4 Co-op	0 Co-op	0 Vacation	0	
ENGW 3315	4				
Elective	4				
Spanish elective 3000-5000	4				
	16	0	0	0	

<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
INTL elective	4 INTL elective	4			
Upper division elective	4 INTL 4700	4			
Elective	4 CLTR 4655	4			
Spanish elective 3000-5000	4 Upper division elective	4			
	16	16			

Total Hours: 129

### Africana Studies, BS

Africana studies is an interdisciplinary field of study devoted to the critical and systematic examination of the cultural, political, social, economic, and historical experiences of Africans, African-Americans throughout the hemisphere, and peoples of African descent around the world. Students are able to choose focused concentrations in African American or Africa Studies.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Concentrations

Complete one of the following:

- No Concentration Option (p. 813)
- African American Studies (p. 814)
- Africa Studies (p. 814)

## Africana Studies Major Credit Requirements

Complete 48 semester hours in the major.

## Program Requirements

128 total semester hours required

### AFRICANA STUDIES (NO CONCENTRATION OPTION)

Code	Title	Hours
<b>Foundational Course</b>		
Complete one of the following:		4

- |              |   |
|--------------|---|
| AFAM 1101    | Introduction to African American and Africana Studies |
| or AFRS 1101 | Introduction to African Studies                       |

### Introductory Courses

Complete one of the following: 4

- |           |  |
|-----------|--|
| AFAM 1104 | The African-American Experience through Music              |
| AFAM 1113 | Black Popular Culture                                      |
| AFAM 1135 | John Coltrane and the History of Jazz in the United States |
| AFAM 1225 | Gender, Race, and Medicine                                 |
| AFRS 1270 | Introduction to Global Health                              |

### Humanities Courses

Complete two of the following, not already used for the introductory requirement: 8

- |           |  |
|-----------|--|
| AFAM 1104 | The African-American Experience through Music                        |
| AFAM 1113 | Black Popular Culture  |
| AFAM 1135 | John Coltrane and the History of Jazz in the United States           |
| AFAM 2455 | American Women Writers   |
| AFAM 2296 | Early African-American Literature                                    |
| AFRS 2410 | Possession, Sacrifice, and Divination in African Diasporic Religions |
| AFAM 3663 | The African American Novel   |
| AFRS 3900 | Gender and Black World Literatures                                   |

### Social Science Courses

Complete two of the following, not already used for the introductory requirement: 8

- |           |                                   |
|-----------|-----------------------------------|
| AFAM 1225 | Gender, Race, and Medicine        |
| AFRS 1270 | Introduction to Global Health     |
| AFAM 2339 | Analysis of American Racism       |
| AFAM 2399 | Black Community and Social Change |
| AFAM 2549 | Public Policy and Black America   |
| AFRS 2307 | Africa Today                      |

AFRS 2464	Natural Resources and Sustainable Development
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFAM 3270	Race and Ethnic Relations
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya

### Electives (6 courses)

Complete three AFAM or AFRS courses above 2000 level, not already taken 24

Complete three AFAM or AFRS courses above 3000 level, not already taken 24

### Capstone

AFAM 4700	Capstone	4
or AFRS 4700	Capstone	

### AFRICAN AMERICAN STUDIES CONCENTRATION

Code	Title	Hours
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### Foundational Course

AFAM 1101	Introduction to African American and Africana Studies	4
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### Introductory Courses

Complete one of the following: 4

- |           |  |
|-----------|--|
| AFAM 1104 | The African-American Experience through Music              |
| AFAM 1113 | Black Popular Culture                                      |
| AFAM 1135 | John Coltrane and the History of Jazz in the United States |
| AFAM 1225 | Gender, Race, and Medicine                                 |

### Humanities Courses

Complete two of the following, not already used for the introductory requirement: 8

- |           |  |
|-----------|--|
| AFAM 1104 | The African-American Experience through Music                        |
| AFAM 1113 | Black Popular Culture  |
| AFAM 1135 | John Coltrane and the History of Jazz in the United States           |
| AFAM 2455 | American Women Writers   |
| AFAM 2296 | Early African-American Literature                                    |
| AFRS 2410 | Possession, Sacrifice, and Divination in African Diasporic Religions |
| AFAM 3663 | The African American Novel   |

### Social Science Courses

Complete two of the following, not already used for the introductory requirement: 8

- |           |                                   |
|-----------|-----------------------------------|
| AFAM 1225 | Gender, Race, and Medicine        |
| AFRS 1270 | Introduction to Global Health     |
| AFAM 2339 | Analysis of American Racism       |
| AFAM 2399 | Black Community and Social Change |
| AFAM 2549 | Public Policy and Black America   |
| AFAM 3270 | Race and Ethnic Relations         |

AFRS 3460	Contemporary Government and Politics in Africa
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora

**Electives (6 courses)**

Complete three AFAM courses above 2000 level, not already taken 24

Complete three AFAM courses above 3000 level, not already taken 24

**Capstone**

AFAM 4700	Capstone
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**AFRICA STUDIES CONCENTRATION**

Code	Title	Hours
------	-------	-------

**Foundational Course**

AFRS 1101	Introduction to African Studies	4
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**Introductory Courses**

Complete one of the following: 4

AFAM 1113	Black Popular Culture
AFRS 1180	African History
AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health

**Humanities Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1113	Black Popular Culture
AFRS 1180	African History
AFAM 2296	Early African-American Literature
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
AFAM 3663	The African American Novel
AFRS 3900	Gender and Black World Literatures

**Social Science Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health
AFRS 2307	Africa Today
AFRS 2464	Natural Resources and Sustainable Development
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya

**Electives (6 courses)**

Complete three AFRS courses above 2000 level, not already taken 24

Complete three AFRS courses above 3000 level, not already taken 24

**Capstone**

AFRS 4700	Capstone
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**Plan of Study****Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CLTR 1000	1	AFAM 1135	4	Vacation	0	Vacation	0
AFRS 1101	4	AFAM 3270	4				
AFAM 1225	4	AFAM 2296	4				
MATH 1215	4	Elective	4				
ENGW 1111	4						
	17		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AFRS 1180	4	AFRS 2465	4	Vacation	0	Co-op	0
AFRS 1270	4	Elective	4				
AFRS 2307	4	AFRS 2410	4				
Elective	4	Elective	4				
		EESH 2000	1				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315	4	Elective	4	Co-op	0
		Elective	4	Elective	4		
		AFRS 3900	4				
		AFRS 3460	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	AFRS 3424	4	Elective	4	Co-op	0
		Upper-division elective	4	Elective	4		
		Elective	4				
		Elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	AFRS 4700	4				
		Upper-division elective	4				
		Upper-division elective	4				
		Elective	4				
	0		16				

Total Hours: 130

**American Sign Language–English Interpreting, BS**

Website (<https://cssh.northeastern.edu/asl/>)



**Lori Whynot, PhD, CI, CT, SC: L, CoreCHI, NAATI**

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American Sign Language (ASL) is estimated to be the third most used language in the United States, and its visibility in society is on the rise in recent years. There are between 500,000–2,000,000 Deaf, DeafBlind, or hard of hearing people in the United States who use ASL as their primary language and a large number of non-Deaf signers who use or learn ASL as a second language. A disproportionate percentage of Deaf Community members experience socioeconomic disadvantage due to their dual status as members of both a cultural linguistic minority group and a disability group. As a result, there is a broad societal misunderstanding of Deaf, signing people's minority language and culture—their lived experience—which creates barriers to educational and economic opportunity. While state and federal legislation enables improved civic engagement by Deaf, hard of hearing, and DeafBlind individuals, there is continued need to elevate quality of life, equity, and the rich contributions of the diverse members of the American Deaf Community.

The curriculum in the NU American Sign Language and Interpreting program addresses social inequalities and contributes to cultural resilience by raising awareness of the minority population of ASL users: Deaf, hard of hearing, and DeafBlind individuals. Students acquire the complex skills of ASL-English interpreting through intensive faculty instruction and direct student support and guidance, which is similar to training in other practice professions (such as law, medicine, and social work).

Professional ASL-English interpreting is an important service that supports Deaf, hard of hearing, and DeafBlind people's efforts to participate, be recognized, and contribute to civic society equally at all levels. There continues to be a shortage of qualified sign language interpreters in all domains of civic life since the emergence of the profession in the early 1960s. There is ongoing need for advancing research on ASL and on sign language interpreting to contribute to the growing literature.

The Bachelor of Science in American Sign Language-English Interpreting curriculum is a rigorous program of study that integrates a foundation of ASL and Deaf studies with intensive interpreting skill development. This program is designed to assist students in acquiring competence in ASL, developing an understanding of the diverse American Deaf Community and its culture, and applying linguistic, analytic, and sociocultural skills and knowledge in order to contribute to civic engagement and social justice for Deaf citizens. The major in ASL-English Interpreting is a sequence of courses in linguistic, cognitive, human relations, and ethical decision-making skills as well as the sociocultural knowledge necessary to prepare students for future state or national credentialing as professional ASL-English interpreters. The program offers a wide array of courses as well as volunteer, internship, and practicum opportunities to learn from Deaf citizens' lived experiences through community and industry connections and research. To supplement ASL and Deaf cultural learning, students have the option to do an ASL immersion semester through our Gallaudet University semester study option by the end of the sophomore year or a co-op with a Deaf community-based organization. Academic and co-op advising and discussion with the program director is required for students electing these options.

The program also has alternative, combined majors (<https://cssh.northeastern.edu/asl/program/american-sign-language-combined->

majors/) for students who want to master ASL and cultural skills to work alongside and on behalf of Deaf, hard of hearing, or DeafBlind people in the disciplines of human services, psychology, linguistics, or theatre/arts.

### **ACADEMIC PROGRESSION STANDARDS FOR ASL-ENGLISH INTERPRETING MAJORS**

- To begin the interpreting skills course sequence (INTP course numbers 3510 and higher), students must pass an ASL competency assessment at the intermediate/advanced level and maintain a minimum 2.750 GPA in all AMSL, INTP, and DEAF courses as well as maintain a minimum 2.500 overall GPA.
- Due to the fiduciary responsibility of professional sign language interpreters, there are technical, ethical, and dispositional standards required of progression to graduation in the ASL-English interpreting program. An individual must be able to meet the following competency standards to continue to graduation:
  - Human relations
  - Communication ability
  - Cognitive skills
  - Ethical conduct

#### ***Human Relations***

Students must demonstrate collegiality by showing respect and courtesy to colleagues, consumers, employers/site placements, and taking responsibility for one's work. Compassion, integrity, motivation, effective interpersonal skills, and concern for others are personal attributes required of those in the interpreting profession. The student must be able to work under supervision of a site instructor or preceptor; this is essential to ensure rights, safety, and privacy of interpreting clients/consumers. The student must exercise good judgment and promptly complete all responsibilities in the classroom and practical fieldwork settings. The ability to establish culturally competent relationships with individuals and groups and to respond effectively to clients who have different language and cognitive capacities is critical to interpreting practice.

#### ***Communication ability***

The student must communicate verbally in order to elicit information and to convey that information to others. Each student must have the ability to read and write accurately and comprehensively in English. The student must be able to thoroughly comprehend and fluently use ASL and speak the English language so as to facilitate communication with Deaf and hearing community members and stakeholders, including colleagues, instructors, and other students. The student must also be able to present information in a professional, logical manner and to articulate decisions that enable effective interpreting.

#### ***Cognitive Skills***

The student must show evidence of progression toward effectively integrating academic and world knowledge during simultaneous and consecutive interpretation, using appropriate cultural adjustments while managing internal and external factors and processes that result in accurate and reliable interpretations in both ASL and English.

#### ***Ethical Conduct***

The student must demonstrate self-awareness and discretion by monitoring and managing personal and professional behaviors and integrity by avoiding conflicts of interest and adhering to values reflected in the Registry of Interpreters for the Deaf (RID) professional code of conduct.

## Program Requirements

### American Sign Language-English Interpreting Major Requirements

To begin the interpreting skills course sequence (INTP course numbers 3510 and higher), students must pass an American Sign Language (ASL) competency assessment at the intermediate/advanced level and maintain a minimum of 2.750 GPA in all AMSL, INTP, and DEAF courses. Students must also maintain an overall minimum 2.500 GPA.

Students with prior ASL skills may be allowed to waive up to the first four AMSL courses by taking the language placement assessment. Waived courses must be replaced by electives.

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
AMSL 3102	Advanced ASL 2	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Linguistics</b>		
LING 1150	Introduction to Language and Linguistics	4
DEAF 2700	ASL Linguistics	4
<b>Interpreting</b>		
INTP 3500	The Interpreting Profession	2
INTP 3510	Interpreting Inquiry Texts	4
INTP 3515	Interpreting Narrative Texts	4
INTP 3550	Interpreting Scripted Texts	4
INTP 4510	Interpreting Expository Texts	4
INTP 4515	Interpreting Persuasive Texts	4
<b>Interpreting Practicum</b>		
INTP 4995	Interpreting Practicum	4
<b>Ethics</b>		
INTP 4650	Ethical Decision Making	4
INTP 4651	Ethical Fieldwork	2
<b>Research Capstone</b>		
INTP 3970	Research Methods for Interpreting and Translation	4
INTP 4940	Interpreting Research Capstone	4

### American Sign Language-English Interpreting GPA Requirement

Minimum 2.750 GPA required in all AMSL, INTP, and DEAF courses  
Minimum 2.500 overall GPA required

### American Sign Language-English Interpreting Credit Requirement

Complete 84 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

129 total semester hours required

### Plan of Study

#### Four Years, No Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
DEAF 1500	4	AMSL 1102	4	Vacation	0	Vacation	0
AMSL 1101	4	MATH 1215	4				
ENGW 1111	4	LING 1150	4				
INTP 1000	1	Elective	4				
Elective	4						
		17		16		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
DEAF 2500	4	AMSL 2102	4	Vacation	0	Vacation	0
AMSL 2101	4	DEAF 2700	4				
INTP 3500	2	Elective	4				
Elective	4	Elective	4				
		14		16		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTP 3510	4	INTP 3515	4	Vacation	0	Vacation	0
ENGW 3315	4	INTP 3550	4				
AMSL 3101	4	AMSL 3102	4				
Elective	4	Elective	4				
		16		16		0	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTP 4650	4	INTP 4515	4				
INTP 4510	4	INTP 4995	4				
INTP 4651	2	INTP 4940	4				
Elective	4	Elective	4				
INTP 3970	4						
		18		16			

Total Hours: 129

## American Sign Language and Human Services, BS

Website (<https://cssh.northeastern.edu/asl/>)

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American Sign Language (ASL) is estimated to be the third most used language in the United States and its visibility in society is on the rise

in recent years. There are roughly 500,00 to 2,000,000 Deaf, DeafBlind, or hard of hearing people in the United States who use ASL as their primary language, and a large number of non-Deaf signers use or learn ASL as a second language. A disproportionate percentage of Deaf people experience socioeconomic disadvantage due to their dual status as members of both a cultural linguistic minority group and a disability group. As a result, there is a broad societal misunderstanding of Deaf, signing people's minority language and culture—their lived experience—which creates barriers to educational and economic opportunity. While state and federal legislation enables improved civic engagement by Deaf, hard of hearing, and DeafBlind individuals, there is continued need to elevate quality of life, equity, and the rich contributions of the diverse members of the American Deaf communities.

The Bachelor of Science in American Sign Language and Human Services is an integrated program of study dedicated to preparing individuals to interact in a positive and supportive manner with members of the American Deaf Community. The curriculum is designed to assist students in acquiring competence in ASL, developing an understanding of the diverse American Deaf communities and Deaf culture, and applying linguistic and sociocultural skills and knowledge to the discipline of human services, in order to contribute to civic engagement and social justice for Deaf people.

The combined major offers a wide array of courses as well as volunteer, internship, and practicum opportunities to learn from Deaf people's lived experiences through community and industry connections. The program provides opportunities that will allow students an opportunity to acquire the linguistic, cognitive, and ethical decision-making skills as well as the sociocultural knowledge necessary to work in Deaf Community, sign-language-related disciplines. Students pursuing a combined major in human services integrate their foundation in ASL and the Deaf Community with human service organizations.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## American Sign Language Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
AMSL 3102	Advanced ASL 2	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Linguistics</b>		

LING 1150	Introduction to Language and Linguistics	4
DEAF 2700	ASL Linguistics	4
<b>Performance Interpreting</b>		
INTP 3500	The Interpreting Profession	2
<b>Interpreting</b>		
INTP 3510	Interpreting Inquiry Texts	4

## Human Services Requirements

Code	Title	Hours
<b>Human Services</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4700	Senior Seminar in Human Services	4
<b>Human Services Electives</b>		
Complete two courses in the HUSV subject area.		8

## Integrative Requirement

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
HUSV 4994	Human Services Internship	6

## Combined Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses

Minimum 2.500 overall GPA required

## Combined Major Credit Requirement

Complete 88 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

## Plan of Study

### Four Years, No Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 1101	4	AMSL 1102	4	Vacation	0	Vacation	0
DEAF 1500	4	MATH 1215	4				
HUSV 1101	4	HSVC elective	4				
ENGW 1111	4	Elective	4				
		16	16	0	0		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 2101	4	AMSL 2102	4	Vacation	0	Vacation	0
LING 1150	4	DEAF 2700	4				
Elective	4	HUSV 2300	4				

INTP 3500	2 Elective	4		
	14	16	0	0
<b>Year 3</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
DEAF 2500	4 HUSV 2970	4 Vacation	0 Vacation	0
INTP 3510	4 Elective	4		
AMSL 3101	4 ENGW 3315	4		
HSVC elective	4 AMSL 3102	4		
	16	16	0	0
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
HUSV 3900	4 HUSV 4700	4		
HUSV 4994	6 INTP 4940	4		
Elective	4 Elective	4		
Elective	4 Elective	4		
	18	16		

Total Hours: 128

## American Sign Language and Linguistics, BS

The American Sign Language (ASL) & Linguistics combined major is an intensive program of study dedicated to preparing students to interact in a positive and supportive manner with members of the American Deaf Community while simultaneously providing students with an understanding of the theoretical, cultural, and social components of all human language, including ASL, so that they can better understand how ASL is related to spoken languages and other signed languages. This curriculum is designed to assist students in acquiring competence in American Sign Language; and in developing an understanding of the American Deaf Community and its culture, the acquisition and analysis of human languages (signed and spoken), and how human languages work in everyday use (e.g., comprehension, generation, translation).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### American Sign Language Requirements

Code	Title	Hours
<b>Language Requirement</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4

AMSL 3101	Advanced ASL 1	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Interpreting</b>		
INTP 3500	The Interpreting Profession	2
INTP 3510	Interpreting Inquiry Texts	4

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Psychology of Language</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
<b>Linguistics Electives</b>		
Complete two courses (not counted elsewhere) from the following:		8
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3442	Sociolinguistics	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	
or LING 4971	Junior/Senior Honors Project 2	
or LING 4991	Directed Study Research	
or PSYC 4991	Directed Study Research	
LING 4993	Independent Study	
PSYC 4520	Language and the Brain	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	
<b>Seminar Requirement</b>		
Complete one course (not counted elsewhere) from the following:		4
LING 4654	Seminar in Linguistics	

LING 4891	Research Seminar in Linguistics
PSYC 4658	Seminar in Psycholinguistics

### Integrative Courses

Code	Title	Hours
DEAF 2700	ASL Linguistics	4
INTP 4940	Interpreting Research Capstone	4
LING 3412	Language and Culture	4

### Combined Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses

Minimum 2.500 overall GPA required

### Combined Major Credit Requirement

Complete 90 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirements

128 total semester hours required

### Plan of Study

#### Sample, Four Years

##### Year 1

Fall	Hours	Spring	Hours
AMSL 1101		4 AMSL 1102	4
DEAF 1500		4 LING 2350	4
LING 1150		4 LING 3412	4
NUpath/Elective		4 NUpath/Elective	4
		16	16

##### Year 2

Fall	Hours	Spring	Hours
AMSL 2101		4 AMSL 2102	4
DEAF 2500		4 DEAF 2700	4
PSYC 1101		4 PSYC 2320	4
NUpath/Elective		4 NUpath/Elective	4
		16	16

##### Year 3

Fall	Hours	Spring	Hours
AMSL 3101		4 Linguistic Structure course	4
INTP 3500		2 Linguistic Structure course or Linguistics Elective	4
INTP 3510		4 PSYC 3464	4
Linguistic Structure course		4 NUpath/Elective	4
NUpath/Elective		4	
		18	16

##### Year 4

Fall	Hours	Spring	Hours
INTP 4940		4 Linguistics Seminar	4

Linguistics Elective or Linguistic Structure course	4	Linguistics Elective	4
NUpath/Elective	4	NUpath/Elective	4
NUpath/Elective	4	NUpath/Elective	4
		16	16

Total Hours: 130

### American Sign Language and Psychology, BS

American Sign Language (ASL) is estimated to be the third most used language in the United States and its visibility in society is on the rise in recent years. There are roughly 500,000 to 2,000,000 Deaf, DeafBlind, or hard of hearing people in the United States who use ASL as their primary language, and a large number of non-Deaf signers use or learn ASL as a second language. A disproportionate percentage of Deaf people experience socioeconomic disadvantage due to their dual status as members of both a cultural linguistic minority group and a disability group. As a result, there is a broad societal misunderstanding of Deaf, signing people's minority language and culture—their lived experience—which creates barriers to educational and economic opportunity. While state and federal legislation enables improved civic engagement by Deaf, hard of hearing, and DeafBlind individuals, there is continued need to elevate quality of life, equity, and the rich contributions of the diverse members of the American Deaf communities.

The program offers a wide array of courses as well as volunteer, co-op, and research opportunities to learn from Deaf people's lived experiences through community and industry connections.

This combined major educates students in cognitive psychology, psycholinguistics, and the structures of human languages in general and ASL in particular. The curriculum is designed to assist students in acquiring competence in ASL, develop an understanding of the diverse American Deaf communities and Deaf culture, better understand cognitive efforts of interpreters' language transfer, as well as gain insights into various features of spoken language and experience firsthand the principles underlying the spatial organization of discourse required by signed languages. This knowledge and the psychology background from the major provide a foundation for more advanced studies of ASL and interpreting or psychology and Deaf people.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### American Sign Language Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4

AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4

**Social and Cultural World**

DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4

**Linguistics**

LING 1150	Introduction to Language and Linguistics	4
DEAF 2700	ASL Linguistics	4

**Interpreting**

INTP 3500	The Interpreting Profession	2
INTP 3510	Interpreting Inquiry Texts	4
INTP 3970	Research Methods for Interpreting and Translation (Research Methods for Interpreting and Translation)	4

**Psychology Requirements**

Code	Title	Hours
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**Psychology**

PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3466	Cognition	4

**Psychology Lab or Directed Study**

Complete one of the following: 4

PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	
PSYC 4991	Directed Study Research	

**Personal/Social Bases of Behavior (Area A)**

Complete two of the following: 8

PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	

**Biological/Cognitive Bases of Behavior (Area B)**

Complete one of the following: 4

PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	

**Language/Cognition Elective**

Complete one of the following: 4

PSYC 4520	Language and the Brain	
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PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	

**Integrative Requirements**

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
PSYC 3464	Psychology of Language	4

**Combined Major GPA Requirement**

Minimum 2.750 GPA required in all AMSL, INTP, and DEAF courses  
Minimum 2.500 overall GPA required

**Combined Major Credit Requirement**

Complete 82 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Four Years, No Co-op**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
AMSL 1101	4	AMSL 1102	4	Vacation	0
DEAF 1500	4	LING 1150	4	Vacation	0
PSYC 1101	4	MATH 1215	4		
ENGW 1111	4	Elective	4		
		16	16		0

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
AMSL 2101	4	AMSL 2102	4	Vacation	0
DEAF 2500	4	PSYC 2320	4	Vacation	0
PSYC 3464	4	PSYC 3466	4		
INTP 3500	2	Elective	4		
Elective	1-4				
		15-18	16		0

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
AMSL 3101	4	DEAF 2700	4	Vacation	0
Psych Area A elective	4	Psych Area B elective	4	Vacation	0
ENGW 3315	4	Language/cognition elective	4		
INTP 3510	4	AMSL 3102	4		
		16	16		0

Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
INTP 3970	4	INTP 4940	4		

Elective	4 Psych lab elective	4
Elective	4 Psych Area A elective	4
Elective	4 Elective	4
	16	16

Total Hours: 127-130

## American Sign Language and Theatre, BS

The American Sign Language and Interpreting Education (ASLIE) Program curriculum is an intensive program of study dedicated to preparing individuals to interact in a positive and supportive manner with members of the American Deaf Community. This program is designed to assist students in acquiring competence in American Sign Language, developing an understanding of the American Deaf Community and its culture, and applying their linguistic and cultural skills and knowledge to a particular academic area of study.

This major is designed for students who want to combine an understanding of the American Deaf Community and its culture to the study and making of theatre, including performance, design, and production. It offers both classroom and experiential learning on the creative, social, and linguistic relationship between theatre and the American Deaf Community. Students may study acting, dramatic literature, and production design to develop the skills to be professional ASL/English interpreters and/or performers for theatrical productions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### American Sign Language Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Linguistics</b>		
DEAF 2700	ASL Linguistics	4
LING 1150	Introduction to Language and Linguistics	4

### Interpreting

INTP 3500	The Interpreting Profession	2
INTP 3550	Interpreting Scripted Texts	4

### Theatre Requirements

Code	Title	Hours
<b>Theatre</b>		

A grade of C or higher is required for all theatre courses.

#### Foundational Stages

THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

#### Theatre Texts and Context

Complete one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	

#### Making Theatre

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1

#### Intermediate or Advanced Technique

Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
THTR 4345	Advanced Acting for the Camera	

## Integrative Requirement

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
THTR 4702	Capstone Rehearsal and Performance	4

## Combined Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses

Minimum 2.500 overall GPA required

## Combined Major Credit/Grade Requirement

Complete 88 semester hours in the major. A minimum grade of C is required for all theatre courses.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, One Co-op

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
AMSL 1101	4 AMSL 1102	4 Elective	4 Vacation	0
DEAF 1500	4 THTR 1120	4 Elective	4	
THTR 1100	1 THTR Text & Context 1	4		
THTR 1101	4 Elective	4		
ENGW 1111	4			
	17	16	8	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
AMSL 2101	4 AMSL 2102	4 Vacation	0 Vacation	0
LING 1150	4 DEAF 2700	4		
DEAF 2500	4 THTR 1131	4		
THTR 1270	4 THTR Intermediate or Advanced 1	4		
THTR 2000	1			
	17	16	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTP 3550 or 3510	4 Co-op 1	Co-op 1	0 Elective	4
THTR 2325	4		Elective	4
INTP 3500	2			
Elective	4			
Elective	4			
EEAM 2000	1			
	19	0	0	8
Year 4				
Fall	Hours Spring	Hours		
ENGW 3315	4 THTR 4702	4		

THTR Intermediate or Advanced 2	4	INTP 4940	4
Elective	4	AMSL 3101	4
Elective	4	Elective	4
	16		16

Total Hours: 133

## African American Studies, Minor

The African American studies minor offers students the opportunity to engage in focused analysis devoted to the critical and systematic examination of the cultural, political, social, economic, and historical theories, frameworks, and experiences of African-descended people in the United States of America.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Courses

Code	Title	Hours
Foundational		
AFAM 1101	Introduction to African American and Africana Studies	4
Humanities		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 2296	Early African-American Literature	
AFAM 2339	Analysis of American Racism	
AFAM 2360	Politics of Poverty	
AFAM 2362	Modern and Contemporary African-American Literature	
AFAM 2690	Boston in Literature	
AFAM 3120	Race, Crime, and Justice	
AFAM 3404	African American Rhetorical Traditions	
AFAM 3664	Black Poetry and the Spoken Word	
AFAM 2455	American Women Writers	
Social Sciences		
Complete one of the following:		4
AFAM 1225	Gender, Race, and Medicine	
AFAM 2355	Race, Identity, Social Change, and Empowerment	
AFAM 2399	Black Community and Social Change	
AFAM 2549	Public Policy and Black America	
AFAM 2600	Issues in Race, Science, and Technology	
AFAM 2618	Community Psychology	
AFAM 3270	Race and Ethnic Relations	
AFAM 5001	Special Topics in Race and the Law	



**Electives**

Code	Title	Hours
Complete one AFAM or AFRS course at the 2000 level or above, not already taken.		4
Complete one AFAM or AFRS course at the 3000 level or above, not already taken.		4

**GPA Requirement**

2.000 GPA required in the minor

**African Studies, Minor**

The mission of the African and African-American Studies Program is to mentor intellectual leaders, to develop emerging scholars, and to train global citizens who are able to explore the world from diverse perspectives in an ever increasingly global and interdisciplinary world. In our experiential liberal arts education model, students study culture, history, politics, and society as they relate to African and African-American studies to cultivate their thinking, reading, and writing skills through interdisciplinary class-based and experiential learning opportunities. Some of the major areas of interest and research of our faculty include the public humanities and public policy, critical race theory and empire/colonialism, criminal justice and carceral state, global public health and neglected tropical diseases, gender, sexuality, and women's studies.

Through rigorous study, co-op, study abroad, Dialogue of Civilizations, and service-learning, students have an opportunity to acquire use-inspired knowledge and competencies that will equip them with endless possibilities to flexibly fit any profession and graduate studies they may pursue in the social sciences and humanities.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Course**

Code	Title	Hours
AFRS 1101	Introduction to African Studies (A grade of C or higher is required)	4

**Social Sciences**

Code	Title	Hours
Complete two of the following:		8
AFRS 1185	Gender and Sexuality in the African Diaspora	
AFRS 2307	Africa Today	
AFRS 2414		
AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	

INTL 3565	Morocco: History, Cultures, and Economic Development in the Mediterranean Basin
POLS 3487	Politics of Developing Nations

**Humanities**

Code	Title	Hours
AFAM 1109		4
AFRS 1180	African History	4

**GPA Requirement**

2.000 GPA required in the minor

**Africana Studies, Minor**

The Africana studies minor offers students the opportunity to explore the interdisciplinary analysis of the cultural, political, social, economic, and historical aspects of the diaspora of African-descended people across the globe.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
<b>Foundational</b>		
AFAM 1101	Introduction to African American and Africana Studies	4
<b>Humanities</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 2296	Early African-American Literature	
AFAM 2455	American Women Writers	
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
<b>Social Sciences</b>		
Complete one of the following:		4
AFAM 1225	Gender, Race, and Medicine	
AFAM 2399	Black Community and Social Change	
AFAM 2549	Public Policy and Black America	
AFAM 3270	Race and Ethnic Relations	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	

**Electives**

Code	Title	Hours
Complete one AFAM or AFRS course at the 2000 level or above, not already taken.		4
Complete one AFAM or AFRS course at the 3000 level or above, not already taken.		4

## GPA Requirement

2.000 GPA required in the minor

### American Sign Language, Minor

The American Sign Language and Interpreting Education (ASLIE) program curriculum is an intensive program of study dedicated to preparing individuals to interact in a positive and supportive manner with members of the American Deaf Community. This program is designed to assist students in acquiring competence in American Sign Language, developing an understanding of the American Deaf Community and its culture, and applying their linguistic and cultural skills and knowledge to a particular academic area of study.

The program offers a wide array of courses as well as volunteer, internship, and practicum opportunities. For students wishing to pursue a minor in ASL, the program is committed to providing opportunities that will allow them to acquire the linguistic, cognitive, and ethical decision-making skills as well as the sociocultural knowledge necessary to work in positive and supportive ways with Deaf people.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4
DEAF 1500	Deaf People in Society	4

### Required Language Courses

Code	Title	Hours
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4

### Elective

Code	Title	Hours
Complete one of the following:		4
AMSL 3101	Advanced ASL 1	
AMSL 3102	Advanced ASL 2	
AMSL 4992	Directed Study	
DEAF 2500	Deaf History and Culture	
DEAF 2700	ASL Linguistics	

## GPA Requirement

2.000 GPA required in the minor

### Arabic, Minor

We live in a truly global world, where the leaders of tomorrow will dwell in, and negotiate all transactions in spaces not claimed in exclusivity by a single people, language or culture. Knowing Arabic, the fifth largest language in the world in terms of speakers, will help you become a truly

global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

### Required Culture Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

### Required Language Courses

Students may waive any of these courses by taking the language exam in the World Languages Center.

Code	Title	Hours
ARAB 2101	Intermediate Arabic 1	4
ARAB 2102	Intermediate Arabic 2	4

### Electives

Code	Title	Hours
ARAB 4992	Directed Study	
CLTR 1151	Muslim Writers and the Qur'an (in English Translations)	
CLTR 1502	Introduction to Arabic Culture	
CLTR 4944	Cultural Engagement Abroad	
HIST 1185	Introduction to Middle Eastern History	
HIST 1290	Modern Middle East	
INTL 1160	Middle East Studies	
POLS 3465	Government and Politics in the Middle East	
POLS 4915	Model Arab League	

## GPA Requirement

2.000 GPA required in the minor

### Black Feminist Studies, Minor

This interdisciplinary minor offers students opportunities to critically engage with the histories and theories that sit at the intersections of race, gender, class, and sexuality. This minor will allow students to centralize the study of Black women from diverse disciplinary perspectives and provide students with opportunities to engage comparative and transnational Black feminist studies frameworks for analyzing gender, sexuality, and other concepts within the broader disciplines of African and women's, gender, and sexuality studies.

**Minor Requirements**

Code	Title	Hours
<b>Required Courses</b>		
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	4
AFAM 1101	Introduction to African American and Africana Studies	4
or AFRS 1101	Introduction to African Studies	
<b>Electives</b>		
Complete two of the following:		
AFAM 1113	Black Popular Culture	4
AFRS 3900	Gender and Black World Literatures	4
ENGL 2451	Postcolonial Women Writers	4
ENGL 2455	American Women Writers	4
SOCL 4520	Race, Class, and Gender	4
WMNS 1225	Gender, Race, and Medicine	4
WMNS 2505	Digital Feminisms	4
WMNS 3100	Gender, Social Justice, and Transnational Activism	4

**Chinese, Minor**

The leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed exclusively by a single people, language, or culture. Knowing Chinese will help students become truly global citizens. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens a door for a fascinating cultural and intellectual world in and beyond the classroom, with a myriad of opportunities to travel, live, and work abroad.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students are required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogue of Civilizations at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count toward the five classes in the minor.

**Required Culture Course**

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

**Required Language Courses**

Students may waive any of these courses by taking the language exam in the World Languages Center.

Code	Title	Hours
CHNS 2101	Intermediate Chinese 1	4
or CHNS 2301	Intermediate Chinese Immersion 1	
CHNS 2102	Intermediate Chinese 2	4
or CHNS 2302	Intermediate Chinese Immersion 2	

**Electives**

Code	Title	Hours
ASNS 3422	Topics in Chinese Studies	
CHNS 3101	Advanced Chinese 1	
or CHNS 3301	Advanced Chinese Immersion 1	
CHNS 3102	Advanced Chinese 2	
or CHNS 3302	Advanced Chinese Immersion 2	
CHNS 3800	Special Topics in Chinese	
CHNS 4800	Special Topics in Chinese	
CHNS 4992	Directed Study	
CLTR 1500	Modern Chinese History and Culture	
or HIST 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 4944	Cultural Engagement Abroad	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2360	History of Capitalism in East Asia	

**GPA Requirement**

2.000 GPA required in the minor

**Film and International Cultures, Minor**

The minor in Film and International Cultures allows students to study the rapidly expanding global visual culture. Students will explore the history, theory, aesthetics and criticism of film and other moving-image media on a global scale and in relation to culture, other arts, politics and propaganda. The minor also explores how the image and the film/propaganda industry shape the world we live in and the ways in which we conceive of ourselves and others.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* At least two of the courses taken for the minor must be at or above the 2000 level.

**Required Culture Courses**

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4
CLTR 2001	World Cultures through Film	4

**Film and Culture Study**

Code	Title	Hours
Select one of the following pairings:		8
CLTR 1240 and CLTR 1505	Latin American Film and Latin American Culture, History, and Politics	
CLTR 1260 and CLTR 1700	Japanese Film and Introduction to Japanese Pop Culture	
CLTR 2715 and LACS 1220	New Media Narratives in Latin America: Local and Global Dimensions and Latino, Latin American, and Caribbean Studies	

## Elective

*Note:* Courses taken for this requirement cannot be double-counted with courses taken to fulfill the film and culture study requirement.

Code	Title	Hours
Complete one of the following:		4
CLTR 1151	Muslim Writers and the Qur'an (in English Translations)	
CLTR 1240	Latin American Film	
CLTR 1260	Japanese Film	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1501	Introduction to French Culture	
CLTR 1502	Introduction to Arabic Culture	
CLTR 1503	Introduction to Italian Culture	
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3725	Representing Violence and Human Rights in Latin America	
CLTR 4655	Latin American Literature	

## GPA Requirement

2.000 GPA required in the minor

### German, Minor

We live in a truly global world where the leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed in exclusivity by a single people, language, or culture. Knowing German will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. The minor also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live, and work abroad.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students are required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count toward the five classes in the minor.

## Culture Course Requirement

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

## Language Requirement

Students may waive any of these courses by taking the language exam in the World Languages Center.

Code	Title	Hours
GRMN 2101	Intermediate German 1	4
GRMN 2102	Intermediate German 2	4

## Electives

Code	Title	Hours
Complete two of the following:		
GRMN 3800	Special Topics in German	
GRMN 4800	Special Topics in German	
CLTR 4944	Cultural Engagement Abroad	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2282	The Holocaust and Comparative Genocide	
LING 1150	Introduction to Language and Linguistics	
LING 3412	Language and Culture	
PHIL 3343	Existentialism	
PHIL 3435	Moral Philosophy	
PSYC 3464	Psychology of Language	

## GPA Requirement

2.000 GPA required in the minor

### Italian, Minor

We live in a truly global world where the leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed in exclusivity by a single people, language or culture. Knowing Italian will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

## Required Culture Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

## Required Language Courses

Students may waive any of these courses by taking the language exam in the World Language Center.

Code	Title	Hours
ITLN 2101	Intermediate Italian 1	4
ITLN 2102	Intermediate Italian 2	4

### Electives

Code	Title	Hours
CLTR 1503	Introduction to Italian Culture	
CLTR 4944	Cultural Engagement Abroad	
ITLN 3101	Advanced Italian 1	
ITLN 4992	Directed Study	

### GPA Requirement

2.000 GPA required in the minor

### Japanese, Minor

We live in a truly global world where the leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed in exclusivity by a single people, language or culture. Knowing Japanese will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count toward the five courses in the minor.

### Required Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4
or JPNS 3101	Advanced Japanese 1	
or JPNS 3102	Advanced Japanese 2	

### Required Language Courses

Students may waive any of these courses by taking the language exam in the World Language Center.

Code	Title	Hours
JPNS 2101	Intermediate Japanese 1	4
or JPNS 2301	Intermediate Japanese Immersion 1	
JPNS 2102	Intermediate Japanese 2	4
or JPNS 2302	Intermediate Japanese Immersion 2	

### Electives

Code	Title	Hours
ASNS 1150	East Asian Studies	
CLTR 1260	Japanese Film	
CLTR 1700	Introduction to Japanese Pop Culture	
CLTR 4944	Cultural Engagement Abroad	

HIST 1252	Japanese Literature and Culture
HIST 2351	Modern Japan
JPNS 3101	Advanced Japanese 1
JPNS 3102	Advanced Japanese 2
JPNS 4992	Directed Study

### GPA Requirement

2.000 GPA required in the minor

### French, Minor

We live in a truly global world where the leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed in exclusivity by a single people, language or culture. Knowing French will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

### Required Culture Course

This course must be taken on campus. It may not be substituted by courses taken on Dialogue programs, through study abroad or at another institution.

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4
or FRNH 3101	Advanced French 1	
or FRNH 3102	Advanced French 2	

### Required Language Courses

Students may waive one or both of the courses below by taking the language exam in the World Language Center. Waived courses must be replaced by electives. Please see the elective list for options.

Code	Title	Hours
FRNH 2101	Intermediate French 1	4
FRNH 2102	Intermediate French 2	4

### Electives

If any courses were waived in previous requirements, please complete additional electives to reach five total courses for the French minor.

Code	Title	Hours
Take two courses from the following list:		
CLTR 1501	Introduction to French Culture	
CLTR 4944	Cultural Engagement Abroad	
FRNH 2900	Specialized Instruction in French	
FRNH 3101	Advanced French 1	

FRNH 3102	Advanced French 2
FRNH 3900	Specialized Instruction in French
FRNH 4800	Special Topics in French

## GPA Requirement

2.000 GPA required in the minor

### Portuguese, Minor

We live in a truly global world where the leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed in exclusivity by a single people, language or culture. Knowing Portuguese will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

### Required Culture Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

### Required Language Courses

Students may waive any of these courses by taking the language exam in the World Language Center.

Code	Title	Hours
PORT 2101	Intermediate Portuguese 1	4
PORT 2102	Intermediate Portuguese 2	4

### Electives

Take at least two of the following. If one or both of the intermediate level courses were waived, please complete additional electives to reach five total courses for the Portuguese minor.

Code	Title	Hours
ANTH 4500	Latin American Society and Development	
CLTR 1240	Latin American Film	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 4944	Cultural Engagement Abroad	

## GPA Requirement

2.000 GPA required in the minor

### Russian, Minor

We live in a truly global world where the leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed in exclusivity by a single people, language or culture. Knowing Russian will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

### Required Culture Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

### Required Language Courses

Students may waive any of these courses by taking the language exam in the World Language Center.

Code	Title	Hours
RSSN 2101	Intermediate Russian 1	4
RSSN 2102	Intermediate Russian 2	4

### Electives

Code	Title	Hours
CLTR 4944	Cultural Engagement Abroad	
HIST 1285	Introduction to Russian Civilization	
HIST 1286	History of the Soviet Union	
RSSN 4992	Directed Study	
RSSN 4993	Independent Study	

## GPA Requirement

2.000 GPA required in the minor

### Spanish, Minor

Spanish is the second most spoken language in the world. It is used in more than twenty countries, including the United States. In fact, in terms of the number of speakers, the United States is the second largest Spanish-speaking country in the planet. Being a Spanish speaker is a major professional and cultural asset as it prepares you to be successful in any career path. Yet, in our society, knowing Spanish is not just an asset; it is increasingly a necessity. Not only does proficiency in Spanish prepare you to be a leader in a country where Hispanics are the fastest growing segment of the population and where Spanish-speakers are the

vast majority of the population in the hemisphere. Knowing Spanish also makes you a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

### Required Culture Course

This course must be taken on campus. It may not be replaced by courses taken on Dialogue programs, through study abroad or at another institution.

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4
or SPNS 3101	Advanced Spanish 1	
or SPNS 3102	Advanced Spanish 2: Hispanic and Latinx Identity	

### Required Language Courses

Students may waive one or both of the courses below by taking the language exam in the World Language Center. Waived courses must be replaced by electives. Please see the elective list for options.

Code	Title	Hours
SPNS 2101	Intermediate Spanish 1	4
or SPNS 2301		
or SPNS 2401	Intermediate Spanish 1 for Healthcare Professionals	
SPNS 2102	Intermediate Spanish 2	4
or SPNS 2302		
or SPNS 2402	Intermediate Spanish 2 for Healthcare Professionals	

### Electives

Take at least two of the following. If one or both of the intermediate level courses were waived, please complete additional electives to reach five total courses for the Spanish minor.

Code	Title	Hours
ANTH 4500	Latin American Society and Development	
or INTL 4500		
CLTR 1240	Latin American Film	
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3715	New Narratives: Latin America after 1989	

CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 3725	Representing Violence and Human Rights in Latin America
CLTR 3805	Culture, Politics, and Media in Spain
CLTR 4655	Latin American Literature
CLTR 4944	Cultural Engagement Abroad
HIST 1187	Introduction to Latin American History
LACS 1220	Latino, Latin American, and Caribbean Studies
SPNS 2900	Specialized Instruction in Spanish
SPNS 3101	Advanced Spanish 1
or SPNS 3301	
SPNS 3102	Advanced Spanish 2: Hispanic and Latinx Identity
or SPNS 3302	
SPNS 3501	Advanced Spanish Conversation: Global Communication
SPNS 3601	Exploring Spoken Spanish
SPNS 3800	Special Topics in Spanish
SPNS 3900	Specialized Instruction in Spanish
SPNS 4800	Special Topics in Spanish

### GPA Requirement

2.000 GPA required in the minor

## Economics

Website (<http://www.northeastern.edu/cssh/economics/>)

### Robert Triest, PhD

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Economics is the study of how societies produce and exchange goods and services to satisfy needs. Undergraduates may study economics to develop specialized analytical skills useful in today's complex labor market. Economics is distinguished among the social sciences by having a systematic normative as well as a positive framework for evaluating public policy. The major in economics is also a good foundation for graduate studies in advanced economics, public policy, law, or business.

Macroeconomics, which focuses on the overall economy, deals with such problems as inflation, unemployment, growth and instability, economic development, and governmental monetary and fiscal policies.

Microeconomics examines the economic behavior of individuals, households, firms, industries, and trade among countries. It seeks to assess the economic effects of market power and environmental damage and analyzes the economic aspects of natural resources, poverty, health, income distribution, trade unions, crime, and government regulation.

Courses in economics cover international trade; the behavior of families, firms, and industries in the market economy; the environmental costs of growth; and the economic aspects of natural resources, poverty, health, labor market discrimination, trade unions, crime, and governmental oversight. International and comparative perspectives are emphasized,

most directly in courses in studies of the developing world and economic history.

Students may pursue a BA, a BS, or a minor in economics. Additionally, economics majors in their junior year may qualify for admission to the PlusOne program that combines the BA or BS with a MS in economics. The department also offers combined majors with business administration, computer science, cybersecurity, data science, environmental and sustainability sciences, history, international affairs, mathematics, philosophy, political science, psychology, and human services, as well as an interdisciplinary major in politics, philosophy, and economics.

Graduates may find jobs in major corporations; financial institutions; nonprofits; NGOs; or federal, state, and local governments. Their work may involve planning and forecasting, assessing labor needs, and undertaking financial studies. They may estimate consumer demand for new products, conduct research, teach, or provide specialized consulting services.

## Academic Progression Standards

The following are the requirements to progress in the major:

Code	Title	Hours
The following three core courses should be completed first:		12
ECON 1115	Principles of Macroeconomics	
ECON 1116	Principles of Microeconomics	
MATH 1231	Calculus for Business and Economics	
The following four core courses should be completed by the end of sophomore year:		16
ECON 2315	Macroeconomic Theory	
ECON 2316	Microeconomic Theory	
ECON 2350	Statistics	
ECON 2560	Applied Econometrics	

## PlusOne Program (MS) in Economics

The PlusOne Program in Economics provides the opportunity for Northeastern's undergraduate majors to complete both the undergraduate degree program (BS or BA) and the professional master's program (MS) in economics in less time than if the programs were completed sequentially. Undergraduate students may apply to the program as early as the end of their sophomore year or the beginning of their junior year. Students must demonstrate a strong quantitative background. One additional year of graduate study is required to complete the master's program. Students interested in this option should consult with the departmental undergraduate and graduate directors.

## Programs

### Bachelor of Arts (BA)

- Economics (p. 903)
- History and Economics (p. 904)
- International Affairs and Economics (p. 906)
- Political Science and Economics (p. 910)

### Bachelor of Science (BS)

- Economics (p. 913)
- Computer Science and Economics (p. 351)
- Cybersecurity and Economics (p. 394)
- Data Science and Economics (p. 411)
- Economics and Business Administration (p. 279)

- Economics and Human Services (p. 919)
- Economics and Mathematics (p. 742)
- Economics and Philosophy (p. 922)
- Economics and Psychology (p. 797)
- Environmental and Sustainability Studies and Economics (p. 713)
- History and Economics (p. 928)
- Political Science and Economics (p. 929)
- Politics, Philosophy, and Economics (p. 821)

## Minor

- Economics (p. 935)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Economics, BA

The Bachelor of Arts degree in economics maintains the tradition of the liberal arts with the language and arts courses required to satisfy the university's BA degree requirements. Along with the six core courses in economics, students may choose from over 40 electives. Many of these electives continue this liberal arts tradition with courses that focus on economic literature, economic history, the history of economic thought, and political economy. Students considering future doctoral studies in economics are strongly encouraged to pursue a double major in economics (BS) and mathematics (BS) or choose our combined economics/mathematics major.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Economics Major Requirements for BA

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Senior Seminar</b>		
ECON 4692	Senior Economics Seminar	4



### Economics Electives for BA

Code	Title	Hours
Complete 5 courses that are found in the following ranges, with no more than one in the ECON 1200 to ECON 1999 range:		20
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Breadth Courses for Economics Major

Code	Title	Hours
<b>Calculus</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Computer Science</b>		
Complete one of the following:		4
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MISM 2510	Fundamentals of Information Analytics	

### Economics Major GPA/Credit Requirement

Grades in the following four courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 56 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1000	1	CS 1100, MISM 2510, or DS 2000 and DS 2001	4	Elective	4	Elective	4
ECON 1115	4	ECON 1116	4	ECON elective 1	4	Elective	4

ENGW 1111	4	Foreign language core course	4				
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4	Elective	4				
Foreign language core course	4						
		17	16	8	8		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2350	4	ECON 2316	4	Elective	4	Co-op	0
ECON 2315	4	ECON elective 2	4	Elective	4		
Foreign language core course	4	Elective	4				
Elective	4	Elective	4				
		EESH 2000	1				
		16	17	8	0		
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3308	4	ECON elective 4	4	Co-op	0
		ECON elective 3	4	Elective	4		
		ECON 2560	4				
		Elective	4				
		0	16	8	0		
Year 4							
Fall	Hours	Spring	Hours				
Co-op	0	ECON elective 5	4				
		Elective	4				
		ECON 4692	4				
		Elective	4				
		0	16				

Total Hours: 130

## History and Economics, BA

The Department of History and the Department of Economics offer an interdisciplinary combined major in history and economics. Students interested in the combined major integrate the study of economic systems and theories with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one history course from the 1000 level (except from HIST 1200 and HIST 1201).		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
HIST 2330	Colonial and Revolutionary America	
<b>Intermediate/Advanced History Courses</b>		
Complete four history courses numbered 2000 or above, excluding HIST 2301 and HIST 2302.		16
<b>Advanced History</b>		
Complete one history course at the 3000 level or above.		4

## Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000	Economics at Northeastern	1
or HIST 1000	History at Northeastern	
<b>Required Economics Courses</b>		
ECON 1115	<i>Principles of Macroeconomics</i>	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
ECON 3520	History of Economic Thought	4
<b>Economics Electives</b>		

Complete two economics elective courses that are found in the following ranges, with no more than one in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy the integrative course requirement and ECON 3520 may not be used as economics electives:

ECON 1200 to ECON 1999

ECON 3000 to ECON 4689

ECON 4900 to ECON 4999

ECON 5200 to ECON 5999

### Supplemental Courses

CS 1100	Computer Science and Its Applications	4
or MISM 2510	Fundamentals of Information Analytics	
or DS 2000	Programming with Data	
and DS 2001	and Data Science Programming Practicum	
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	

## Capstone Requirements

Code	Title	Hours
Complete one of the following options (Public History concentrations complete HIST 4903 and HIST 4904):		4
ECON 4692	Senior Economics Seminar	
HIST 4701	Capstone Seminar	

## Integrative Requirement

Code	Title	Hours
Complete one of the following:		4
ECON 3470	American Economic History	
ECON 1292	Economic History of the Middle East	
HIST 2360	History of Capitalism in East Asia	
HIST 2011	Capitalism and Business: A Global History	

## History and Economics Major GPA/Credit Requirement

Grades in the following four economics courses must average a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 92 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

**Plan of Study****Four Years, Two Co-ops in Summer 2/Fall****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115	4	ECON 1116	4	ECON 2315	4	ECON elective 1	4
ECON 1000 or HIST 1000	1	HIST elective 1	4	HIST elective 3	4	Elective	4
HIST 1200	1	CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4				
HIST 1201	4	HIST elective 2	4				
Foreign language or elective	4						
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4						
	18		16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2316	4	ECON 2350	4	Elective	4	Co-op	
HIST 2301	4	HIST elective 4	4	Elective	4		
HIST 2302	1	HIST elective 5	4				
Elective	4	EESH 2000	1				
Elective	4	Foreign language or elective	4				
	17		17		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ECON 2560	4	HIST elective 7	4	Co-op	
		HIST elective 6	4	ECON elective 2	4		
		ENGW 3315	4				
		ECON 3520	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op		ECON 4692 or HIST 4701	4
		ECON 3470, HIST 2360, HIST 2011, or ECON 1292	4
		Elective	4
		Elective	4
	0		16

Total Hours: 132

**International Affairs and Economics, BA**

This combined major fosters an awareness of global affairs and international economic issues since the early 20th century through diverse and cross-disciplinary theories of economic development and growth; states, societies, and markets (the intersection of politics and economics); and the role of states, civil societies, and social movements in crafting or addressing economic strategies, inequalities, and citizenship rights.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**International Affairs Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>International Affairs/Economics at Northeastern</b>		
INTL 1000 or ECON 1000	International Affairs at Northeastern or Economics at Northeastern	1

**Required Courses**

INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
ANTH 1101	Peoples and Cultures	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	

**International Experiential Learning**

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

**International Affairs Elective**

Code	Title	Hours
Complete one of the following courses:		
		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	

INTL 3450	Security, Culture, Power
INTL 3520	Global Political Economy
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
INTL 5100	Climate and Development

### Global Dynamics Requirement

Code	Title	Hours
Complete two of the following with one course numbered 2000 or above. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		8

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	

PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development

INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Regional Analysis Requirement**

Code	Title	Hours
	Complete three of the following, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty advisor. See department for additional courses:	12

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	

HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

*Europe*

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict

POLS 4915	Model Arab League
<i>Russia</i>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

ECON 4692	Senior Economics Seminar	4
or INTL 4700	Senior Capstone Seminar in International Affairs	

### International Affairs and Economics Combined-Major GPA

Grades in the following Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4

### International Affairs and Economics Combined-Major Credit Requirement

Complete 88 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 MATH 1231, 1241, 1245, 1251, 1340, or 1341	4 ECON elective 1	4 Elective	4
INTL 1101	4 ECON 1116	4 INTL Elective	4 Elective	4
ECON 1115	4 POLS 1160	4		
ENGW 1111	4 HIST 2211	4		
Foreign language core course	4			
	17	16	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1100, MISM 2510, or DS 2000 and DS 2001	4 ECON 2350	4 ECON elective 2	4 Co-op	0
ECON 2315	4 INTL elective	4 Elective	4	
INTL elective	4 Foreign language core course	4		
Foreign language core course	4 ECON 2316	4		
	16	16	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 INTL 3400	4 Elective	4 Co-op	0
	Elective	4 INTL elective	4	
	ECON 3520	4		

### International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

### Economics Requirements

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 3520	History of Economic Thought	4

### Economics Electives

Code	Title	Hours
Complete 3 Economics elective courses from the following ranges with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy international affairs requirements, courses used to satisfy the integrative courses requirement, and ECON 3520 may not be used as Economics electives.		
ECON 1200 to ECON 1999		12
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	

### Methods

CS 1100	Computer Science and Its Applications	4
or INTL 2718	Research Methods in International Affairs	
or MISM 2510	Fundamentals of Information Analytics	
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	

### Integrative Requirements

Code	Title	Hours
<b>Development Economics</b>		
ECON 1291	Development Economics	4

### Senior Seminar

Complete one of the following with a thesis or project that integrates both international affairs and economics:

	INTL Elective	4		
	0	16	8	0
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
Co-op	0	ECON elective 3	4	
		INTL elective	4	
		INTL Elective	4	
		ECON 4692	4	
		or INTL 4700		
	0	16		

Total Hours: 129

## Political Science and Economics, BA

The combined major in political science and economics offers students the opportunity to integrate the study of politics and government with the study of economics. Students complete the core courses in political science along with core courses in economics that cover both macroeconomic and microeconomic perspectives. This combined major highlights the important role that the economy plays in shaping politics and government.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2330	American Political Thought	
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2332	Contemporary Political Thought	

### Political Science Electives

Complete four courses POLS2000 to POLS5999	16
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### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below.

- American Political Institutions (p. 911)
- Campaigns and Elections (p. 911)
- Comparative Politics (p. 911)
- Identity, Culture, and Politics (p. 911)
- International Relations and Diplomacy (p. 912)
- Law and Legal Studies (p. 912)
- Public Policy (p. 912)
- Security Studies (p. 912)

### Economics Requirements for BA

Code	Title	Hours
<b>Breadth Courses</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	
CS 1100	Computer Science and Its Applications	4
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
or MISM 2510	Fundamentals of Information Analytics	

### Required Economics Courses

ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 3520	History of Economic Thought	4

### Economics Electives

Complete 3 Economics elective courses that are found in the following ranges, with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, ECON 3520 may not be used as an Economics elective:

ECON 1200 to ECON 1999
ECON 3000 to ECON 4689
ECON 4900 to ECON 4999
ECON 5200 to ECON 5999

### Supporting Courses

Complete either of the statistics and departmental elective combinations listed below:

#### COMBINATION A

Code	Title	Hours
<b>Statistics</b>		
POLS 2400	Quantitative Techniques	4
<b>Economics</b>		

Complete one course within the following ranges, excluding ECON 3520. This course may not also be used as an Economics elective: 4

ECON 1200 to ECON 1999

ECON 3000 to ECON 4689

ECON 4900 to ECON 4999

ECON 5200 to ECON 5999

### COMBINATION B

Code	Title	Hours
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#### Statistics

ECON 2350	Statistics	4
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#### Political Science

Complete one course in the following range: 4

POLS 2401 to POLS 5999

### Integrative Requirements

Code	Title	Hours
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#### Senior Seminar/Capstone

Complete one of the following: 4

ECON 4692 Senior Economics Seminar

POLS 4701 Political Science Senior Capstone

POLS 4703 Senior Thesis

### Combined Major GPA/Credit Requirement

Grades in the following required Economics courses and in Quantitative Techniques (POLS 2400) or Statistics (ECON 2350) must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

## Concentrations

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
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Complete four of the following: 16

POLS 2350 State and Local Politics

POLS 3300 The U.S. Congress

POLS 3302 Judicial Process and Behavior

POLS 3307 Public Policy and Administration

POLS 3310 Public Opinion, Voting, and Elections

POLS 3160 Campaign Strategy

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
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#### Required Courses

POLS 3160	Campaign Strategy	4
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POLS 3302	Judicial Process and Behavior	4
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#### Campaigns and Elections Electives

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following: 8

POLS 2345 Urban Policies and Politics

POLS 2350 State and Local Politics

POLS 2355 Intergovernmental Relations

POLS 3310 Public Opinion, Voting, and Elections

POLS 3320 Politics and Mass Media

POLS 3304 Presidential Nominating Process

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
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#### Theoretical Requirement

Complete one of the following: 4

POLS 2370 Religion and Politics

POLS 3418 Nationalism

POLS 3430 Revolution, Civil War, and Insurrection

POLS 3487 Politics of Developing Nations

#### Regional Requirements

Complete two of the following: 8

POLS 3435 Politics and Governance of Europe and the European Union

POLS 3465 Government and Politics in the Middle East

POLS 3470 Arab-Israeli Conflict

#### Experiential/Practicum Requirement

Complete one of the following: 4

POLS 4915 Model Arab League

POLS 4918 Model NATO

POLS 4937 Dialogue of Civilizations: Government and Politics Abroad

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
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#### Core Course

POLS 3418	Nationalism	4
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#### Electives

Complete three of the following: 12

POLS 2368 Music and Politics in America and Abroad

POLS 2370 Religion and Politics

POLS 2375 Gender and Politics

POLS 3309 Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy

POLS 3324 Law and Society



**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	

POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

<b>Year 1</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
ENGW 1111	4	MATH 1231, 1241, 1245, 1251, 1340, or 1341	4	Elective	4
POLS 1155	4	POLS 1150	4	Elective	4
ECON 1115	4	CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4		
Elective	4	ECON 1116	4		
		16	16	8	8
<b>Year 2</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1160	4	POLS 2400 or ECON 2350	4	Elective	4
POLS elective	4	POLS elective	4	Political Theory Course	4
ECON 2315	4	ECON 2316	4		
		Elective	4		
ECON elective 1	4				
		16	16	8	0
<b>Year 3</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		Elective	4	ECON elective 3	4
		POLS elective	4	ENGW 3315	4
		ECON elective 2	4		
		ECON 3520	4		
		0	16	8	0
<b>Year 4</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		POLS 4701, 4703, or ECON 4692	4		
		Elective	4		
		ECON or POLS elective (See Supporting Courses, Combinations A and B.)	4		
		Elective	4		
		0	16		

Total Hours: 128

## Economics, BS

The Bachelor of Science degree focuses attention on the use of mathematics in economic models in the six core courses and many of the required seven electives. The BS degree allows ample room to take courses such as economic development, game theory, and mathematical economics in addition to more supporting courses in the mathematics and computer science departments. Students considering future doctoral studies in economics are strongly encouraged to pursue a double major in economics (BS) and mathematics (BS) or to choose our combined economics/mathematics major.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Economics Major Requirements for BS

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Senior Seminar</b>		
ECON 4692	Senior Economics Seminar	4

### Electives for BS in Economics

Code	Title	Hours
Complete seven courses found in the following ranges, with no more than two at the 1000 level: 28		
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Breadth Courses for Economics Major

Code	Title	Hours
<b>Calculus</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	

### Computer Science

CS 1100	Computer Science and Its Applications	4
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
or MISM 2510	Fundamentals of Information Analytics	

### Economics Major GPA/Credit Requirement

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 64 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ECON 1115	4	ECON 1116	4	ECON elective 2	4
ENGW 1111	4	CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4	Elective	4
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4	ECON elective 1	4		
Elective	4	Elective	4		
ECON 1000	1				
				17	16
				8	8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
ECON 2315	4	ECON 2316	4	Elective	4
ECON 2350	4	ECON elective 3	4	ECON elective 4	4
Elective	4	Elective	4		
Elective	4	Elective	4		
		EESH 2000	1		
				16	17
				8	0
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	ENGW 3308	4	ECON elective 6	4
		ECON elective 5	4	Elective	4
		ECON 2560	4		

	Elective	4		
	0	16	8	0
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op	0	ECON elective 7	4	0
		Elective	4	
		Elective	4	
		ECON 4692	4	
	0	16		0

Total Hours: 130

## Computer Science and Economics, BS

The combined major in computer science and economics integrates fundamental economics courses with a strong programming foundation. Studying both the behavior of individuals and the collective behavior of industries and governments, students will utilize computing skills to address complex issues within the field.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ECON 1000	First Year Seminar Economics at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
IS 2000	Principles of Information Science	4

Choose one		4
IS 4200	Information Retrieval	
IS 4300	Human Computer Interaction	
<b>Khoury Elective</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		8
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

### Economics Requirements

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Economics Electives</b>		
Complete 4 Economics elective courses from the following ranges with no more than 2 at the ECON 1200 – ECON 1999 range:		16
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		
<b>Economics Capstone</b>		
ECON 4692	Senior Economics Seminar	4

### Integrative Course Requirement

Code	Title	Hours
The following courses are used in other areas of the major:		
IS 2000	Principles of Information Science	4
ECON 2560	Applied Econometrics	4

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231 or MATH 1241	Calculus for Business and Economics Calculus 1	4
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Computing and Social Issues</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	

CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
HIST 2220	History of Technology
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300 or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4

### Advanced Writing in the Disciplines

Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
	Complete 24 credits of general electives.	24

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Economics GPA Requirement

Grades in the following required Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Exploring Creative Expression and Innovation
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major

- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Computer Science and Economics Major Credit Requirement

Minimum of 100 SH is required in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

134 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3200	4	Elective	4
CS 1800 and CS 1802	5	IS 2000	4	CS 3500 and CS 3501	5	Elective	4
CS 2500 and CS 2501	5	ECON 1116	4				
ECON 1115	4	MATH 1231, 1241, 1245, 1251, 1340, or 1341	4				
ENGW 1111	4						
		19		17		9	
						8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 2800 and CS 2801	5	CS 1210	1	Elective	4	Co-op	4
CS 3000	4	Khoury Elective	4	Elective	4		
ECON 2315	4	ECON 2316	4				
ECON 2350	4	ECON elective 1	4				
		Elective	4				
		17		17		8	
						0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury Elective	4	ENGW 3302	4	Co-op	4
		ECON elective 2	4	Elective	4		
		Computing and social issues requirement	4				
		ECON 2560	4				
		0		16		8	
						0	

Year 4		
Fall	Hours Spring	Hours
Co-op	CS elective 3	4
	ECON 4692	4
	ECON elective 3	4
	ECON elective 4	4
	0	16

Total Hours: 135

## Cybersecurity and Economics, BS

The cybersecurity and economics combined degree applies a multidisciplinary approach integrating fundamental economics courses with a strong programming foundation. Students will study both the behavior of individuals and the collective behavior of industries and governments, utilizing computing skills to ensure the reliability and security of cyberspace.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ECON 1000	First Year Seminar Economics at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamentals Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
<b>Cybersecurity Required Courses</b>		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4

CY 4740	Network Security	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
<b>Cybersecurity Elective</b>		
Complete one of the following:		4
CS 2800	Logic and Computation	
CS 4710	Mobile and Wireless Systems	
CS 4400	Programming Languages	
CS 4500	Software Development	
CS 4240	Large-Scale Parallel Data Processing	
CY 4770	Cryptography	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
CY 5200	Security Risk Management and Assessment	
CY 5210	Information System Forensics	
CY 5770	Software Vulnerabilities and Security	
IS 4300	Human Computer Interaction	
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 3324	Computer Architecture and Organization	
EECE 4534 and EECE 4535	Microprocessor-Based Design and Lab for EECE 4534	
MATH 3527	Number Theory 1	
MATH 4575	Introduction to Cryptography	
COMM 2551	Free Speech in Cyberspace	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 3030	Global Criminology	
CRIM 4040	Crime Prevention	
LPSC 1101	Introduction to Law	
LPSC 2301	Introduction to Law, Policy, and Society	
LPSC 3303	Topics in Law and Public Policy	
PHIL 1145	Technology and Human Values	
POLS 2390	Science, Technology, and Public Policy	
POLS 3307	Public Policy and Administration	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	

### Supporting Course

Code	Title	Hours
MATH 1231 or MATH 1241 or MATH 1245 or MATH 1251 or MATH 1340 or MATH 1341	Calculus for Business and Economics Calculus 1 Calculus with Applications Calculus and Differential Equations for Biology 1 Intensive Calculus for Engineers Calculus 1 for Science and Engineering	4

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
Complete one of the following:		4
ENGW 1111	First-Year Writing	
ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3311	Advanced Writing for Prelaw	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Economics Requirements**

Code	Title	Hours
<b>Required Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Electives</b>		
Complete 4 ECON electives that are found in the following ranges, with at least two numbered at ECON 3000 or above:		16
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

**Integrative Requirement**

Code	Title	Hours
<b>Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
CY 4930	Cybersecurity Capstone	
CY 4940	Research Projects on National Security	

**Integrative Requirement**

ECON 2560	Applied Econometrics	4
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**Required General Electives**

Code	Title	Hours
Complete 24 credits of general electives.		24

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Economics GPA Requirement**

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

133 total semester hours required.

**Plan of Study****Sample Plan of Study: Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Elective	4	Elective	4
CS 2500 and CS 2501	5	CY 2550	4	Elective	4	Elective	4
CS 1800 and CS 1802	5	ECON 1116	4				
ENGW 1111	4	MATH 1231, 1241, 1245, 1251, 1340, or 1341	4				
ECON 1115	4						
	19		17		8		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 and CS 3501	5	CS 3000	4	Elective	4	Co-op	
CS 3650	4	CS 1210	1	Elective	4		
ECON 2315	4	CS 3700	4				
ECON 2350	4	ECON 2316	4				
		ECON elective 1	4				
	17		17		8		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CY 3740	4	ECON elective 3	4	Co-op	
		ECON 2560	4	ENGW 3302	4		
		Cybersecurity Elective	4				
		ECON elective 2	4				
	0		16		8		0
Year 4							
Fall	Hours	Spring	Hours				
Co-op		CY 4170	4				
		CY 4740	4				
		Capstone	4				

ECON elective 4	4
0	16

Total Hours: 134

## Economics and Business Administration, BS

Economics and business administration is our most popular combined major, integrating the underlying economic theories and models and their business applications. After satisfying the core courses in economics, there are over 40 electives from which to choose to complete this combined major.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000 or BUSN 1102	Economics at Northeastern Personal Skill Development for Business	1
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350 or MGSC 2301	Statistics Business Statistics	4
ECON 2560	Applied Econometrics	4
<b>Economics Electives</b>		
Complete four courses that are found in the following ranges, with no more than one at the introductory (1000) level:		16
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		

MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4

### Business Concentration

Complete one of the following business concentrations:

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

### Business Cooperative Education Requirement

Complete one six-month co-op experience.

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231 or MATH 1241 or MATH 1245 or MATH 1251 or MATH 1340 or MATH 1341	Calculus for Business and Economics Calculus 1 Calculus with Applications Calculus and Differential Equations for Biology 1 Intensive Calculus for Engineers Calculus 1 for Science and Engineering	4
<b>Computer Science</b>		
Complete one of the following:		4
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MISM 2510	Fundamentals of Information Analytics	
<b>Co-op Preparation</b>		
BUSN 1103 or EESH 2000	Professional Development for Business Co-op Professional Development for Co-op	1
<b>Capstone Requirement</b>		
ECON 4692	Senior Economics Seminar	4
STRT 4501	Strategy in Action	4

## Economics GPA Requirement

Grades in the following four economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350 or MGSC 2301	Statistics Business Statistics	4
ECON 2560	Applied Econometrics	4

## Business GPA Requirement

Minimum 2.000 GPA required in business courses

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ACCT 1201	4	ECON 1116	4	ECON 2315	4	MKTG 2201	4
ECON 1000 or BUSN 1102	1	MGSC 2301 or ECON 2350	4	NUpath DD	4	FINA 2201	4
ENGW 1111	4	FINA 2201	4				
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4	INTB 1203	4				
ECON 1115	4						
	17		16		8		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2316	4	Co-op		Co-op		Elective	4
ACCT 2301	4					ORGB 3201	4
CS 1100, MISM 2510, or DS 2000 <b>and</b> DS 2001	4						
BUSN 1103 or EESH 2000	1						
Economics elective 1	4						
	17		0		0		8
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2560	4	Co-op		Co-op		Advanced Writing	4
Concentration course 1	4					Elective	4

Concentration course 2	4				
Economics elective 2	4				
	16		0		0
					8

Year 4			
Fall	Hours	Spring	Hours
Concentration course 3	4	ECON 4692	4
Economics elective 3	4	Concentration course 4	4
STRT 4501	4	Economics elective 4	4
Elective	4	Elective	4
	16		16

Total Hours: 130

## Economics and Human Services, BS

This combined degree in human services and economics provides students with the opportunity to obtain the skills and knowledge related to each of these areas of study and an in-depth understanding of how these fields inform and impact each other. The study of economics provides students with an understanding of how individuals, firms, governments, and other organizations behave and interact with each other at both a macro and micro level. The study and practice of human services organizations focus on the impact of economic conditions on individuals, families, and communities. Human services organizations and policies use economic theory to inform responses to societal and economic challenges. Students will pair this knowledge with an understanding of how economics uses data and economic reasoning to help decision makers, businesses, and governments develop better public policy. This degree provides students with both the theoretical and practical curricula utilizing interdisciplinary thinking about inequality and nonprofit/government responses.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Overview and Co-op Courses

Code	Title	Hours
HUSV 1000 or ECON 1000	Human Services at Northeastern Economics at Northeastern	1
EESH 2000	Professional Development for Co-op	1



### Economics Requirements

Code	Title	Hours
<b>Economic Requirements</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Economics Elective Courses</b>		
Complete three economics elective courses found in the following ranges, with no more than one at the 1000 level:		12
ECON 1200–ECON 1999		
ECON 3000–ECON 4689		
ECON 4900–ECON 4999		
ECON 5200–ECON 5999		

### Human Services Requirements

Code	Title	Hours
<b>Human Services Overview</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	
<b>Human Services Elective Courses</b>		
Complete three additional HUSV courses.		12

### Supporting Courses

Code	Title	Hours
Complete one of the following:		4
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1245	Calculus with Applications	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
Complete one of the following:		4
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MISM 2510	Fundamentals of Information Analytics	

### Capstone

Complete one of the following capstone/senior seminar options:

Code	Title	Hours
<b>Economics Capstone Option</b>		
ECON 4692	Senior Economics Seminar	4
Complete one additional HUSV elective.		4
<b>Human Services Capstone Option</b>		
HUSV 4700	Senior Seminar in Human Services	4
Complete one additional ECON elective at the 3000 level or above.		4

### Integrative Course

Code	Title	Hours
Complete one of the following:		4
ECON 3412	Women’s Labor and the Economy	
ECON 3413	Health Economics and Healthcare Policy	
ECON 3416	Behavioral Economics	
ECON 3410	Labor Economics	

### Economics Major Grade Requirement

Grades in the following four economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	
ECON 2316	Microeconomic Theory	
ECON 2350	Statistics	
ECON 2560	Applied Econometrics	

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 MATH 1231, 1241, 1245, 1251, 1340, or 1341	4 Elective	4 Elective	4
HUSV 1000 or ECON 1000	1 CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4 ECON 2315	4 Elective	4
HUSV 1101	4 HUSV 2300	4		
ECON 1115	4 ECON 1116	4		
Elective	4			
17		16		8
				8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HS diverse populations course	4 HUSV 2970	4 Elective	4 Co-op	
HUSV 2351	HUSV 3570	4 Elective	4	
HUSV 2800	ECON 2350	4		
HUSV 2961	ECON elective 2	4		
ECON 2316	4 EESH 2000	1		
HUSV elective 1	4			
ECON elective 1	4			
	16	17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ECON 2560	4 HUSV elective 2	4 Co-op	
	HUSV 3900	4 ENGW 3308 or 3315	4	
	ECON elective 3	4		
	HUSV 4994	6		
	0	18	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	Integrative course	4
	ECON 3411	
	ECON 3413	
	ECON 3416	
	ECON 3916 (Economics of Race)	
	Capstone and elective	8
	HUSV 4700 + 1 ECON course (Option A) or ECON 4692 and 1 HUSV course (Option B)	
	Elective	4
	0	16

Total Hours: 132

**Economics and Mathematics, BS**

Given the mathematical and graphical models used extensively in economics, economics and mathematics are natural partners. Our combined major with mathematics is designed for students who

want to further develop their mathematics skills to enhance their understanding and interest in economics. This combined major is strongly recommended for students with an interest in pursuing graduate studies in economics.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Economics Requirements**

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000	Economics at Northeastern	1
or MATH 1000	Mathematics at Northeastern	
<b>Required Economics</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
<b>Economics Electives</b>		
Complete 4 economics electives found in the following ranges, with no more than two in the ECON 1200 to ECON 1999 range:		16
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

**Mathematics Requirements**

Code	Title	Hours
<b>Required Mathematics</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4

**Mathematics Electives**

Complete two courses in the following range:	8
MATH 3001 to MATH 4999	
The following courses are recommended:	

MATH 3150	Real Analysis
MATH 4581	Statistics and Stochastic Processes

**Breadth Course**

Code	Title	Hours
<b>Computer Science</b>		
Choose one of the following: 4		
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MISM 2510	Fundamentals of Information Analytics	

**Integrative Requirements**

Code	Title	Hours
<b>Advanced Writing in the Disciplines</b>		
ENGW 3308	Advanced Writing in the Social Sciences	4
<b>Integrative Course</b>		
Complete one of the following: 4		
ECON 4692	Senior Economics Seminar	
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	

**Combined Major GPA/Credit Requirement**

Code	Title	Hours
Grades in the following 4 Economics courses must average to a minimum of C (2.000):		
ECON 2315	Macroeconomic Theory	
ECON 2316	Microeconomic Theory	
ECON 2560	Applied Econometrics	
MATH 3081	Probability and Statistics	

A cumulative GPA of 2.000 is required in all math courses. A grade of C or higher is required in all math courses numbered MATH 2999 or below; grades below C will not count toward the degree.

**Economics and Mathematics Major Credit Requirement**

Complete 76 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ECON 1115	4	ECON 1116	4	MATH 2321	4
MATH 1365	4	MATH 1342	4	Elective	4
MATH 1341	4	ENGW 3308	4		

CS 1100, DS 2000 and DS 2001, or MISM 2510	4	Elective	4		
MATH 1000 or ECON 1000	1				

	17	16	8	8
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**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2315	4	ECON 2316	4	Elective	4	Co-op	
MATH 2341	4	ECON elective 1	4	MATH 3081	4		
Elective	4	MATH 2331	4				
Elective	4	Math elective 1	4				

	16	16	8	0
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**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ECON 2560	4	Elective	4	Co-op	
		ECON elective 2	4	Elective	4		
		Math elective 2	4				
		Elective	4				

	0	16	8	0
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**Year 4**

Fall	Hours	Spring	Hours
Co-op		ECON elective 3	4
		ECON elective 4	4
		ECON 4692, MATH 4025, or MATH 5131	4
		Elective	4

	0	16
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Total Hours: 129

**Economics and Philosophy, BS**

Both philosophy and economics are the disciplines of critical thinking —thinking in concrete and abstract terms to help put the world in perspective. The combined economics and philosophy major provides students with training to critically evaluate and assess policies and issues on both economic and ethical grounds, including issues such as globalization, immigration, environmental protections, the minimum wage, a fair and just tax, just working environments, and many more.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Overview and Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		

Complete one of the following:

ECON 1000	Economics at Northeastern	1
or PHIL 1000	Philosophy at Northeastern	

### Supporting Courses

MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	

## Economics Requirements

Code	Title	Hours
<b>Required Economics Courses</b>		

ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
ECON 3520	History of Economic Thought	4

### Economics Electives

Complete 2 Economics elective courses from the following ranges with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, ECON 3520 may not be used as an Economics Elective.

ECON 1200 to ECON 1999

ECON 3000 to ECON 4689

ECON 4900 to ECON 4999

ECON 5200 to ECON 5999

## Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		

PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
PHIL 2330	Modern Philosophy	4

### Advanced Philosophy Elective

Complete one of the following:

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	4
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	

PHIL 3460	Philosophy and Literature
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

### Additional Electives

Complete three additional electives in philosophy or religion. 12  
At least one must be numbered 2000 or above.

## Integrative Requirements

Code	Title	Hours
Complete PHIL 4550 and one of the other courses listed below that has not been used in above requirements:		
PHIL 4550	Philosophy of Economics	8

PHIL 4550	Philosophy of Economics
PHIL 3435	Moral Philosophy
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy

## Major GPA/Credit Requirement

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 76 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
ENGW 1111	4	PHIL 1115	4	ECON elective 1	4
PHIL 1000 or ECON 1000	1	POLS 2325	4	Elective	4
ECON 1115	4	MATH 1231, 1241, 1245, 1251, 1340, or 1341	4		

Elective	4	ECON 1116	4		
Elective	4				
	17		16	8	8
<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
PHIL 2330	4	PHIL Advanced Elective	4	PHIL Advanced Elective	4
ECON 2315	4	ECON 2560	4	ENGW 3302, 3302, or 3315	4
ECON 2350	4	PHIL Integrative Course	4		
ECON elective 2	4	ECON 2316	4		
	16		16	8	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op		PHIL Integrative Course	4	Elective	4
		Computing and Social Issues Requirement	4	Elective	4
		Elective	4		
		ECON 2560	4		
	0		16	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Co-op		PHIL Intermediate/ Advanced Elective	4		
		PHIL Capstone	4		
		ECON 4692	4		
		ECON 3520	4		
	0		16		

Total Hours: 129

## Economics and Psychology, BS

This combined major educates students in economics and psychology and the interface between the two disciplines. Economics courses provide a foundation in macroeconomics, microeconomics, and applied econometrics. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including such topics as cognition, decision making, learning, and motivation. Students completing this program of study should be able to understand how the two fields jointly contribute to explaining the complexity of human behavior in an economic context.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Economics Requirements

Code	Title	Hours
<b>Required Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
ECON 4692	Senior Economics Seminar	4

#### Economics Electives

Complete four ECON courses from the following ranges with no more than two at the ECON 1200–ECON 1999 range. The course used to satisfy the integrative course requirement may not be used as an economics elective:

ECON 1200–ECON 1999
ECON 3000–ECON 4689
ECON 4900–ECON 4999
ECON 5200–ECON 5999

### Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3402	Social Psychology	4
PSYC 3450	Learning and Motivation	4
PSYC 3466	Cognition	4

#### Required Lab

Complete one of the following:		
PSYC 4600	Laboratory in Research Design	4
PSYC 4606	Laboratory in Biological Psychology	4
PSYC 4610	Laboratory in Psycholinguistics	4
PSYC 4612	Laboratory in Cognition	4
PSYC 4614	Laboratory in Social Psychology	4
PSYC 4616	Laboratory in Personality	4
PSYC 4622	Laboratory in Sensation and Perception	4
PSYC 4624	Laboratory in Affective Science	4
PSYC 4626	Laboratory in Life-Span Emotional Development	4
PSYC 4628	Laboratory in Developmental Psychology	4

#### Required Seminar

Complete one of the following:		
PSYC 4654	Seminar in Behavioral Modification	4
PSYC 4656	Seminar in Biological Psychology	4

PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4662	Seminar in Personality
PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

**Psychology Electives**

Complete three PSYC courses not used to fulfill requirements above. 12

**Other Requirements Outside Major**

Code	Title	Hours
PSYC 1000 or ECON 1000	Psychology at Northeastern Economics at Northeastern	1
EESC 2000 or EESH 2000	Professional Development for Co-op Professional Development for Co-op	1
ENGW 1111	First-Year Writing	4
MATH 1231 or MATH 1241 or MATH 1245 or MATH 1251 or MATH 1340 or MATH 1341	Calculus for Business and Economics Calculus 1 Calculus with Applications Calculus and Differential Equations for Biology 1 Intensive Calculus for Engineers Calculus 1 for Science and Engineering	4
CS 1100 or DS 2000 and DS 2001 or MISM 2510	Computer Science and Its Applications Programming with Data and Data Science Programming Practicum Fundamentals of Information Analytics	4
COOP 3945	Co-op Work Experience	0

**Integrative Course**

Code	Title	Hours
ECON 4681 or ECON 3416	Information Economics and Game Theory Behavioral Economics	4

**NUPath Not Fulfilled by Major**

Code	Title	Hours
NUPath EI—Expression and Innovation		4
NUPath IC—Interpreting Culture		4
NUPath DD—Difference and Diversity		4
NUPath ER— Ethical Reasoning		4
NUPath WD—Advanced Writing in the Discipline		4

**Open Electives**

Code	Title	Hours
Complete three open electives.		12

**Combined Major Credit/ GPA Requirement**

Complete 84 semester hours in the major.

Grades in the following required courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
PSYC 2320	Statistics in Psychological Research	4

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Four Years, Two Co-ops**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
PSYC 1101	4	PSYC 2320	4	ECON elective	4
ENGW 1111	4	ECON 1116	4	PSYC elective	4
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4	CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4		
ECON 1115	4	PSYC elective	4		
ECON 1000 or PSYC 1000	1				
	17		16		8
				8	8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
PSYC 3402	4	PSYC 3466	4	NUPath DD	4
ECON 2315	4	ECON 2316	4	PSYC elective	4
ECON elective	4	NUPath IC	4		
NUPath EI	4	Open elective	4		
		EESC 2000 or EESH 2000	1		
	16		17		8
				8	0
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		PSYC 3450	4	ECON 4692	4
		ECON 2560	4	PSYC lab	4
		ECON elective	4		
		NUPath ER	4		
	0		16		8
					0
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		ECON 4681 or 3416	4		

PSYC seminar	4
NUpath WD	4
Open elective	4
0	16

Total Hours: 130

## Environmental and Sustainability Sciences and Economics, BS

Through this combined major, successful undergraduates will develop an awareness of the intrinsic connection between the environment and economics and understand how long-run economic growth is crucially dependent on policies that account for the sustainability and well-being of the environment and that are grounded on environmental science.

There are a number of interdisciplinary opportunities involving environmental and sustainability sciences. Due to curricular overlap, combinations of any environmental and sustainability sciences major, including combined majors, cannot occur with majors or minors in ecology and evolutionary biology or environmental studies or with the minor in geoscience.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Environmental and Sustainability Sciences Requirements

Code	Title	Hours
<b>Core Courses</b>		
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
ENVR 2200 or ENVR 1200	Earth's Changing Cycles Dynamic Earth	4
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 2515	Sustainable Development	4
Complete one of the following skills courses:		4-5
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3555	Networks and Natural Systems	
Complete four courses from these lists:		16
<i>Earth Oceans and Environmental Change</i>		
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 3125	Global Oceanic Change	
ENVR 3600	Oceanography	

ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500
<i>Conservation, Restoration, and Management</i>	
EEMB 2400	Introduction to Evolution
EEMB 3460	Conservation Biology
EEMB 3465	Ecological and Conservation Genomics
EEMB 4001	Landscape and Restoration Ecology
<i>Sustainable Planning and Development</i>	
ENVR 3150	Food Security and Sustainability
ENVR 3200	Water Resources
ENVR 5150	Climate and Atmospheric Change
ENVR 5210	Environmental Planning
<i>Environment and Society</i>	
POLS 2395	Environmental Politics and Policy
PPUA 5260	Ecological Economics
PPUA 5268	International Environmental Policy
SOCL 2485	Environment, Technology, and Society

### Economics Requirements

Code	Title	Hours
<b>Core Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
ECON 3423	Environmental Economics	4
<b>Supporting Courses</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	
CS 1100	Computer Science and Its Applications	4
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
or MISM 2510	Fundamentals of Information Analytics	
<b>Electives</b>		
Complete two courses in the following ranges, with only one below the 3000 level:		8
ECON 1200–ECON 1999		
ECON 3000–ECON 4689		
ECON 4900–ECON 4999		
ECON 5200–ECON 5999		
<b>Integrative Requirements</b>		
<b>Code</b> <b>Title</b> <b>Hours</b>		
<b>Introduction to College</b>		
ENVR 1000	Marine and Environmental Sciences at Northeastern	1
or ECON 1000	Economics at Northeastern	
<b>Co-op</b>		
EESC 2000	Professional Development for Co-op	1

or EESH 2000 Professional Development for Co-op

**Environmental and Sustainability Sciences Integrative Course**

Complete one of the following (courses used as electives may not overlap with courses used as integrative): 4

ENVR 3150	Food Security and Sustainability
ENVR 5350	Sustainable Energy and Climate Solutions
ENVR 5450	Applied Social-Ecological Systems Modeling
ENVR 5563	Advanced Spatial Analysis

**Economics Integrative Course**

Complete one of the following (courses used as electives may not overlap with courses used as integrative): 4

ECON 1711	Economics of Sustainability
ECON 3404	International Food Policy
ECON 3425	Energy Economics

**Capstone**

Complete one of the following: 4

ENVR 4050	Solving Emerging Environmental Challenges through Capstone
ENVR 4997	Senior Thesis
ECON 4692	Senior Economics Seminar

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**English Requirements (First-Year Writing and Advanced Writing in the Disciplines)**

Code	Title	Hours
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
ENGW 3307 or ENGW 3308 or ENGW 3315	Advanced Writing in the Sciences Advanced Writing in the Social Sciences Interdisciplinary Advanced Writing in the Disciplines	4

**Major GPA/Credit Requirement**

Grades in the following four economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

83 semester hours required in the major

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1000 or ECON 1000	1	CS 1100, DS 2000 <b>and</b> DS 2001, or MISM 2510	4	Elective	4	Elective	4
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4	ECON 1116	4	Elective	4	Elective	4
ECON 1115	4	ENVR 2200 or 1200	4				
ENGW 1111 or 1102	4	ENVR elective 1	4				
ENVR 1400	4						
ENVR 1401	1						
	18		16		8		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEMB 2302	4	ECON 2316	4	Elective	4	Co-op	4
EEMB 2303	1	ECON 2350	4	Elective	4		4
ECON 2315	4	ENVR 2515	4				
ENVR elective 2	4	ENVR elective 3	4				
ECON elective 1	4						
	17		16		8		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ECON 2560	4	Elective	4	Co-op	4
		ECON 3423	4	ENVR elective 4	4		
		ENVR 3150, 5350, 5450, or 5563	4				
		ENGW 3308, 3307, or 3315	4				
	0		16		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ENVR 4050, 4997, or ECON 4692	4				
		ENVR elective 5	4				
		ECON elective 2	4				
		ECON 1711, 3404, or 3425	4				
	0		16				

Total Hours: 131



## History and Economics, BS

The Department of History and the Department of Economics offer an interdisciplinary combined major in history and economics. Students interested in the combined major integrate the study of economic systems and theories with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one history course from the 1000 level except from HIST 1200 and HIST 1201.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
<b>Intermediate/Advanced History Courses</b>		
Complete four history courses numbered 2000 or above, excluding HIST 2301 and HIST 2302.		16
<b>Advanced History</b>		
Complete one history course at the 3000 level or above.		4
<b>Supplemental Course for History—Research Methods</b>		
Complete one of the following:		4
ECON 2350	Statistics	
ENVR 5260	Geographical Information Systems	
MATH 2280	Statistics and Software	
POLS 2400	Quantitative Techniques	

PSYC 2320	Statistics in Psychological Research
SOCL 2320	Statistical Analysis in Sociology

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000 or HIST 1000	Economics at Northeastern History at Northeastern	1
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Economics Electives</b>		
Complete four economics elective courses that are found in the following ranges, with no more than two in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy the integrative course requirement may not be used as economics electives:		16
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		
<b>Supplemental Courses</b>		
CS 1100 or MISM 2510 or DS 2000 and DS 2001	Computer Science and Its Applications Fundamentals of Information Analytics Programming with Data and Data Science Programming Practicum	4
MATH 1231 or MATH 1241 or MATH 1245 or MATH 1251 or MATH 1340 or MATH 1341	Calculus for Business and Economics Calculus 1 Calculus with Applications Calculus and Differential Equations for Biology 1 Intensive Calculus for Engineers Calculus 1 for Science and Engineering	4
<b>Capstone Requirements</b>		
<b>Code</b>	<b>Title</b>	<b>Hours</b>
Complete one of the following options (public history concentrations complete HIST 4903 and HIST 4904):		4
ECON 4692	Senior Economics Seminar	
HIST 4701	Capstone Seminar	
<b>Integrative Requirements</b>		
<b>Code</b>	<b>Title</b>	<b>Hours</b>
Complete one of the following:		4
ECON 3470	American Economic History	
ECON 1292	Economic History of the Middle East	
HIST 2360	History of Capitalism in East Asia	
HIST 2011	Capitalism and Business: A Global History	

## History and Economics Major GPA/Credit Requirement

Grades in the following four economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 88 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
ECON 1000 or HIST 1000	1	ECON elective 1	4	ECON elective 2	4	Elective	4	4
ECON 1115	4	HIST elective 1	4	Elective	4	Elective	4	4
HIST 1200	1	HIST elective 2	4					
HIST 1201	4	ECON 1116	4					
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4							
Elective	4							
	18		16		8		8	

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
HIST 2301	4	HIST elective 3	4	HIST elective 5	4	Co-op	4	
HIST 2302	1	HIST elective 4	4	Elective	4			
CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4	ECON 2316	4					
ECON 2315	4	Elective	4					
Elective	4							
	17		16		8		0	

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
Co-op		ECON 2350	4	ECON 2560	4	Co-op		
		ECON elective 3	4	ECON elective 4	4			
		HIST elective 6	4					

	Elective	Hours		Hours
		4		
	0	16	8	0
<b>Year 4</b>				
Fall	Hours	Spring	Hours	
Co-op		ECON 4692 or HIST 4701	4	
		ECON 3470, HIST 2360, HIST 2011, or ECON 1292	4	
		HIST elective 7	4	
		Elective	4	
	0	16		

Total Hours: 131

## Political Science and Economics, BS

The combined major in political science and economics offers students the opportunity to integrate the study of politics and government with the study of economics. Students complete the core courses in political science along with core courses in economics that cover both macroeconomic and microeconomic perspectives. This combined major highlights the important role that the economy plays in shaping politics and government.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4

## Political Theory

Complete one of the following: 4		
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

## Political Science Electives

Complete four courses from the following range, or complete a concentration as outlined below: 16  
 POLS 2000 to POLS 5999

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. ).

- American Political Institutions (p. 930)
- Campaigns and Elections (p. 930)
- Comparative Politics (p. 931)
- Identity, Culture, and Politics (p. 931)
- International Relations and Diplomacy (p. 931)
- Law and Legal Studies (p. 931)
- Public Policy (p. 931)
- Security Studies (p. 931)

### Economics Requirements for BS

Code	Title	Hours
<b>Breadth Courses</b>		
CS 1100 or DS 2000 and DS 2001 or MISM 2510	Computer Science and Its Applications Programming with Data and Data Science Programming Practicum Fundamentals of Information Analytics	4
MATH 1231 or MATH 1241 or MATH 1245 or MATH 1251 or MATH 1340 or MATH 1341	Calculus for Business and Economics Calculus 1 Calculus with Applications Calculus and Differential Equations for Biology 1 Intensive Calculus for Engineers Calculus 1 for Science and Engineering	4
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
<b>Economics Electives</b>		
Complete 3 Economics elective courses found in the following ranges, with no more than 1 in the ECON 1200 to ECON 1999 range:		12
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Supporting Courses

Complete either of the statistics and departmental elective combinations listed below:

#### COMBINATION A

Code	Title	Hours
<b>Statistics</b>		
POLS 2400	Quantitative Techniques	4
<b>Economics</b>		
Complete one course from the following ranges. This course may not also be used as an Economics elective:		4

ECON 1200 to ECON 1999  
 ECON 3000 to ECON 4689  
 ECON 4900 to ECON 4999  
 ECON 5200 to ECON 5999

#### COMBINATION B

Code	Title	Hours
<b>Statistics</b>		
ECON 2350	Statistics	4
<b>Political Science</b>		
Complete one course in the following range:		4
POLS 2401 to POLS 5999		

### Integrative Requirements

Code	Title	Hours
<b>Senior Seminar/Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

### Combined Major GPA/Credit Requirement:

Grades in the following required Economics courses and in Quantitative Techniques (POLS 2400) or Statistics (ECON 2350) must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	
ECON 2560	Applied Econometrics	4

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required.

#### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:	8
POLS 2345 Urban Policies and Politics	
POLS 2350 State and Local Politics	
POLS 2355 Intergovernmental Relations	
POLS 3310 Public Opinion, Voting, and Elections	
POLS 3320 Politics and Mass Media	
POLS 3304 Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370 Religion and Politics		
POLS 3418 Nationalism		
POLS 3430 Revolution, Civil War, and Insurrection		
POLS 3487 Politics of Developing Nations		

**Regional Requirements**

Complete two of the following:	8
POLS 3435 Politics and Governance of Europe and the European Union	
POLS 3465 Government and Politics in the Middle East	
POLS 3470 Arab-Israeli Conflict	

**Experiential/Practicum Requirement**

Complete one of the following:	4
POLS 4915 Model Arab League	
POLS 4918 Model NATO	
POLS 4937 Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418 Nationalism		4

**Electives**

Complete three of the following:	12
POLS 2368 Music and Politics in America and Abroad	
POLS 2370 Religion and Politics	
POLS 2375 Gender and Politics	
POLS 3309 Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324 Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910 Model United Nations		
POLS 4915 Model Arab League		
POLS 4938 Dialogue of Civilizations: International Politics Abroad		

**Core Courses**

Complete three of the following:	12
POLS 3405 International Political Economy	
POLS 3406 International Law	
POLS 3408 International Security	
POLS 3435 Politics and Governance of Europe and the European Union	
POLS 3470 Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 2330 American Political Thought		
POLS 3300 The U.S. Congress		
POLS 3302 Judicial Process and Behavior		
POLS 3324 Law and Society		
POLS 3406 International Law		
POLS 3409 Global Governance		
POLS 4500 U.S. Constitutional Law		
POLS 4505 U.S. Civil Liberties		

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307 Public Policy and Administration		4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335 Budgeting and Taxation		
POLS 2340 Business and Government		
POLS 2345 Urban Policies and Politics		
POLS 2350 State and Local Politics		
POLS 2357 Growth and Decline of Cities and Suburbs		
POLS 2390 Science, Technology, and Public Policy		
POLS 2395 Environmental Politics and Policy		
POLS 3425 U.S. Foreign Policy		

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 3408 International Security		
POLS 3420 U.S. National Security Policy		
POLS 3423 Terrorism and Counterterrorism		
POLS 3425 U.S. Foreign Policy		
POLS 3430 Revolution, Civil War, and Insurrection		
POLS 3470 Arab-Israeli Conflict		
POLS 3487 Politics of Developing Nations		

**Plan of Study****Four Years, Two Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 MATH 1231, 1241, 1245, 1251, 1340, or 1341	4 Elective	4 Elective	4
POLS 1155	4 POLS 1150	4 Elective	4 Elective	4
ECON 1115	4 CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4		
Elective	4 ECON 1116	4		
	16	16	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1160	4 POLS 2400 or ECON 2350	4 Elective	4 Co-op	0
POLS undergraduate elective	4 POLS undergraduate elective	4 Political Theory Course	4	
ECON 2315	4 ECON 2316	4		
ECON elective 1	4 ECON elective 2	4		
	16	16	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Elective	4 Elective	4 Co-op	0
	POLS undergraduate elective	4 ECON elective or POLS elective <sup>See Supporting Courses, Combinations A and B.</sup>	4	
	ECON elective 3	4		
	ECON 2560	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	POLS 4701, 4703, or ECON 4692	4
	Elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 128

**Politics, Philosophy, and Economics, BS**Website (<https://www.northeastern.edu/cssh/ppe/>)617.373.3636  
617.373.4359 (fax)

The PPE major at Northeastern University brings together three of the most important approaches to understanding the world around us: political science, philosophy, and economics. The PPE major is an interdisciplinary degree that not only provides students with the analytic tools from three different disciplines but also teaches students to make connections across disciplines and to keep multiple perspectives in mind when analyzing complex social phenomena. This interdisciplinary perspective and set of skills are indispensable in our increasingly interconnected world and are essential in addressing the kinds of complex global problems future leaders will need to tackle.

There are a number of varieties of the PPE major that students may choose from in accordance with their own backgrounds and interests. These include:

- environment and energy policy
- international political economy
- law and justice
- logic and game theory
- political philosophy
- public and economic policy

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Politics, Philosophy, and Economics Major Requirements**

Code	Title	Hours
<b>Foundation Course</b>		
PHIL 1160	Introduction to Economic Justice	4
<b>Core Courses</b>		
<i>Philosophy</i>		
PHIL 2303 or PHIL 3822	Social and Political Philosophy Philosophy of Race and Racism	4
PHIL 1115	Introduction to Logic	4
PHIL 3435 or PHIL 2325	Moral Philosophy Ancient Philosophy and Political Thought	4
<i>Political Science</i>		
POLS 1160	International Relations	4
POLS 3405	International Political Economy	4
POLS 1150 or POLS 1155	American Government Comparative Politics	4
<i>Economics</i>		

ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315 or ECON 2316	Macroeconomic Theory Microeconomic Theory	4

**Methods Course**

PHIL 3000	Interdisciplinary Methods for Politics, Philosophy, and Economics	4
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**Capstone**

Complete one of the following: 4

ECON 4692	Senior Economics Seminar	
PHIL 4550	Philosophy of Economics	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**Major Electives**

Code	Title	Hours
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Complete two of the following: 8

ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		
PHIL 2000 to PHIL 5999		
POLS 2000 to POLS 5999		

**Concentration**

Complete one of the following concentrations:

- Environment and Energy Policy (p. )
- International Political Economy (p. )
- Law and Justice (p. )
- Logic and Game Theory (p. )
- Political Philosophy (p. )
- Public and Economic Policy (p. )

**Supporting Courses**

Code	Title	Hours
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**Racial or Gender Justice**

Complete one of the following: 4

AFAM 1101	Introduction to African American and Africana Studies	
AFAM 2339	Analysis of American Racism	
AFAM 2355	Race, Identity, Social Change, and Empowerment	
AFAM 2360	Politics of Poverty	
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
CRIM 3110	Gender, Crime, and Justice	
ECON 3412	Women's Labor and the Economy	
HIST 1225	Gender, Race, and Medicine	
HIST 2000	Native American Resistance: Past and Present	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 3500	Sexuality, Gender, and the Law	

POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
SOCL/WMNS 1260	Gender in a Changing Society	
SOCL 3270	Race and Ethnic Relations	
SOCL 4520	Race, Class, and Gender	
WMNS 1101	Sex, Gender, and Popular Culture	
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	
WMNS 1441	Topics in Women's, Gender, and Sexuality Studies	
WMNS 2304	Communication and Gender	
WMNS/HIST 2373	Gender and Sexuality in World History	
WMNS/INTL 2480	Women and World Politics	
WMNS 2505	Digital Feminisms	
WMNS/HUSV 2800	Sexual Orientation and Gender Expression	
WMNS 3100	Gender, Social Justice, and Transnational Activism	
WMNS/COMM 3304	Communication and Inclusion	
WMNS 3500	Sexuality, Gender, and the Law	

**Statistics and Mathematics**

MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	
or MATH 2280	Statistics and Software	

**Experiential Learning Requirement**

Complete one co-op, study abroad, qualifying Dialogue of  
Civilizations, or one of the following: 4

ECON 4991	Research	
ECON 4994	Internship	
ECON 4996	Experiential Education Directed Study	
POLS 4970	Junior/Senior Honors Project 1	
POLS 4971	Junior/Senior Honors Project 2	
POLS 4942	Internship in Politics	
POLS 4996	Experiential Education Directed Study	

**Major GPA/Credit Requirement**

Complete 68 semester hours in the major with a 3.000 GPA.

Code	Title	Hours
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**Economics GPA Requirement:**

Grades in the following courses must average to a minimum  
of C (2.000):

ECON 2315	Macroeconomic Theory	
or ECON 2316	Microeconomic Theory	
ECON 2350	Statistics	
or POLS 2400	Quantitative Techniques	
or MATH 2280	Statistics and Software	

## Course Distribution Requirement

Complete at least four courses in each of the following subject areas: ECON, PHIL, and POLS.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

### Concentrations

#### CONCENTRATION IN ENVIRONMENT AND ENERGY POLICY

Code	Title	Hours
Complete two of the following:		8
ECON 1711	Economics of Sustainability	
ECON 3423	Environmental Economics	
or ECON 3425	Energy Economics	
PHIL 1180	Environmental Ethics	
or PHIL 1185	The Ethics of Food	
POLS 2395	Environmental Politics and Policy	
Complete one of the following:		4
ECON 3423	Environmental Economics	
ECON 3425	Energy Economics	
PHIL 1180	Environmental Ethics	
PHIL 1185	The Ethics of Food	

#### CONCENTRATION IN INTERNATIONAL POLITICAL ECONOMY

Code	Title	Hours
Complete two of the following:		8
ECON 1291	Development Economics	
ECON 2316	Microeconomic Theory	
ECON 3290	History of the Global Economy	
ECON 3404	International Food Policy	
ECON 4635	International Economics	
ECON 5200	Topics in Applied Economics	
PHIL 1185	The Ethics of Food	
PHIL 1170	Business, Ethics, and Human Rights	
POLS 3406	International Law	
POLS 3487	Politics of Developing Nations	
Complete one of the following:		4
ECON 1292	Economic History of the Middle East	
HIST 2360	History of Capitalism in East Asia	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
HIST 2011	Capitalism and Business: A Global History	

#### CONCENTRATION IN LAW AND JUSTICE

Code	Title	Hours
Complete three of the following, only two of which may be POLS courses:		12
ECON 3424	Law and Economics	

ECON 1240	Economics of Crime	
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2155	Human Rights	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 3500	Sexuality, Gender, and the Law	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	
WMNS 3500	Sexuality, Gender, and the Law	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 3335	History of Modern Terrorism	

#### CONCENTRATION IN LOGIC AND GAME THEORY

Code	Title	Hours
Complete three courses from the following:		12
ECON 2316	Microeconomic Theory	
ECON 3416	Behavioral Economics	
ECON 4680	Competition Policy and Regulation	
ECON 4681	Information Economics and Game Theory	
ECON 5105	Math and Statistics for Economists	
ECON 5110	Microeconomic Theory	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 3050	Information and Uncertainty	
PHIL 4500	Theory of Knowledge	
PHIL 4515	Advanced Logic	
PHIL 4550	Philosophy of Economics	

#### CONCENTRATION IN POLITICAL PHILOSOPHY

Code	Title	Hours
<b>Economics Course</b>		
ECON 3490	Public Choice Economics	4
<b>Politics Courses</b>		
Complete two of the following:		8
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Philosophy Course</b>		
Complete one of the following:		4
PHIL 2155	Human Rights	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 3435	Moral Philosophy	
PHIL 3500	Sexuality, Gender, and the Law	

PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy

**CONCENTRATION IN PUBLIC AND ECONOMIC POLICY**

Code	Title	Hours
<b>Required Course</b>		
POLS 3307	Public Policy and Administration	4
<b>Elective Courses</b>		
Complete two of the following:		8
ECON 1240	Economics of Crime	
ECON 1281	Economics of the Creative Industries	
ECON 2315	Macroeconomic Theory	
ECON 3410	Labor Economics	
ECON 3413	Health Economics and Healthcare Policy	
ECON 3414	Economics of Human Capital	
ECON 3420	Urban Economic Issues	
ECON 3422	Economics of Transportation	
ECON 3423	Environmental Economics	
ECON 3425	Energy Economics	
ECON 3440	Public Finance	
ECON 3462	Bubbles, Busts, and Bailouts: Market and Regulatory Failures in the Financial Crisis	
ECON 3490	Public Choice Economics	
ECON 4680	Competition Policy and Regulation	
HIST 2331	The Civil War and Reconstruction	
HIST 2339	America's Gilded Age, 1865-1896	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 2340	Business and Government	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 2335	Budgeting and Taxation	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 3425	U.S. Foreign Policy	

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops Summer 2/ Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHIL 1160	4 ENGW 1111	4 Elective	4 Vacation	
PHIL 1000	1 ECON 1116	4 Elective	4	
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4 PHIL 1115	4		
POLS 1160	4 PHIL 2303	4		
General Elective				

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ECON 1115	4 Statistics and Mathematics Requirement	4 Elective	4 Co-op	
POLS 1150 or 1155	4 ECON 2315 or 2316	4 Elective	4	
PHIL 3435 or 2325	4 Major Elective	4		
Supporting Course in Race or Gender Justice	4 Concentrator Course	4		
	16	16	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHIL 3000	4 General Elective	4 Co-op	
	General Elective	4 General Elective	4	
	Major Elective	4		
	Concentrator Course	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Concentration Course	4 General Elective	4	
	Capstone Requirement	4 General Elective	4	
	General Elective	4		
	General Elective	4		
	0	16	8	

Total Hours: 129

**Economics, Minor**

The minor in economics introduces students to fundamental concepts in economics such as market demand and supply, how firms compete with each other, household choice and behavior under scarcity constraints, government fiscal and monetary policy, inflation, unemployment, and growth and instability. Economics elective courses explore further topics such as international trade, development economics, food supply chain policy, the environmental costs of growth, the economic aspects of natural resources, poverty, healthcare markets, labor market discrimination, trade unions, crime, and government regulation, among others. Students are also exposed to historical perspectives and to international and comparative perspectives on these topics.



## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any prerequisites, corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Courses

Code	Title	Hours
Take one of the following two-course sequences:		
ECON 1115 and ECON 2315	Principles of Macroeconomics and Macroeconomic Theory	8
ECON 1116 and ECON 2316	Principles of Microeconomics and Microeconomic Theory	

## Elective Courses

Code	Title	Hours
Complete three courses from the following ranges, with no more than one in the ECON 1200 to ECON 1999 range:		
ECON 1200 to ECON 1999		12
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

## GPA Requirement

Minimum of 2.000 GPA required in the minor

## English

Website (<http://www.northeastern.edu/english/>)

### Neal Lerner, EdD

Professor and Chair  
n.lerner@northeastern.edu

617.373.4540  
617.373.2509 (fax)

In the Department of English, we explore how literary expression and rhetorical action shape and are shaped by the worlds in which they were created. Literature, language, and rhetoric offer powerful tools for understanding the ideas and beliefs that construct our lives, including present and historical formations of aesthetics, race, gender, sexuality, disability, class, colonialism, health, and the environment across a wide variety of media.

Whether you choose an English major, combine the English major with another area of study, or opt to pursue a minor, in the Department of English at Northeastern you join a community in which you can:

- learn about the literatures and cultures of the United States, the United Kingdom, and the English-speaking world, past and present
- investigate the rhetorics and literacies of local and global communities by using a variety of methods, including community-based, historical, and justice-based approaches
- develop varieties of creative expression
- engage meaningfully and generously with others through writing and discussion in our classrooms, workplaces, and communities
- examine the power of language and rhetoric to effect action, shape knowledge and identity, and constitute communities
- uncover how language operates through the lens of linguistics
- explore Englishes and the way that language shapes our communities and ourselves

- discover how knowledge is produced through language and material forms, including digital forms
- hone critical and analytic strategies and skills
- balance theoretical perspectives with experiential practices
- undertake independent research

In addition to the English major (p. 936), we also offer several combined majors (<https://cssh.northeastern.edu/english/program/combined-majors/>), an English minor (p. 974), a minor in writing (p. 974), a minor in rhetoric (p. 186), and a minor in health, humanities, and society (p. 539).

## Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 27)."

## PlusOne Program (MA) in English

English majors at the end of their sophomore year or the beginning of their junior year may qualify for application to the PlusOne program that combines the BA with the master's degree in English. Students interested in this option should consult with the undergraduate program director in English by the end of the sophomore year.

## Programs

### Bachelor of Arts (BA)

- English (p. 936)
- English and Communication Studies (p. 139)
- English and Criminal Justice (p. 840)
- English and Cultural Anthropology (p. 948)
- English and Graphic and Information Design (p. 101)
- English and Philosophy (p. 952)
- English and Political Science (p. 954)
- English and Theatre (p. 246)
- History and English (p. 960)
- Journalism and English (p. 189)
- Linguistics and English (p. 687)
- Media and Screen Studies and English (p. 149)

### Bachelor of Science (BS)

- Architecture and English (p. 60)
- Biology and English (p. 650)
- Computer Science and English (p. 353)

### Minor

- English (p. 974)
- Rhetoric (p. 186)
- Writing (p. 974)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## English, BA

Students in the English major study the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures. They analyze writing practices and related media from the Middle Ages through the present, from the quill pen to code. They practice a variety of theoretical and methodological approaches to the study of language, rhetoric, writing, and literature.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## English Major Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
ENGL 1000	English at Northeastern	1
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
ENGL 1700	Global Literatures 1	4
or ENGL 1701	Global Literatures 2	
<b>Literary Periods</b>		
<i>Early Literatures</i>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 3101	Early Literatures	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
<i>Seventeenth to Eighteenth Centuries</i>		
Complete one of the following:		4
ENGL 2250	18th-Century British Literature	
ENGL 2296	Early African-American Literature	
or AFAM 2296	Early African-American Literature	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3618	Milton	
<i>Nineteenth Century</i>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3140	19th-Century Literatures	
ENGL 3619	Emerson and Thoreau	
ENGL 3720	19th-Century Major Figure	
<i>Twentieth to Twenty-First Centuries</i>		
Complete one of the following:		4
ENGL 2301	The Graphic Novel	
or ARTE 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	

ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3161	20th- and 21st-Century Literatures	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Comparative Literature</b>		
Complete two of the following:		8
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 2362	Modern and Contemporary African-American Literature	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2451	Postcolonial Women Writers	
or WMNS 2451	Postcolonial Women Writers	
or CLTR 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
or AFAM 2455	American Women Writers	
or WMNS 2455	American Women Writers	
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2530	Fantasy Literature	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
or AFAM 2690	Boston in Literature	
ENGL 2695	Travel and Place-Based Writing	
ENGL 3487	Film and Text (Abroad)	
ENGL 3663	The African American Novel	
or AFAM 3663	The African American Novel	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3400	Opening the Archive	
ENGL 3404	African American Rhetorical Traditions	
or AFAM 3404	African American Rhetorical Traditions	
ENGL 3700	Narrative Medicine	
ENGL 4410	Research in Rhetoric and Writing	
LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	
LING 3450	Syntax	
LING 3452	Semantics	

LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	

**Advanced Writing in the Disciplines**

Complete one of the following: 4

ENGW 3310	Advanced Writing in Literature
ENGW 3311	Advanced Writing for Prelaw

**Writing**

Complete two of the following: 8

ENGL 2695	Travel and Place-Based Writing
ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**Capstone**

ENGL 4710 Capstone Seminar 4  
or ENGL 4720 Capstone Project

**Diversity**

Complete one of the following courses, which can also count toward another requirement in the major: 4

ENGL 2150	Literature and Digital Diversity
ENGL 2296	Early African-American Literature
or AFAM 2296	Early African-American Literature
ENGL 2362	Modern and Contemporary African-American Literature
ENGL 2451	Postcolonial Women Writers
or WMNS 2451	Postcolonial Women Writers
or CLTR 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
or AFAM 2455	American Women Writers
or WMNS 2455	American Women Writers
ENGL 2760	Writing in Global Contexts
ENGL 3404	African American Rhetorical Traditions
or AFAM 3404	African American Rhetorical Traditions
ENGL 3663	The African American Novel
or AFAM 3663	The African American Novel
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or WMNS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature

ENGL 3900	Gender and Black World Literatures
or AFRS 3900	Gender and Black World Literatures
or WMNS 3900	Gender and Black World Literatures

**Electives**

Complete any two ENGL courses, except for First-Year Writing and Advanced Writing in the Disciplines, that has not already been used to fulfill another requirement. The following courses may also be used as electives: 8

LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

**Experiential Learning Requirement**

Complete one course in experiential learning from the list below or any Dialogues of Civilization experience. (Other study-abroad programs may not be used.) This course can also count toward another requirement in the major.

Code	Title	Hours
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**Experiential Learning Course Work**

ENGL 2690	Boston in Literature
or AFAM 2690	Boston in Literature
ENGL 2740	Writing and Community Engagement
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3375	Writing Boston
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3382	Publishing in the 21st Century
ENGL 3400	Opening the Archive

**Dialogues of Civilization**

Complete one Dialogues of Civilization experience, including but not limited to those offered by the department. (Other study-abroad programs may not be used.)

ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 2620	What Is Nature?
ENGL 3487	Film and Text (Abroad)

**English Major Credit Requirement**

Complete 64 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

## Plan of Study

### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGL 1000	1 ENGL 1700	4 Vacation	0 Vacation	0
ENGW 1111	4 ENGL 1410 or 1160	4		
ENGL 1400	4 Foreign language core course	4		
Foreign language core course	4 Elective	4		
Elective	4 EESH 2000	1		
	17	17	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Comparative course elective	4 Comparative course elective	4 Vacation	0 Co-op	0
Literary period and diversity elective	4 Foreign language core course	4		
Elective	4 Literary period course elective	4		
Elective	4 Writing and experiential education elective	4		
	16	16	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Advanced Writing in the Disciplines	4 Writing elective	4 Co-op	0
	Literary period elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours	Hours
Co-op	0 Literary period elective	4 English elective	4	
	Theories and methods elective	4 Elective	4	
	Elective	4		
	English elective	4		
	0	16	8	

### Year 5

Fall	Hours Spring	Hours
Co-op	0 Capstone	4
	Elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 130

## Computer Science and English, BS

The computer science and English combined major focuses on the increasingly interdisciplinary processes of creating, interpreting, and analyzing texts and programs. Students will combine communication and critical judgment, gaining the creativity and adaptability necessary to utilize technology in literary studies, and apply humanities skills to solve programming problems.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
<b>Computing Focus</b>		
Students are required to complete one of the following foci (two courses total):		8
<i>Focus 1: Natural Language Processing</i>		
CS 3800	Theory of Computation	
CS 4120	Natural Language Processing	

**Focus 2: Programming Languages**

CS 3800	Theory of Computation
CS 4400	Programming Languages

**Focus 3: Analytics**

DS 3000	Foundations of Data Science
DS 4200	Information Presentation and Visualization

**Computer Science/Information Science Elective Course**

Choose one: 4

IS 2000	Principles of Information Science
CS 4500	Software Development
or CS 4530	Fundamentals of Software Engineering

**Khoury Elective Courses**

With adviser approval, a directed study, project study, or appropriate graduate-level course may also be taken as an upper-division elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010
CY 2000 or higher, except CY 4930
DS 2500 or higher, except DS 4900
IS 2000 or higher, except IS 4900

**English Requirements**

Code	Title	Hours
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**English Course-Level Requirement**

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

**Introduction to College**

ENGL 1000	English at Northeastern	1
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**Foundational Courses**

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	

**Diversity**

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below: 4

ENGL 2150	Literature and Digital Diversity
ENGL 2296	Early African-American Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2760	Writing in Global Contexts
ENGL 3663	The African American Novel
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature

**Pre-Nineteenth-Century Literature**

Complete one of the following: 4

ENGL 1600	Introduction to Shakespeare
ENGL 1700	Global Literatures 1
ENGL 2296	Early African-American Literature

ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

ENGL 3101	Early Literatures
ENGL 3120	17th- and 18th-Century Literatures

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2330	The American Renaissance
ENGL 2301	The Graphic Novel
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3140	19th-Century Literatures
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3720	19th-Century Major Figure
ENGL 3730	20th- and 21st-Century Major Figure

**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3700	Narrative Medicine
ENGL 4410	Research in Rhetoric and Writing
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

**Comparative Literature**

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)

ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

**English Electives**

Complete two additional ENGL electives. 8

**Integrative Course Requirement**

This course will not be allowed to double-count in the Theories and Methods section above.

Code	Title	Hours
ENGL 3340	Technologies of Text	4

**Supporting Course**

Complete one of the following: 4

AFAM 2600	Issues in Race, Science, and Technology
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
HIST 2220	History of Technology
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300	Knowledge in a Digital World
or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

**Computer Science Writing Requirement**

Code	Title	Hours
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**College Writing**

ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one course from the following: 4

ENGW 3302	Advanced Writing in the Technical Professions
ENGW 3309	Advanced Writing in the Humanities
ENGW 3310	Advanced Writing in Literature
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines

**Required General Electives**

Code	Title	Hours
Complete 32 credits of general electives.		32

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Exploring Creative Expression and Innovation
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

133 total semester hours required

**Plan of Study****Sample Patterns:****Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 CS 3500 and CS 3501	5 Vacation	
CS 1800 and CS 1802	5 ENGL 1160 or 1410	4 Elective	4	

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CS 2500 and CS 2501	5 Elective	4		
ENGL 1400	4 English literary period 1	4		
ENGW 1111	4			
	19	17	9	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 Strand elective 1	4 ENGW 3302, 3309, 3310, or 3315	4 Co-op	
CS 3200	4 CS 1210	1 Elective	4	
English literary period 2	4 IS 2000 (or English Category or Elective)	4		
English category or elective	4 English category or elective	4		
	ENGL 3340	4		
	16	17	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Strand elective 2	4 Elective	4 Co-op	
	English category or elective	4 Elective	4	
	English category or elective	4		
	Computing and social issues	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
Co-op	CS 4500 (or English Category or Elective)	4 Elective	4
	ENGL 4710 or 4720	4 Elective	4
	Khoury elective	4	
	Elective	4	
	0	16	8

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 ENGL 1160 or 1410	4		

CS 2500 and CS 2501	5 Elective	4		
ENGW 1111	4 English literary period 1	4		
ENGL 1400	4			
	19	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 CS 3200	4 Vacation	Co-op	
CS 3500 and CS 3501	5 CS 1210	1		
English literary period 2	4 IS 2000 (or English Category or Elective)	4		
English category or elective	4 English category or elective	4		
	ENGL 3340	4		
	17	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Strand elective 1	4 ENGW 3302, 3309, 3310, or 3315	4 Co-op	
	English category or elective	4 Elective	4	
	English category or elective	4		
	Elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Strand elective 2	4 Elective	4 Co-op	
	Computing and social issues	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	CS 4500 (or English Category or Elective)	4
	ENGL 4710 or 4720	4
	Khoury elective	4
	Elective	4
	0	16

Total Hours: 134

## English and Communication Studies, BA

The English department and the communication studies department offer an interdisciplinary combined major in English and communication studies. Broadly speaking, students in the combined major in English and communication studies at Northeastern integrate the study of literature and writing with studies of media, social, corporate, and political communications.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 2470	Asian-American Literature	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	

ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3618	Milton	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2301	The Graphic Novel	
ENGL 2330	The American Renaissance	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3140	19th-Century Literatures	
ENGL 3619	Emerson and Thoreau	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3400	Opening the Archive	
ENGL 3700	Narrative Medicine	
ENGL 4410	Research in Rhetoric and Writing	
LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
<b>Comparative Literature</b>		
Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1500	British Literature to 1800	
ENGL 1502	American Literature to 1865	
ENGL 2150	Literature and Digital Diversity	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	



ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Writing Seminar	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

**English Electives**

Complete two additional ENGL electives. 8

**Communication Studies Requirements**

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

**Foundation Course**

Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1231	Principles of Organizational Communication	
COMM 1225	Communication Theory	
COMM 1255	Communication in a Digital Age	

**Cluster Course**

Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

**Writing-Intensive Courses**

Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	

**Communication Studies Electives**

Complete three additional COMM courses. 12

**Integrative Requirement**

Code	Title	Hours
<b>Integrative English Course</b>		
Complete one of the following:		4
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3381	The Practice and Theory of Teaching Writing	

**Integrative Communication Studies Course**

COMM 3415	Communication Criticism	4
or COMM 4602	Contemporary Rhetorical Theory	

**Communication Studies Grade Requirements**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL 1000 or COMM 1000	1	Communication Studies foundational course	4	Communication Studies cluster course	4	Foreign Language	4
ENGL 1400	4	English diversity course	4	Communication Studies elective	4	Communication Studies elective	4

COMM 1101	4	English Pre-19th Century Literature elective	4		
COMM 1112 or 2301	4	ENGL 1160 or 1410	4		
Elective	4				
	17		16	8	8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
English 19th-20th-21st Century Literature elective	4	CO-OP		CO-OP		Communication Studies writing-intensive	4
English Theories and Methods course	4					Communicati Studies elective	4
Foreign Language	4						
Elective	4						
EEAM 2000	1						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
English Comparative Literature elective	4	CO-OP		CO-OP		Elective	4
English Writing elective	4					Elective	4
Communication Studies writing-intensive	4						
Foreign Language	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
English elective	4	English capstone	4
English elective	4	Integrative COMM Course	4
Integrative ENGL course	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

**English and Criminal Justice, BA**

The Department of English and School of Criminology and Criminal Justice offer a combined major in English and criminal justice. Criminal justice courses provide a foundation for understanding individual and

systemic aspects of criminology and criminal justice. English courses prepare students to analyze and interpret various representations of crime, criminality, the law, justice, and ethics in both literary and nonliterary texts as they study the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures; analyze writing practices and related media; and practice a variety of approaches to the study of language, rhetoric, writing, and literature.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**English Requirements**

Code	Title	Hours
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**English Course-Level Requirement**

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

**Foundational Courses**

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160 or ENGL 1410	Introduction to Rhetoric Introduction to Research on Writing	4

**Diversity**

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:

ENGL 2150	Literature and Digital Diversity	4
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 2470	Asian-American Literature	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685 or JWSS 3685	Modern and Contemporary Jewish Literature Modern and Contemporary Jewish Literature	

**Pre-Nineteenth-Century Literature**

Complete one of the following:

ENGL 1600	Introduction to Shakespeare	4
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	

ENGL 3120	17th- and 18th-Century Literatures
ENGL 3618	Milton
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>	
Complete one of the following: 4	
ENGL 2301	The Graphic Novel
ENGL 2330	The American Renaissance
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3140	19th-Century Literatures
ENGL 3619	Emerson and Thoreau
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3720	19th-Century Major Figure
ENGL 3730	20th- and 21st-Century Major Figure
<b>Theories and Methods</b>	
Complete one of the following: 4	
ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3700	Narrative Medicine
ENGL 4410	Research in Rhetoric and Writing
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics
<b>Comparative Literature</b>	
Complete one of the following: 4	
ENGL 1450	Reading and Writing in the Digital Age
ENGL 1500	British Literature to 1800
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature

ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel
<b>Writing</b>	
Complete one of the following: 4	
ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

<b>English Electives</b>	
Complete two additional ENGL electives.	8

## Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses successful students will develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Crime Problems and Criminal Justice Institutions</b>		
The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students a deeper look at a range of crime problems.		
Complete one of the following:		4

CRIM 2310	Courts: The Third Branch of Government
CRIM 2320	Youth Crime and Justice
CRIM 2330	Punishment in the Age of Mass Incarceration
CRIM 2340	Corporate Security: Securing the Private Sector
CRIM 2350	Policing a Democratic Society
CRIM 3010	Criminal Violence
CRIM 3030	Global Criminology
CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3060	Political Crime and Terrorism
CRIM 3070	Corporate and White-Collar Crime
CRIM 3540	Addiction and Recovery

**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following:		4
CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	

**Criminal Justice Electives**

Rounding out knowledge of crime and justice.

Complete two additional criminal justice electives from the 3000, 4000, or 5000 level. 8

**Other Requirements**

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		1
CRIM 1000	Criminal Justice at Northeastern	1
ENGL 1000	English at Northeastern	1

**Integrative Course**

Complete one of the following:		4
ENGL 3325	Rhetoric of Law	
ENGL 3426	British and American Literature and Politics	

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	
or CRIM 4949	Senior Capstone Seminar	

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirements**

128 total semester hours required

**Plan of Study**

**Sample Four Years, One Co-op Plan**

Year 1							
Fall	Hours	Spring	Hours				
CRIM 1000 or ENGL 1000	1	ENGL 1160 or 1410	4				
ENGL 1111	4	CRIM 1110	4				
CRIM 1100	4	CRIM 1120	4				
ENGL 1400	4	Elective	4				
Current crime and justice issues CRIM course	4						
		17	16				
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Pre-19th-century ENGL	4	19th-, 20th-, or 21st-century ENGL	4	Elective	4	Elective	4
Systems and institutions CRIM course	4	Crime problems elective	4				
ENGL theory/methods	4	Elective	4				
Elective	4	Elective	4				
		16	16	4	4		
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3600	4	Co-op		Co-op		Elective	4
CRIM 3700	4					Elective	4
ENGL comparative literature	4						
ENGL writing	4						
		16	0	0	0		8
Year 4							
Fall	Hours	Spring	Hours				
Systemic issues CRIM elective	4	Solutions and reform course	4				
ENGL elective	4	ENGL diversity	4				
ENGL elective	4	Capstone	4				
Elective	4	Elective	4				
		16	16				

Total Hours: 129

## English and Cultural Anthropology, BA

The English department and the sociology/anthropology department offer an interdisciplinary combined major in English and cultural anthropology. Broadly speaking, students in the combined major in English and cultural anthropology at Northeastern integrate the study of literature, language, and writing with the study of human culture and its intersections with structures of inequality (e.g., race, class, and gender) and contemporary global issues.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450		
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2460		
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3676		

ENGL 3678 Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature

### Pre-Nineteenth-Century Literature

Complete one of the following: 4

ENGL 1600 Introduction to Shakespeare

ENGL 1700 Global Literatures 1

ENGL 2240

ENGL 2296 Early African-American Literature

ENGL/JWSS 3678 Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

ENGL 4000

ENGL 4020

### Nineteenth-, Twentieth-, and Twenty-First-Century Literature

Complete one of the following: 4

ENGL 2330 The American Renaissance

ENGL 3720 19th-Century Major Figure

ENGL 4040

ENGL 2301 The Graphic Novel

ENGL 2440 The Modern Bestseller

ENGL 2600 Irish Literary Culture (Abroad)

ENGL 2610 Contemporary Israeli Literature and Art (Abroad)

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature

ENGL 3730 20th- and 21st-Century Major Figure

### Theories and Methods

Complete one of the following: 4

ENGL 1140 Grammar: The Architecture of English

ENGL 1160 Introduction to Rhetoric

ENGL 1410 Introduction to Research on Writing

ENGL 2150 Literature and Digital Diversity

ENGL 3325 Rhetoric of Law

ENGL 3340 Technologies of Text

ENGL 3370 Writing Cultures

ENGL 3381 The Practice and Theory of Teaching Writing

ENGL 3700 Narrative Medicine

ENGL 4400

ENGL 4410 Research in Rhetoric and Writing

LING 1150 Introduction to Language and Linguistics

LING 2350 Linguistic Analysis

LING 3450 Syntax

LING 3452 Semantics

LING 3454 History of English

LING 3456 Language and Gender

LING 3458 Topics in Linguistics

### Comparative Literature

Complete one of the following: 4

ENGL 1450 Reading and Writing in the Digital Age

ENGL 1502 American Literature to 1865

ENGL 1503	
ENGL 2150	Literature and Digital Diversity
ENGL 2380	
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2460	
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3582	
ENGL 3663	The African American Novel
ENGL 3676	

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

**English Electives**

Complete two additional ENGL electives. 8

**Cultural Anthropology Requirements**

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4

**Area Courses**

Additional "area courses" taken may count as anthropology electives.

Complete two of the following: 8		
ANTH 4350	Ethnography of Southeast Asia	

ANTH 4500	Latin American Society and Development
ANTH 4505	Native North Americans
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India

**Capstone**

Students are expected to complete the following course in spring of their senior year:

ANTH 4600	Senior Seminar	4
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**Anthropology Electives**

Complete three 4-semester-hour courses in addition to the above requirements. One study-abroad course may also count toward this requirement with prior permission from the department. 12

**Integrative Requirements**

Code	Title	Hours
One integrative course is required for each discipline. Courses taken as electives above may not be used as integrative courses.		

**English Integrative Course**

ENGL 2450		4
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**Cultural Anthropology Integrative Courses**

Complete one of the following: 4

ANTH 2300	Reading Culture through Ethnography
ANTH 3421	Foundations of Anthropological Theory

**Cultural Anthropology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**English and Cultural Anthropology Combined-Major Credit Requirement**

Complete 88 semester hours in the major.

**Program Requirement**

128 total semester hours required

**English and Graphic and Information Design, BA**

The Department of English and the Department of Art + Design offer an interdisciplinary combined major in English and graphic and information design. Students interested in the combined major in English and graphic and information design integrate the study of literature and writing with the design of message and meaning, integrating text, image, and data.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450		
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2460		
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3676		
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2240		
ENGL 2296	Early African-American Literature	
ENGL/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000		
ENGL 4020		
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040		
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	

ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3700	Narrative Medicine	
ENGL 4400		
ENGL 4410	Research in Rhetoric and Writing	
LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
<b>Comparative Literature</b>		
Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503		
ENGL 2150	Literature and Digital Diversity	
ENGL 2380		
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450		
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2460		
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
ENGL 3487	Film and Text (Abroad)	
ENGL 3582		
ENGL 3663	The African American Novel	
ENGL 3676		
<b>Writing</b>		
Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	

ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

**English Electives**

Complete two additional ENGL electives.	8
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**Graphic and Information Design Requirements**

Code	Title	Hours
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**Art and Design at Northeastern**

ARTF 1000	Art and Design at Northeastern	1
or ENGL 1000	English at Northeastern	

**Art and Design Fundamentals**

ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4

**Art and Design History**

ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4

**Design**

ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4

**Degree Project**

ARTG 4550	Design Degree Project 1	4
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**Art and Design Electives**

Complete one of the following:	4
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ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTG 2260	Programming Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124	Form and Structure (with optional ARTF 1125)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3351		

ARTG 3450	Graphic Design 2
ARTG 3460	Identity and Brand Design
ARTG 4552	
ARTG 4553	
ARTG 4554	Typography 3

**Integrative Requirement**

Code	Title	Hours
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**Integrative English Course**

Complete one of the following:	4	
ENGL 2301	The Graphic Novel	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 3340	Technologies of Text	
ARTG 4551	Design Degree Project 2	

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Five Years, Two Co-ops (Summer 2/Fall)**

**Year 1**

Fall	Hours	Spring	Hours	SummerHours 1	SummerHours 2
ENGL 1000	1	ENGL 1160	4	Vacation	Vacation
or ARTF 1000		or ARTF 1410			
ENGL 1450	4	ARTG 1250	4		
		(With optional ARTF 2251)			
ARTF 1122	4	Integrat course	4		
(with optional ARTF 2221)					
Elective	4				
	17		16	0	0

**Year 2**

Fall	Hours	Spring	Hours	SummerHours 1	SummerHours 2
ARTF 2220	4	ARTH 2210	4	Vacation	Co-op
(with optional ARTF 2221)					
ARTG 2260	4	ARTG 3350	4		
ENGL 1700	4	ENGL 19th-century requirement	4		
ENGL pre-19th century requiren	4	ENGL theories & method: requiren	4		
	16		16	0	0



**Year 3**

Fall	Hours	Spring	Hours	SummerHours 1	SummerHours 2
Co-op		ARTG 3350	4	Vacation	Co-op
		ARTH 2:	4		
		ENGL comparative requirement	4		
		ENGL diversity requirement	4		
	0		16	0	0

**Year 4**

Fall	Hours	Spring	Hours	SummerHours Full Semester
Co-op		ARTG 3451	4	Vacation
		Elective	4	
		ENGL 20th- century requirement	4	
		ENGL elective	4	
	0		16	0

**Year 5**

Fall	Hours	Spring	Hours
ARTG 4550	4	Integrative course	
ENGL 4:	4	English writing requirement	4
Elective	4	Elective	4
ENGL elective	4	Elective	4
	16		12

Total Hours: 125

**English and Philosophy, BA**

The Department of English and the Department of Philosophy and Religion offer an interdisciplinary combined major in English and philosophy. Students in the combined major in English and philosophy integrate the study of literature and writing with the study of ethical and philosophical issues and problems.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**English Requirements**

Code	Title	Hours
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**English Course-Level Requirement**

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

**Introduction to College**

ENGL 1000	English at Northeastern	1
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**Foundational Courses**

ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
ENGL 1400	Introduction to Literary Studies	4

**Diversity**

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below: 4

ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2470	Asian-American Literature	
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	

**Pre-Nineteenth-Century Literature**

Complete one of the following: 4

ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3618	Milton	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2301	The Graphic Novel	
ENGL 2330	The American Renaissance	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	

ENGL 3140	19th-Century Literatures
ENGL 3619	Emerson and Thoreau
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3720	19th-Century Major Figure
ENGL 3730	20th- and 21st-Century Major Figure

### Theories and Methods

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3700	Narrative Medicine
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

### Comparative Literature

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1500	British Literature to 1800
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

### Writing

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals

ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

### Capstone

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

### English Electives

Complete two additional ENGL electives. 8

### Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

### Restricted Electives

Take two of the following with at least one at the 4000 or 5000 level: 8

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3343	Existentialism
PHIL 3460	Philosophy and Literature
PHIL 3360	Scientific Approaches to Philosophy
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

### Philosophy Electives

Complete three additional electives from the philosophy department. 12

### Integrative Requirement

Code	Title	Hours
PHIL 3435	Moral Philosophy	4
ENGL 3619	Emerson and Thoreau	4

### English and Philosophy Combined Major Credit Requirement

Complete 88 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Spring/Summer 1

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
PHIL 1115	4	PHIL 2325	4	Vacation		Vacation		
ENGL 1000	1	ENGL 1160	4					
ENGL 1400	4	Elective	4					
Elective	4	ENGL Diversity Course	4					
Elective	4							
	17		16		0		0	

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
ENGL Pre Nineteenth Century Literature Course	4	Co-op		Co-op		Elective	4	
Elective	4					Elective	4	
PHIL 2330	4					Elective	4	
ENGL Nineteenth, Twentieth, and Twenty First Century Literature	4							
	16		0		0		12	

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
PHIL Restricted Elective	4	Co-op		Co-op		Elective	4	
Elective	4					Elective	4	
ENGL Comparative Literature Course	4					Elective	4	
ENGL Theories and Methods Course	4							
	16		0		0		12	

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
ENGL Writing Course	4	Integrative Course	4	Elective	4			
ENGL Capstone	4	Elective	4	Elective	4			

PHIL Restricted Elective	4	Elective	4				
Elective	4	Elective	4				
	16		16		8		

Total Hours: 129

## English and Political Science, BA

The Department of English and the Department of Political Science offer an interdisciplinary combined major in English and political science. Students in the combined major in English and political science integrate the study of literature and writing with the study of political issues and problems.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## English Requirements

Code	Title	Hours
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	

## English Electives

Two of the courses chosen from the lists below must be at the 3000 or 4000 level.

Code	Title	Hours
<b>Diversity</b>		
Complete one of the following. You may reuse this course to fulfil an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 2470	Asian-American Literature	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	

ENGL 3685	Modern and Contemporary Jewish Literature	
<b>Pre-19th-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3618	Milton	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
<b>19th-, 20th-, 21st-Century Literature</b>		
Complete one of the following:		4
<i>19th Century</i>		
ENGL 2330	The American Renaissance	
<i>20th/21st Century</i>		
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3140	19th-Century Literatures	
ENGL 3619	Emerson and Thoreau	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3400	Opening the Archive	
ENGL 3700	Narrative Medicine	
ENGL 4410	Research in Rhetoric and Writing	
LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	

**Comparative Literature Course**

Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1500	British Literature to 1800	
ENGL 1502	American Literature to 1865	
ENGL 2150	Literature and Digital Diversity	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2470	Asian-American Literature	
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
ENGL 3487	Film and Text (Abroad)	
ENGL 3663	The African American Novel	

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Writing Seminar	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	

**English Electives**

Complete two English courses not used above.	8
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**Political Science Requirements**

Code	Title	Hours
<b>Foundational Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Electives**

Complete three courses in the following range:	12
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POLS 2300 and above that are not fulfilling other POLS requirements

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 956)
- Campaigns and Elections (p. 956)
- Comparative Politics (p. 956)
- Identity, Culture, and Politics (p. 956)
- International Relations and Diplomacy (p. 957)
- Law and Legal Studies (p. 957)
- Public Policy (p. 957)
- Security Studies (p. 957)

### Supporting Courses for Political Science

Code	Title	Hours
Complete one of the following to fulfill the prerequisite for POLS2400: 4		
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

### Integrative Requirements

Code	Title	Hours
<b>English Integrative Requirement</b>		
Complete one of the following: 4		
ENGL 2740	Writing and Community Engagement	
ENGL 3426	British and American Literature and Politics	
<b>Political Science Integrative Requirement</b>		
Complete one of the following: 4		
POLS 2368	Music and Politics in America and Abroad	
POLS 3320	Politics and Mass Media	
<b>Capstone</b>		
Complete one of the following: 4		
ENGL 4710	Capstone Seminar	
POLS 4701 or POLS 4703	Political Science Senior Capstone Senior Thesis	

### Major Credit Requirement

88 semester hours required in the major

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		

POLS 2368	Music and Politics in America and Abroad
POLS 2370	Religion and Politics
POLS 2375	Gender and Politics
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
POLS 3324	Law and Society

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Sample Five Years, Two Co-ops in Summer 2/Fall

**Year 1**

Fall	Hours	Spring	Hours	SummerHours 1	SummerHours 2
ENGL 1000	1	ENGL 1160	4	Vacation	Vacation
		or			
		1410			
ENGL 14	4	POLS 11	4		
POLS 1150	4	POLS 2400	4		
		prerequisite			
POLS 11	4	English elective	4		
Elective	4				
	17		16	0	0

**Year 2**

Fall	Hours	Spring	Hours	SummerHours 1	SummerHours 2
ENGL pre-19th-century requirement	4	ENGL 19th-, 20th-, 21st-century requirement	4	Vacation	Co-op
ENGL elective	4	ENGL theories and method: requiren	4		
POLS elective	4	Elective	4		
POLS thought course	4	POLS 24	4		
	16		16	0	0

**Year 3**

Fall	Hours	Spring	Hours	SummerHours 1	SummerHours 2
Co-op		ENGL comparative literature requirement	4	Vacation	Co-op
		ENGL diversity requiren	4		
		Elective	4		

		POLS 201	4		
		0	16	0	0
<b>Year 4</b>					
Fall	Hours	Spring	Hours	Summer	Hours
Co-op		ENGL elective	4	Full Semester Vacation	
		POLS elective	4		
		Elective	4		
		Elective	4		
		0	16		0
<b>Year 5</b>					
Fall	Hours	Spring	Hours		
Capstone	4	Integrative course	4		
Elective	4	English writing requirement	4		
POLS elective	4	Elective	4		
POLS integrat course	4	Elective	4		
		16	16		

Total Hours: 129

## English and Theatre, BA

The Department of Theatre and Department of English offer an interdisciplinary combined major that integrates performance, design, production, and dramatic literature with literary studies, digital humanities, and creative writing. This combined major offers both classroom and experiential learning in making theatre, playwriting, and dramaturgy with the study of the diverse historical, cultural, and aesthetic contexts of literature. Students develop the capacity for interpreting a variety of texts through performance and writing to engage audiences.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 2470	Asian-American Literature	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3618	Milton	
ENGL/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2301	The Graphic Novel	
ENGL 2330	The American Renaissance	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3140	19th-Century Literatures	
ENGL 3619	Emerson and Thoreau	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	

ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3400	Opening the Archive	
ENGL 3700	Narrative Medicine	
ENGL 4410	Research in Rhetoric and Writing	
LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
<b>Comparative Literature</b>		
Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1500	British Literature to 1800	
ENGL 1502	American Literature to 1865	
ENGL 2150	Literature and Digital Diversity	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2470	Asian-American Literature	
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
ENGL 3487	Film and Text (Abroad)	
ENGL 3663	The African American Novel	
<b>Writing</b>		
Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Writing Seminar	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	
<b>Capstone</b>		

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

<b>English Electives</b>		
Complete two additional ENGL electives.		8

## Theatre Requirements

A minimum grade of C is required in all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1000	Theatre at Northeastern	1
or ENGL 1000	English at Northeastern	
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Intermediate or Advanced Technique</b>		
Complete two of the following:		8
THTR 2310	History of Musical Theatre	
THTR 2330	Playwriting	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 4345	Advanced Acting for the Camera	

## Integrative Requirements

Courses used in the integrative requirements cannot double-count in other areas of the major.



Code	Title	Hours
<b>Integrative Courses</b>		
ENGL 1600	Introduction to Shakespeare	4
THTR 2315	Rebels of Modern Drama	4
or THTR 2320	Classics of 20th-Century American Drama	

### English and Theatre Major Credit Requirement

90 semester hours required in the major

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, One Co-op

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
THTR 1000 or ENGL 1000	1 THTR 1131	4 Elective	4 Vacation	
THTR 1100	1 ENGL 1160 or 1410	4 Elective	4	
THTR 1101	4 THTR 1270	4		
THTR 1120	4 ENGL elective	4		
ENGL 1400	4			
ENGL comparative requirement	4			
	18	16	8	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGL 1600	4 Co-op	Co-op	Vacation	
THTR 2000	1			
THTR 2325	4			
THTR 2315 or 2320	4			
ENGL pre-19th- century requirement	4			
EEAM 2000	1			
	18	0	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGL 19th-, 20th-, or 21st-Century requirement	4 Foreign Language	4 Foreign Language	4 Vacation	
ENGL Theories & Methods requirement	4 ENGL diversity requirement	4 Elective	4	
THTR Intermediate	4 THTR Intermediate	4		

	or Advanced Technique elective	or Advanced Technique		
THTR Text and Context elective	4 Elective	4		
	16	16	8	0
Year 4				
Fall	Hours Spring	Hours		
ENGL writing requirement	4 THTR 4702	4		
ENGL elective	4 Foreign Language	4		
Elective	4 ENGL Capstone	4		
Elective	4 Elective	4		
	16	16		

Total Hours: 132

## History and English, BA

The English department and the history department offer an interdisciplinary combined major in English and history. Students interested in the combined major in English and history integrate the study of literature and writing with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one course from the 1000 level.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4

HIST 1185	Introduction to Middle Eastern History
HIST 1187	Introduction to Latin American History
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
HIST 1252	Japanese Literature and Culture
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 1285	Introduction to Russian Civilization
HIST 2370	Renaissance to Enlightenment
HIST 2330	Colonial and Revolutionary America
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain

**Intermediate/Advanced History Courses**

Complete four history courses numbered 2000 or above that have not been used to fulfill another requirement. 16

**Advanced History**

Complete one history course at the 3000 level or above that has not been used to fulfill another requirement. 4

**English Requirements**

Code	Title	Hours
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**English Course-Level Requirement**

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

**Introduction to College**

ENGL 1000	English at Northeastern	1
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**Foundational Courses**

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	

**Diversity**

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below. 4

ENGL 2150	Literature and Digital Diversity
ENGL 2296	Early African-American Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2760	Writing in Global Contexts
ENGL 2470	Asian-American Literature
ENGL 3663	The African American Novel
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature

**Pre-Nineteenth-Century Literature**

Complete one of the following: 4

ENGL 1600	Introduction to Shakespeare
ENGL 1700	Global Literatures 1
ENGL 2296	Early African-American Literature
ENGL 3101	Early Literatures
ENGL 3120	17th- and 18th-Century Literatures
ENGL 3618	Milton

ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2301	The Graphic Novel
ENGL 2330	The American Renaissance
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3140	19th-Century Literatures
ENGL 3619	Emerson and Thoreau
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3720	19th-Century Major Figure
ENGL 3730	20th- and 21st-Century Major Figure

**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3700	Narrative Medicine
ENGL 4410	Research in Rhetoric and Writing
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

**Comparative Literature**

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1500	British Literature to 1800
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction

ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**English Electives**

Complete two additional ENGL electives. 8

**Capstone**

Complete one of the following: 4

ENGL 4710	Capstone Seminar
ENGL 4720	Capstone Project
HIST 4701	Capstone Seminar
Public History:	
HIST 4903	Fieldwork in History 1

**Integrative Requirement**

Complete one of the following: 4

ENGL 3400	Opening the Archive
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**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

The History Seminar (HIST 2301) fulfills the college's experiential learning requirement.

**Program Requirements**

128 total semester hours required

**Plan of Study**

**Sample Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1000	1	HIST elective or integrative 1	4	Vacation		Vacation	

HIST 1200	1	HIST elective or integrative 2	4		
HIST 1201	4	ENGL 1160 or 1410	4		
ENGL 1111	4	Elective	4		
ENGL 1400	4				
Elective	4				
		18	16	0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2301	4	HIST elective or integrative 3	4	Vacation		Co-op	
HIST 2302	1	HIST elective or integrative 4	4				
Pre-19th-century ENGL	4	19th-, 20th-, or 21st-century ENGL	4				
ENGL theory/methods	4	Elective	4				
Elective	4						
		17	16	0	0		

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST elective or integrative 5	4	Elective	4	Co-op	
		ENGL comparative	4	Elective	4		
		ENGL writing	4				
		Elective	4				
		0	16	8	0		

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST elective or integrative 6	4	Elective	4	Co-op	
		ENGL diversity	4	Elective	4		
		Elective	4				
		Elective	4				
		0	16	8	0		

**Year 5**

Fall	Hours	Spring	Hours
Co-op		HIST capstone or HIST senior project or ENGL capstone	4
		HIST elective or integrative 7	4
		Elective	4

Elective	4
0	16

Total Hours: 131

## Journalism and English, BA

The School of Journalism and the English Department offer an interdisciplinary combined major in Journalism and English. Broadly speaking, students in the Combined Major in Journalism and English at Northeastern integrate the study of journalism with the study of language, literature and writing.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (EI), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

NUpath requirements Interpreting Culture (IC), Analyzing and Using Data (AD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Journalism Major Requirements

Code	Title	Hours
<b>Journalism Introductory Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundations</b>		
Must receive a C or better in the following:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Law and Ethics</b>		
JRNL 3550 or JRNL 4650	The First Amendment and the Media Ethics and Issues in Journalism	4
<b>Journalism Electives</b>		
Take three JRNL courses		12

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3140	19th-Century Literatures	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	

ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3700	Narrative Medicine
ENGL 4410	Research in Rhetoric and Writing
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

**Comparative Literature**

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**Capstone**

ENGL 4710	Capstone Seminar	4
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or ENGL 4720	Capstone Project
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**English Electives**

Complete two additional ENGL electives. 8

**Integrative Requirement**

Code	Title	Hours
JRNL 3630	Magazine Writing	4
ENGL 2740	Writing and Community Engagement	4
or ENGL 2850	Writing for Social Media: Theory and Practice	

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

129 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

**SPRING/SUMMER 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
JRNL 1000 or ENGL 1000	1	JRNL 1101 and JRNL 1102	5	Foreign language	4	Foreign language	4	4
JRNL 1150	4	ENGL 1160 or 1410	4	Elective	4	Elective	4	4
ENGW 1111	4	English diversity requirement	4					
ENGL 1400	4	Elective	4					
pre- nineteenth- century literature requirement	4							
		17		17		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
JRNL 2201	4	Co-op	0	Co-op	0	Elective	4	4
EEAM 2000 or EESH 2000	1					Elective	4	4
Nineteenth- century, twentieth- and twenty- first-century literature requirement	4							
Theories and methods requirement	4							
Elective	4							
		17		0		0		8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
JRNL 2301	4 Co-op	0 Co-op	0 English elective 1	4
Journalism elective 1	4		Elective	4
Comparative literature requirement	4			
English writing requirement	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
JRNL 3610	4 JRNL 3550 or 4650	4	
Journalism elective 2	4 Journalism elective 3	4	
ENGL 2740 or 2850	4 JRNL 3630	4	
English elective 2	4 ENGL 4710	4	
	16	16	0

Total Hours: 131

**Linguistics and English, BA**

In the combined major in linguistics and English, students learn about the structures and analysis of human languages across multiple levels (sounds, words, phrases and sentences, meaning) and apply this knowledge to understanding how the English language works, its rhetorical forms, how it has changed over time, and its cultural context. Students hone their writing skills, develop substantial language-analysis skills, and apply them particularly to English.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 46).

**Linguistics Requirements**

Code	Title	Hours
<b>Linguistics Requirements</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
LING 3442	Sociolinguistics	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete two courses (not used elsewhere) from the following:		8
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	
or LING 4971	Junior/Senior Honors Project 2	
or LING 4991	Directed Study Research	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	

**English Requirements**

Code	Title	Hours
<b>English Course-Level Requirement</b>		
At least two of the courses chosen from the English Requirements lists below must be numbered 3000–4999.		
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4

or ENGL 1410	Introduction to Research on Writing	
<b>Diversity</b>		
Complete one of the following courses:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3618	Milton	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3140	19th-Century Literatures	
ENGL 3619	Emerson and Thoreau	
ENGL 3720	19th-Century Major Figure	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3400	Opening the Archive	

ENGL 3700	Narrative Medicine	
ENGL 4410	Research in Rhetoric and Writing	
<b>Comparative Literature</b>		
Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 2150	Literature and Digital Diversity	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
ENGL 3487	Film and Text (Abroad)	
ENGL 3663	The African American Novel	
<b>Writing</b>		
Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Writing Seminar	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	
<b>Electives</b>		
Complete one additional ENGL elective at the 2000 level or higher.		4

### Linguistics/English Combined Major Requirements

Code	Title	Hours
<b>Integrative Course</b>		
LING 3454	History of English	4
<b>Junior/Senior Seminar</b>		
ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	
or LING 4654	Seminar in Linguistics	
<b>Experiential Learning</b>		
Complete one of the following options. Courses used to satisfy this requirement may simultaneously satisfy a requirement above.		0-8
Study Abroad (not a Dialogue)		
International Co-op		
LING 4891	Research Seminar in Linguistics	

LING 4970	Junior/Senior Honors Project 1
and LING 4971	and Junior/Senior Honors Project 2
LING 4991	Directed Study Research

## Linguistics/English Combined Major Credit Requirement

Complete 80 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 1150	4 LING 2350	4 Vacation	0 Vacation	0
ENGW 1111	4 ENGL 1400	4		
MATH 1215	4 Foreign language core course	4		
Elective	4 Elective	4		
	16	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
LING 3454	4 Linguistic structure course	4 Vacation	0 Co-op	0
Linguistics elective	4 LING 3412 or 3442	4		
ENGL 1410 or 1160	4 Theories and methods course	4		
Foreign language core course	4 Diversity course	4		
	EESC 2000	1		
	16	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Linguistic structure course	4 Elective	4 Co-op	0
	Pre-19th century literature course	4 Elective	4	
	Comparative literature course	4		
	ENGW 3315	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 LING 3412 or 3442	4 Elective	4 Co-op	0
	Linguistics structure course	4 Elective	4	
	Writing course	4		
	19th-, 20th-, and 21st-century literature course	4		
	0	16	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	0 Linguistics elective	4
	Junior/senior seminar	4
	Foreign language core course	4
	English elective	4
	0	16

Total Hours: 129

## Media and Screen Studies and English, BA

The media and screen studies program and the Department of English offer a combined major in media and screen studies and English. The combined major integrates the analysis, research, and production of traditional and emerging media along with the study of the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures. Majors become familiar with writing practices and media from the Middle Ages through the present, from the quill pen to computer code.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).



NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

## Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

## Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2470	Asian-American Literature	
ENGL 2760	Writing in Global Contexts	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3140	19th-Century Literatures	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3400	Opening the Archive	

ENGL 3700	Narrative Medicine
ENGL 4410	Research in Rhetoric and Writing
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

**Comparative Literature**

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

**English Electives**

Complete two additional ENGL electives. 8

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Courses</b>		
MSCR 3600	Film Theory	4

ENGL 1450	Reading and Writing in the Digital Age	4
or ENGL 3340	Technologies of Text	

**Media and Screen Studies Grade Requirement**

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Sample Four Years, Two Co-ops**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR 1000 or ENGL 1000	1	MSCR 1320 or 1420	4	MSCR elective	4
MSCR 1220	4	MSCR foundation	4	Foreign Language	4
ENGL 1400	4	ENGL pre-19th- century literature elective	4		
ENGL 1160 or 1410	4	Foreign Language	4		
Foreign Language	4				
	17		16		8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR elective	4	Co-op		Co-op	4
ENGL 19th-, 20th-, and 21st-century literature elective	4			Elective	4
ENGL diversity elective	4				
MSCR diversity/ globalization	4				
EEAM 2000	1				
	17		0		0
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
ENGL theories and methods elective	4	MSCR elective	4	Elective	4
ENGL elective	4	ENGL comparative elective	4	Elective	4

970 Architecture and English, BS

MSCR writing-intensive	4	MSCR writing-intensive	4		
ENGL elective	4	ENGL 1450 or 3340	4		
	16		16	8	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 2	Hours
Co-op		ENGL writing elective	4		
		MSCR 3600	4		
		ENGL 4710 or 4720	4		
		Elective	4		
	0		16		0

Total Hours: 130

**Architecture and English, BS**

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

NUpath attributes Natural and Designed World (ND), Creative Expression and Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

In order to graduate, students must complete Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Ethical Reasoning (ER) in their electives.

**Architecture Requirements**

Code	Title	Hours
<b>Required Courses</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
ARCH 1310	Buildings and Cities, A Global History	4
ARCH 1320		4
ARCH 1450	Understanding Design	4
ARCH 2130	Site, Space, and Program	6
ARCH 2240	Architectonic Systems	4

ARCH 2330	Architecture and the City in the Nineteenth Century	4
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<b>Electives</b>		
Complete two of the following courses: 8		
ARCH 3370	Advanced Topics in Architectural History	
ARCH 3450	Advanced Architectural Communication	
ARCH 5310	Design Tactics and Operations	

**English Requirements**

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1

<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
	or ENGL 1410 Introduction to Research on Writing	

<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below: 4		
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450		
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2460		
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3676		
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	

<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following: 4		
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2240		
ENGL 2296	Early African-American Literature	
ENGL/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000		
ENGL 4020		

<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following: 4		
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040		
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	

ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3730	20th- and 21st-Century Major Figure

### Theories and Methods

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3700	Narrative Medicine
ENGL 4400	
ENGL 4410	Research in Rhetoric and Writing
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

### Comparative Literature

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 1503	
ENGL 2150	Literature and Digital Diversity
ENGL 2380	
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2460	
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3582	
ENGL 3663	The African American Novel
ENGL 3676	

### Writing

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing

ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

### Capstone

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

### English Electives

Complete two additional ENGL electives. 8

### Integrative Requirement

Code	Title	Hours
ARCH 2330	Architecture and the City in the Nineteenth Century	4
or ARCH 2340	Modern Architecture	
ENGL 3375	Writing Boston	4

### Program Requirement

128 total semester hours required

## Biology and English, BS

In the combined biology and English degree, science courses lay the groundwork for strong basic training in mathematics, chemistry, and physics that are relevant to biology. In biology courses, students broadly explore the organization and processes of life—from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. In English courses, students study the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures; analyze writing practices and related media; and practice a variety of approaches to the study of language, rhetoric, writing, and literature. The fields of biology and English are bridged with course work in different forms of science writing, as well as psychology and sociology courses exploring the acquisition of language and reading; the sociology of health and illness; and the environment, technology, and society.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Biology Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000	Biology at Northeastern	1
or ENGL 1000	English at Northeastern	
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1
<b>Required Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<i>Biochemistry</i>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

## Biology Elective

Code	Title	Hours
<b>Intermediate/Advanced Biology</b>		
Complete one of the following:		4-5
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
<b>Organismal and Population Biology</b>		
Complete one of the following:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	

## Supporting Courses for Biology

Code	Title	Hours
<b>Mathematics</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
<b>Statistics</b>		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5

## Chemistry

<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Physics</b>		
<i>Physics 1</i>		
Complete one of the following lecture/lab pairs. PHYS 1145/PHYS 1146 is recommended:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
<i>Physics 2</i>		
Complete one of the following lecture/lab pairs. PHYS 1147/PHYS 1148 is recommended:		5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160 or ENGL 1410	Introduction to Rhetoric or Introduction to Research on Writing	4
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	

ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3140	19th-Century Literatures	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3400	Opening the Archive	
ENGL 3700	Narrative Medicine	
ENGL 4410	Research in Rhetoric and Writing	
LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
<b>Comparative Literature</b>		
Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	

ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Writing Seminar	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	

**English Electives**

Complete two additional ENGL electives.	8
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**Integrative Courses**

Code	Title	Hours
<b>Integrative English Course</b>		
Complete one of the following:		4
ENGL 2770	Writing to Heal	
ENGL 3340	Technologies of Text	
<b>Integrative General Biological Sciences Course</b>		
Complete one of the following:		4
PSYC 3464	Psychology of Language	
PSYC 4520	Language and the Brain	

**Capstone Requirement**

Complete one of the following capstone options:

Code	Title	Hours
<b>Biology Capstone: complete one of the options to fulfill the capstone requirement in biology.</b>		1-4
BIOL 4701	Biology Capstone	
BIOL 4900	Biology Research Capstone (concurrent with BIOL 4991, which may be used toward Intermediate/Advanced Biology)	
BIOL 4971	Junior/Senior Honors Project 2	

**English Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

### Biology and English Combined Major GPA Requirement

Minimum 2.000 GPA required in all BIOL courses  
Minimum 2.000 GPA required in all ENGL courses

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### English, Minor

The English minor offers students the opportunity to complement their major area with focused course work in any of the broad areas of English studies, such as writing practices, language, rhetoric, and literature.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Three of the four total courses must be taken at Northeastern.

*Note:* Courses taken to fulfill the first-year writing requirement and the Advanced Writing in the Disciplines requirements do not count toward this minor. A total of 16 semester hours is required for the English minor.

### Requirements

Code	Title	Hours
<b>Introductory Course</b>		
Complete one course in the following range:		4
ENGL 1001 to ENGL 1999		
<b>Electives</b>		
Complete three ENGL courses, two of which must be in the range ENGL 2000 to ENGL 4999.		12

### GPA Requirement

2.000 GPA required in the minor

### Rhetoric, Minor

The rhetoric minor appeals to students interested in history, theory, and the criticism of civic discourse and cultural practices. The minor integrates courses from the Department of Communication Studies and the Department of English that explore the nature and function of rhetoric in politics, the professions, and the media. The rhetoric minor offers students an opportunity to be better citizens, members of the community, and leaders in the workplace by learning how to use language strategically, to speak with integrity, and to appreciate the power of their own voice.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where indicated.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Foundational Course

Code	Title	Hours
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
ENGL 1160	Introduction to Rhetoric	

### Electives

Code	Title	Hours
Note: For English majors, only one course from the major may also count toward this elective section of the minor.		
Complete four of the following:		16
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3501	Free Speech: Law and Practice	
COMM 4602	Contemporary Rhetorical Theory	
ENGL 3325	Rhetoric of Law	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3404	African American Rhetorical Traditions	

### GPA Requirement

2.000 GPA required in the minor

### Writing, Minor

Students in the writing minor integrate theory with writing practice. Courses on writing for social media, writing in global contexts, and writing in a variety of creative genres provide students with opportunities to explore writing in diverse contexts.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Three of the four total classes must be taken at Northeastern.

### Writing Theories and Methods

Code	Title	Hours
Complete one of the following:		4
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 3325	Rhetoric of Law	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3404	African American Rhetorical Traditions	

### Writing Electives

Code	Title	Hours
Complete three of the following:		12
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 2301	The Graphic Novel	
ENGL 2695	Travel and Place-Based Writing	
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	

ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

## GPA Requirement

2.000 GPA required in the minor

## History

Website (<http://www.northeastern.edu/history/>)

### Timothy Brown, PhD

Professor and Chair

617.373.2660

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History at Northeastern emphasizes the study of local and regional histories as well as of the global exchanges between nations, regions, and cultures. Knowledge of the past is also about building the future. In a world marked by increasing exchange between peoples, cultures, and societies, history is key to understanding contemporary issues such as the future of democracy, the nature of citizenship and rights, the origins and conduct of war, the foundations of racial and ethnic conflict and tolerance, and poverty and prosperity. At the same time, history teaches crucial skills in analytical thinking, research processes, writing, oral expression, and multimedia presentation.

History majors take three core seminars on historical research and choose from a broad range of courses in historical themes, periods, and regions. The program emphasizes undergraduate research in the major and trains students to conduct research in archives and primary sources and to write research papers. Honors study is strongly encouraged for eligible students, and students are encouraged to take advantage of numerous options for study abroad. Advanced undergraduates have the opportunity to participate in individual directed study with members of the faculty on topics of mutual interest.

Cooperative education placements, fieldwork, internships, and other experiential learning activities are also available. History majors have worked on co-op in law firms, an art auction house, the State Department, the Massachusetts State House, Newton Public Schools, and the Massachusetts State Archives, among many other institutions.

Undergraduates who plan to teach in public schools may combine history with education courses that can lead to state certification in

Massachusetts. History students are also encouraged to take Dialogue of Civilizations courses that engage students in short-term study abroad during the summer.

The Department of History offers a broad-based Bachelor of Arts major and two Bachelor of Science options. One BS option emphasizes training in disciplines outside history. It includes the study of research methods and a minor in fields such as English; economics; political science; sociology; cinema studies; East Asian studies; or women's, gender, and sexuality studies. The other BS option seeks to prepare students for public history fields such as museum administration, archival management, or historic preservation. The Department of History participates in numerous interdisciplinary programs, including East Asian studies; cinema studies; environmental studies; international affairs; Jewish studies; Latino/a, Latin American, and Caribbean studies; and women's, gender, and sexuality studies.

The Department of History offers qualified undergraduates the opportunity to pursue a BA/MA or BS/MA degree in five years, with the approval of the department. Students with a minimum 3.330 cumulative grade-point average (GPA) and minimum 3.500 GPA in required history courses may apply for admission to the PlusOne BA/MA or BS/MA program in history.

## Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 27)."

## PlusOne Program (MA) in History

History majors at the end of their sophomore year or the beginning of their junior year may qualify for application to the PlusOne program that combines the BA with the master's degree in history. Students interested in this option should consult with the graduate program director as soon as they think they might be interested in pursuing the master's degree.

## Programs

### Bachelor of Arts (BA)

- History (p. 976)
- History and Asian Studies (p. 837)
- History and Criminal Justice (p. 842)
- History and Cultural Anthropology (p. 982)
- History and Economics (p. 904)
- History and English (p. 960)
- History and Philosophy (p. 987)
- History and Political Science (p. 989)
- History and Religious Studies (p. 992)
- Environmental Studies and History (p. 717)
- International Affairs and History (p. 994)
- Media and Screen Studies and History (p. 151)

### Bachelor of Science (BS)

- History (p. 999)
- Computer Science and History (p. 361)
- History and Economics (p. 928)

### Bachelor of Science in Mechanical Engineering (BSME)

- Mechanical Engineering and History (p. 529)

## Minor

- History (p. 1008)



## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### History, BA

The Bachelor of Arts (BA) is a broadly based liberal arts degree in history. Students who pursue the BA degree must satisfy general requirements and take courses to satisfy Northeastern's university-wide core curriculum (NUpath (p. 46)), in addition to required and elective history courses. These requirements help students develop their historical knowledge and skills within the contexts of the arts, humanities, social sciences, and sciences that together comprise the disciplinary sources of historical knowledge. They enable historical understanding to be culturally and linguistically sensitive to the subjects of historical inquiry.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### History Major Requirements

Code	Title	Hours
<b>Introductory History</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
Complete two of the following:		8
HIST 1100	Law and History	
HIST 1120	Public History, Public Memory	
HIST 1130	Introduction to the History of the United States	
HIST 1150	East Asian Studies	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1185	Introduction to Middle Eastern History	
HIST 1190	Picturing Modernity: The Photographic Image in Culture and Society	
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	
HIST 1246	World War II in the Pacific	
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	

### History Seminar and Historical Writing

HIST 2301 and HIST 2302	The History Seminar and Historical Writing	5
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### Additional History Requirements

Code	Title	Hours
<b>Pre-1800 Course</b>		
Complete one of the following:		4
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
HIST 2376	Britain and the British Empire	
<b>History Outside the United States and Europe</b>		
Complete one of the following:		4
HIST 1150	East Asian Studies	
HIST 1180	African History	
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1290	Modern Middle East	
HIST 1500	Modern Chinese History and Culture	
HIST 2211	The World Since 1945	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2311	Colonialism/Imperialism	
HIST 2351	Modern Japan	

### Capstone or Project

Complete one of the following:		4
HIST 4701	Capstone Seminar	

### Intermediate/Advanced History Course Requirement

Code	Title	Hours
Complete four history courses numbered 2000 or above (excluding HIST 2301 and HIST 2302); one of these courses must be numbered 3000–4999.		16

### History Major Credit Requirement

Complete 46 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirements

128 total semester hours required

**Plan of Study**  
**Four Years, One Co-Op**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 1000	1 HIST 1130	4 Vacation	0 Vacation	0
HIST 1170	4 MATH 1215	4		
ENGW 1111	4 Elective	4		
Elective	4 Elective	4		
HIST 1200	1			
HIST 1201	4			
18		16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Foreign language course	4 Foreign language course	4 Elective	4 Co-op	0
Elective	4 Intermediate/Advanced History Elective	4 Elective	4	
Pre-1800 or non-U.S./Europe history course	4 Pre-1800 or non-U.S./Europe history course	4		
Elective	4 Elective	4		
16		16	8	0

Year 3			
Fall	Hours Spring	Hours Summer 1	Hours
Co-op	0 Foreign language course	4 Elective	4
	HIST 2301	4 Elective	4
	HIST 2302	1	
	Elective	4	
	Intermediate/Advanced History Elective	4	
0		17	8

Year 4		
Fall	Hours Spring	Hours
Intermediate/Advanced History Elective	4 Intermediate/Advanced History Elective	4
Elective	4 HIST 4701	4
Elective	4 Elective	4
Elective	4 Elective	4
16		16

Total Hours: 131

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 1170	4 HIST 1130	4 Vacation	0 Vacation	0
ENGW 1111	4 MATH 1215	4		
Elective	4 Foreign language course	4		
HIST 1200	1 Elective	4		
HIST 1201	4			
17		16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Foreign language course	4 Co-op	0 Co-op	0 Elective	4
Pre-1800 or non-U.S./Europe History Course	4		Elective	4
Intermediate/Advanced History Elective	4			
Elective	4			
16		0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Foreign language course	4 Co-op	0 Co-op	0 Elective	4
Pre-1800 or non-U.S./Europe History Course	4		Elective	4
Intermediate/Advanced History Elective	4			
Elective	4			
16		0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 Vacation	0
HIST 2301	4			
HIST 2302	1			
Elective	4			
Intermediate/Advanced History Elective	4			
17		0	0	0

Year 5		
Fall	Hours Spring	Hours
Elective	4 HIST 4701	4

Intermediate/ Advanced History Elective	4 Elective	4
Elective	4 Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 130

## Environmental Studies and History, BA

Through this combined major, successful undergraduates will develop an awareness of the scientific, cultural, and political aspects of the world's environmental problems through historical perspectives and backgrounds.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Environmental Studies Requirements

Code	Title	Hours
<b>Science Requirements</b>		
ENVR 1101	Environmental Science	4
ENVR 1202 and ENVR 1203	History of Earth and Life and Interpreting Earth History	5
ENVR 1110	Global Climate Change	4
<b>Humanities Requirement</b>		
PHIL 1180	Environmental Ethics	4
<b>Social Science Requirements</b>		
ECON 1116	Principles of Microeconomics	4
POLS 1150 and POLS 1151	American Government and Recitation for POLS 1150	4
SOCL 1246	Environment and Society	4
<b>Environmental Studies Requirements</b>		
ECON 3423	Environmental Economics	4
POLS 2395	Environmental Politics and Policy	4

### History Requirements

Code	Title	Hours
<b>History Requirements</b>		
HIST 1130	Introduction to the History of the United States	4
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	4
HIST 1201	First-Year Seminar	4
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	4
<b>History Seminar</b>		
HIST 2301 and HIST 2302	The History Seminar and Historical Writing	5
<b>History/Geographic-Area Electives</b>		
Complete two of the following:		8
ASNS 1150	East Asian Studies	
HIST 1180	African History	
HIST 1185	Introduction to Middle Eastern History	
<b>History-Area Electives</b>		
Complete four HIST courses, approved by a faculty adviser, focused on an idea or geographic area. These courses must be numbered 2000 or higher.		16

### Integrative Courses

Code	Title	Hours
<b>Required Integrative Course</b>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
<b>Integrated Elective</b>		
ENVR 5210	Environmental Planning	4

### Experiential Learning and Capstone

Code	Title	Hours
<b>Experiential Learning</b>		
Complete an approved activity from either department, combined with reflection in capstone.		
<b>Capstone Course</b>		
Complete one of the following:		1-4
ENVR 4997 or ENVS 4997	Senior Thesis	
ENVR 4900	Earth and Environmental Science Capstone	
ENVR 4970 HIST 4701	Junior/Senior Honors Project 1 Capstone Seminar	

### Combined-Major Credit Requirement

Complete 91 semester hours in the major.

### Program Requirement

128 total semester hours required

## Plan of Study

### Five Years, Three Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	ENVR 1202 and ENVR 1203	5	Vacation	0	Vacation	0
ENVR 1000	1	HIST 1170	4				
ENVR 1101	4	HIST 1201	4				
HIST 1130	4	PHIL 1180	4				
SOCL 1246	4						
	17		17		0		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1116	4	EESC 2000	1	Vacation	0	Co-op	0
Foreign language course	4	Elective	4				
HIST 1215	4	ENVR 1110	4				
History elective	4	Foreign language course	4				
		HIST geographic elective	4				
	16		17		0		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENVR 3300 and ENVR 3301	5	Elective	4	Co-op	0
		POLS 1150 and POLS 1151	4	Elective	4		
		Foreign language course	4				
		ENVR undergraduat elective	4				
	0		17		8		0

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3308 or 3315	4	Elective	4	Co-op	0
		HIST 2301 and HIST 2302	5	Elective	4		
		History elective	4				
		History elective	4				
	0		17		8		0

#### Year 5

Fall	Hours	Spring	Hours
Co-op	0	Capstone course	1-3

ENVR undergraduat elective	4
HIST geographic elective	4
Integrative major requirement	4
History elective	4
0	17-19

Total Hours: 134-136

## History and Asian Studies, BA

History and Asian studies offers an interdisciplinary combined major. Students interested in the combined major in history and Asian studies integrate the exploration of human history with the rigorous study of Asian cultures, societies, languages, and economies.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
	Choose one course from the 1000 level except HIST 1215, which is required by Asian studies.	4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
	Choose one course from the following:	4
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 2370	Renaissance to Enlightenment	
HIST 1185	Introduction to Middle Eastern History	

HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
<b>Advanced History</b>		
Complete one history course 3000 level or above		4

## History Cluster

In conjunction with your history advisor, define a history cluster by the first semester of your junior year of study. A cluster comprises four history courses with no more than two courses in the 1200–1299 range. These courses may double-count in the requirements above (except History Colloquium).

## Asian Studies Requirements

Code	Title	Hours
<b>Required Courses</b>		
ASNS 1150	East Asian Studies	4
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	4

### Asia in Global Context

Complete one of the following:		4
ECON 3290	History of the Global Economy	
INTL 2240	Global Population and Development	
POLS 3487	Politics of Developing Nations	

Complete a professional or academic experience abroad in consultation with your advisor.

## Language and Elective Requirements

Code	Title	Hours
<b>Language Courses</b>		
Complete the following courses in either Chinese or Japanese:		16
<i>Chinese</i>		
CHNS 1101	Elementary Chinese 1	
CHNS 1102	Elementary Chinese 2	
CHNS 2101	Intermediate Chinese 1	
or CHNS 2301	Intermediate Chinese Immersion 1	
CHNS 2102	Intermediate Chinese 2	
or CHNS 2302	Intermediate Chinese Immersion 2	
<i>Japanese</i>		
JPNS 1101	Elementary Japanese 1	
JPNS 1102	Elementary Japanese 2	
JPNS 2101	Intermediate Japanese 1	
or JPNS 2301	Intermediate Japanese Immersion 1	
JPNS 2102	Intermediate Japanese 2	
or JPNS 2302	Intermediate Japanese Immersion 2	

### Asian Studies Electives

Complete three courses from the following focus areas.		12
<i>Society and Politics Focus Area</i>		

ANTH 4350	Ethnography of Southeast Asia	
ANTH 4515	Culture and Politics in Modern India	
ASNS 2245	The Asian-American Experience	
INTB 2501	Competing to Win in Emerging Markets	
MKTG 4220	Marketing in Asia	
PHIL 1130	Ethics: East and West	
INTL 2240	Global Population and Development	
POLS 3487	Politics of Developing Nations	

<i>Language, Literature, and Culture Focus Area</i>		
CLTR 1260	Japanese Film	
CLTR 1700	Introduction to Japanese Pop Culture	
MUSC 2130	Music of Asia	
PHIL 1130	Ethics: East and West	

### Religious Studies Focus Area

PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 2395	Japanese Buddhism	

## Capstone

Code	Title	Hours
Complete one of the following:		4
HIST 4701	Capstone Seminar	
ASNS 4900	Asian Studies Capstone Directed Study	

## Integrative Requirement

Note: Public history concentrators satisfy this requirement within the concentration with Fieldwork in History 1 (HIST 4903).

Code	Title	Hours
HIST 2351	Modern Japan	4
or ASNS 2245	The Asian-American Experience	

## History and Asian Studies Major Credit Requirement

Complete 82 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

## History and Criminal Justice, BA

This combined major educates students in criminal justice and history, emphasizing the complementarity between these two disciplines. Students successfully completing this program will be able to critically evaluate and draw connections between past and present practices in law, punishment, incarceration, justice, and the social institutions and cultural contexts in which these systems operate.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one other course from HIST 1001 to HIST 1999 (excluding HIST 1100, HIST 1200, and HIST 1201).		4
<b>Intermediate/Advanced Level</b>		
Complete four HIST courses numbered 2000 or above (excluding HIST 2301 and HIST 2302).		16
<b>Advanced Level</b>		
Complete one HIST course numbered 3000 or above.		4
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 2311	Colonialism/Imperialism	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	

## Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses successful students will develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Crime Problems and Criminal Justice Institutions</b>		
The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students a deeper look at a range of crime problems.		

Complete one of the following: 4

CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	
CRIM 3540	Addiction and Recovery	

### Creating Knowledge about Crime and Justice

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3700	Analyzing and Using Data on Crime and Justice	4
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### Systemic Issues

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	

### Criminal Justice Electives

Rounding out knowledge of crime and justice.

Complete two additional criminal justice electives from the 3000, 4000 or 5000-level. 8

## Other Requirements

Code	Title	Hours
A minimum of one history course must be taken between the methods and capstone requirements.		
<b>Methods</b>		
Complete one of the following:		4
CRIM 3600	Criminal Justice Research Methods	
HIST 2301	The History Seminar	
<b>Capstone</b>		
Complete one of the following:		4
HIST 4701	Capstone Seminar	
CRIM 4949	Senior Capstone Seminar	
<b>Integrative Course</b>		
HIST 1100	Law and History	4

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

## Plan of Study

### Example plan of study with One Co-op

#### Year 1

Fall	Hours	Spring	Hours
HIST 1200	1	HIST 1100	4
HIST 1201	4	CRIM 1110	4
CRIM 1100	4	CRIM 1120	4
Current crime and justice issues CRIM course	4	Introductory-level history course	4
ENGW 1111	4		
	17		16

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours
Systems and institutions CRIM course	4	Intermediate/advanced history elective	4	Elective	4
Pre-1800 history elective	4	Methods course	4	Elective	4
Intermediate history elective	4	Elective	4		
Elective	4	Elective	4		
	16		16		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3700	4	Co-op		Co-op		Elective	4
Crime problems elective	4						
Intermediate/advanced history elective	4						
Elective	4						
EESH 2000	1						
	17		0		0		4

#### Year 4

Fall	Hours	Spring	Hours
Systemic issues CRIM elective	4	Solutions and reform CRIM course	4
Intermediate/advanced history elective	4	Capstone	4
Advanced history course	4	Elective	4
Elective	4	Elective	4
CRIM 3000	1	Elective	1
	17		17

Total Hours: 128

## History and Cultural Anthropology, BA

History and cultural anthropology offer an interdisciplinary combined major. Students interested in the combined major in history and cultural anthropology integrate the exploration of human history with the rigorous study of human cultures.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one history course from the 1000 level.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one course from the following:		4
HIST 1187	Introduction to Latin American History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	

### Intermediate/Advanced History Cluster

Complete three history courses numbered 2303 or above. 12

### Advanced History

Complete one history course at the 3000 level or above. 4

### Cultural Anthropology Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4

ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4

**Area Courses**

Complete two courses from the following: 8

ANTH 4350	Ethnography of Southeast Asia
ANTH 4500	Latin American Society and Development
ANTH 4505	Native North Americans
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India

**Anthropology Electives**

Complete three courses in the following range. One study-abroad course may count toward this requirement. 12

ANTH 2001 to ANTH 4599

**Capstone Requirements**

**Code Title Hours**

Complete one of the following: 4

ANTH 4600	Senior Seminar
HIST 4701	Capstone Seminar

**Integrative Requirements**

ANTH courses below will double count as area courses.

**Code Title Hours**

ANTH 4350	Ethnography of Southeast Asia	4
ANTH 4510	Anthropology of Africa	4
HIST 2360	History of Capitalism in East Asia	4

Students taking Senior Seminar (ANTH 4600) must complete either a one-semester senior project, which they would do in the context of ANTH 4600, or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

**Anthropology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Five Years, Three Co-ops in Summer 2/Fall**

Year 1					
Fall	Hours	Spring	Hours	Summer 2	Hours
HIST 1000	1	HIST elective or integrative 1	4	Vacation	Vacation
HIST 1200	1	HIST elective or integrative 2	4		
HIST 1201	4	ANTH 2305	4		
ENGW 1111	4	Elective	4		
ANTH 1101	4				

Year 2					
Fall	Hours	Spring	Hours	Summer 2	Hours
HIST 2301	4	HIST elective or integrative 3	4	Vacation	Co-op
HIST 2302	1	HIST elective or integrative 4	4		
ANTH 3410	4	ANTH 3421	4		
ANTH area course 1	4	Elective	4		
Elective	4				
		17	16	0	0
Year 3					
Fall	Hours	Spring	Hours	Summer 2	Hours
Co-op		HIST elective or integrative 5	4	Elective	4
		ANTH area course 2	4	Elective	4
		ANTH elective 1	4		
		Elective	4		
		0	16	8	0
Year 4					
Fall	Hours	Spring	Hours	Summer 2	Hours
Co-op		HIST elective or integrative 6	4	Elective	4
		ANTH elective 2	4	Elective	4
		ANTH elective 3	4		
		Elective	4		
		0	16	8	0
Year 5					
Fall	Hours	Spring	Hours		
Co-op		HIST capstone or HIST senior project or ANTH capstone	4		
		HIST elective or integrative 7	4		
		Elective	4		
		Elective	4		
		0	16		

Total Hours: 131

**History and Economics, BA**

The Department of History and the Department of Economics offer an interdisciplinary combined major in history and economics. Students



interested in the combined major integrate the study of economic systems and theories with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one history course from the 1000 level (except from HIST 1200 and HIST 1201).		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
HIST 2330	Colonial and Revolutionary America	
<b>Intermediate/Advanced History Courses</b>		
Complete four history courses numbered 2000 or above, excluding HIST 2301 and HIST 2302.		16
<b>Advanced History</b>		
Complete one history course at the 3000 level or above.		4
<b>Economics Requirements</b>		
Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000	Economics at Northeastern	1
or HIST 1000	History at Northeastern	
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4

ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
ECON 3520	History of Economic Thought	4

### Economics Electives

Complete two economics elective courses that are found in the following ranges, with no more than one in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy the integrative course requirement and ECON 3520 may not be used as economics electives:

ECON 1200 to ECON 1999

ECON 3000 to ECON 4689

ECON 4900 to ECON 4999

ECON 5200 to ECON 5999

### Supplemental Courses

CS 1100	Computer Science and Its Applications	4
or MISM 2510	Fundamentals of Information Analytics	
or DS 2000	Programming with Data	
and DS 2001	and Data Science Programming Practicum	
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	

### Capstone Requirements

Code	Title	Hours
Complete one of the following options (Public History concentrations complete HIST 4903 and HIST 4904):		4
ECON 4692	Senior Economics Seminar	
HIST 4701	Capstone Seminar	

### Integrative Requirement

Code	Title	Hours
Complete one of the following:		4
ECON 3470	American Economic History	
ECON 1292	Economic History of the Middle East	
HIST 2360	History of Capitalism in East Asia	
HIST 2011	Capitalism and Business: A Global History	

### History and Economics Major GPA/Credit Requirement

Grades in the following four economics courses must average a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 92 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
ECON 1115	4	ECON 1116	4	ECON 2315	4	ECON elective 1	4	4
ECON 1000 or HIST 1000	1	HIST elective 1	4	HIST elective 3	4	Elective	4	4
HIST 1200	1	CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4					
HIST 1201	4	HIST elective 2	4					
Foreign language or elective	4							
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4							
	18		16		8			8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
ECON 2316	4	ECON 2350	4	Elective	4	Co-op		
HIST 2301	4	HIST elective 4	4	Elective	4			
HIST 2302	1	HIST elective 5	4					
Elective	4	EESH 2000	1					
Elective	4	Foreign language or elective	4					
	17		17		8			0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
Co-op		ECON 2560	4	HIST elective 7	4	Co-op		
		HIST elective 6	4	ECON elective 2	4			
		ENGW 3315	4					
		ECON 3520	4					
	0		16		8			0

#### Year 4

Fall	Hours	Spring	Hours	Hours
Co-op		ECON 4692 or HIST 4701	4	

ECON 3470, HIST 2360, HIST 2011, or ECON 1292	4
Elective	4
Elective	4
0	16

Total Hours: 132

## History and English, BA

The English department and the history department offer an interdisciplinary combined major in English and history. Students interested in the combined major in English and history integrate the study of literature and writing with the study and analysis of human history.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one course from the 1000 level.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 2370	Renaissance to Enlightenment	

HIST 2330	Colonial and Revolutionary America	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	

**Intermediate/Advanced History Courses**

Complete four history courses numbered 2000 or above that have not been used to fulfill another requirement. 16

**Advanced History**

Complete one history course at the 3000 level or above that has not been used to fulfill another requirement. 4

**English Requirements**

Code	Title	Hours
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**English Course-Level Requirement**

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

**Introduction to College**

ENGL 1000	English at Northeastern	1
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**Foundational Courses**

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	

**Diversity**

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below. 4

ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2760	Writing in Global Contexts	
ENGL 2470	Asian-American Literature	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	

**Pre-Nineteenth-Century Literature**

Complete one of the following: 4

ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3618	Milton	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2301	The Graphic Novel	
ENGL 2330	The American Renaissance	
ENGL 2440	The Modern Bestseller	

ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3140	19th-Century Literatures	
ENGL 3619	Emerson and Thoreau	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	

**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3400	Opening the Archive	
ENGL 3700	Narrative Medicine	
ENGL 4410	Research in Rhetoric and Writing	
LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	

**Comparative Literature**

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1500	British Literature to 1800	
ENGL 1502	American Literature to 1865	
ENGL 2150	Literature and Digital Diversity	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2470	Asian-American Literature	
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
ENGL 3487	Film and Text (Abroad)	
ENGL 3663	The African American Novel	

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	

ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**English Electives**  
Complete two additional ENGL electives. 8

**Capstone**

Code	Title	Hours
Complete one of the following:		4
ENGL 4710	Capstone Seminar	
ENGL 4720	Capstone Project	
HIST 4701	Capstone Seminar	
Public History:		
HIST 4903	Fieldwork in History 1	

**Integrative Requirement**

Code	Title	Hours
<b>Required Integrative Course</b>		
ENGL 3400	Opening the Archive	4

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

The History Seminar (HIST 2301) fulfills the college's experiential learning requirement.

**Program Requirements**

128 total semester hours required

**Plan of Study**

**Sample Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 1000	1 HIST elective or integrative 1	4 Vacation	Vacation	
HIST 1200	1 HIST elective or integrative 2	4		
HIST 1201	4 ENGL 1160 or 1410	4		
ENGW 1111	4 Elective	4		
ENGL 1400	4			
Elective	4			
<hr/>				
	18	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 2301	4 HIST elective or integrative 3	4 Vacation	Co-op	
HIST 2302	1 HIST elective or integrative 4	4		
Pre-19th-century ENGL	4 19th-, 20th-, or 21st-century ENGL	4		
ENGL theory/methods	4 Elective	4		
Elective	4			
<hr/>				
	17	16	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	HIST elective or integrative 5	4 Elective	4 Co-op	
	ENGL comparative	4 Elective	4	
	ENGL writing	4		
	Elective	4		
<hr/>				
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	HIST elective or integrative 6	4 Elective	4 Co-op	
	ENGL diversity	4 Elective	4	
	Elective	4		
	Elective	4		
<hr/>				
	0	16	8	0

Year 5				
Fall	Hours Spring	Hours		
Co-op	HIST capstone or HIST senior project or ENGL capstone	4		
	HIST elective or integrative 7	4		
	Elective	4		
	Elective	4		
<hr/>				
	0	16		

Total Hours: 131

**History and Philosophy, BA**

The Department of Philosophy and Religion and the Department of History offer an interdisciplinary combined major in philosophy and

history. Students interested in the combined major integrate the study of philosophy and ethics with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Choose one course from the 1000 level, excluding HIST 1200/1201		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Choose one course from the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
<b>Intermediate/Advanced History Cluster</b>		
Complete (3) History courses numbered 2000 or above, excluding 2301/2302.		12
<b>Advanced History</b>		
Complete one history course 3000 level or above		4
<b>History Capstone Seminar or Senior Project</b>		
HIST 4701	Capstone Seminar	
Public history concentrators may also select from the following:		
HIST 4903	Fieldwork in History 1	

### Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Intermediate/Advanced Electives</b>		
Complete three of the following with at least one course at the 4000 or 5000 level:		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

### Additional Electives

Complete three additional PHIL courses. 8

### Integrative Courses

Code	Title	Hours
Complete one of the following: 4		
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2395	Japanese Buddhism	

### History and Philosophy Combined Major Credit Requirement

Complete 85 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1200	1	HIST Introductory Level	4	Vacation		Vacation	

HIST 1201	4 HIST Pre 1800 History Elective	4		
ENGW 1111	4 HIST 1000	1		
PHIL 1115	4 PHIL Intermediate/ Advanced Elective	4		
PHIL 2325 or POLS 2325	4 PHIL 2330	4		
	17	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 2301	4 HIST Intermediate/ Advanced Elective	4 Vacation	Co-op	
HIST 2302	1 HIST Intermediate/ Advanced Elective	4		
PHIL Elective	4 PHIL Intermediate/ Advanced Elective	4		
ANTH Area Course	4 PHIL Intermediate/ Advanced Elective	4		
PHIL Elective	4 Elective	1		
	17	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	HIST Intermediate/ Advanced Elective	4 Elective	4 Co-op	
	PHIL Integrative Course	4 Elective	4	
	PHIL Elective	4		
	HIST Advanced Elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	HIST Elective or Integrative Course	4 Elective	4 Co-op	
	PHIL Elective	4		
	PHIL Elective	4		
	Elective	4		
	0	16	4	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	HSIT Capstone or Senior Project	4
	HIST Elective or Integrative Course	4
	PHIL Intermediate/ Advanced Elective	4
	Elective	4
	0	16

Total Hours: 128

## History and Political Science, BA

The Department of History and the Department of Political Science offer an interdisciplinary combined major in history and political science. Students interested in the combined major integrate the study of political systems and theories with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### History Major Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level Course</b>		
Complete one course from HIST 1000 levels, excluding HIST 1200 and HIST 1201		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	

HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	

**Intermediate/Advanced History Cluster**

Complete three HIST courses numbered 2000 or above, excluding HIST 2301 and HIST 2302. 12

**Advanced History**

Complete one HIST course numbered 3000 or above. 4

**Political Science Major Requirements**

Code	Title	Hours
<b>Political Science Foundation Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Electives**

Complete three POLS courses numbered 2000 or above. 12

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 990).

- American Political Institutions (p. 990)
- Campaigns and Elections (p. 990)
- Comparative Politics (p. 991)
- Identity, Culture, and Politics (p. 991)
- International Relations and Diplomacy (p. 991)
- Law and Legal Studies (p. 991)
- Public Policy (p. 991)
- Security Studies (p. 991)

**Supporting Courses**

Code	Title	Hours
Complete one of the following:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
Complete one of the following:		4
HIST 1130	Introduction to the History of the United States	
HIST 2211	The World Since 1945	
HIST 2282	The Holocaust and Comparative Genocide	
<b>Capstone</b>		
Complete one of the following. (Public History concentrations take HIST 4903 & HIST 4904)		4
HIST 4701	Capstone Seminar	
HIST 4903	Fieldwork in History 1	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**History and Political Science Major Credit Requirement**

Complete 78 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirements**

128 total semester hours required

**Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	POLS 1160	4	Elective	4	Elective	4
POLS 1155	4	POLS Supporting course	4	Elective	4	Elective	4
POLS 1150	4	HIST 1200	1				
HIST elective 1	4	HIST 1201	4				
		HIST elective 2	4				
16		17		8		8	



**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS Thought	4 Co-op	Co-op	Foreign Language	4
POLS 2399	4		HIST elective 4	4
Foreign Language	4			
HIST elective 3	4			
	16	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS elective	4 Co-op	Co-op	Advanced Writing	4
PHIL 5001	4		HIST elective 5	4
POLS 2400	4			
HIST 2302	1			
HIST 2301	4			
	17	0	0	8

**Year 4**

Fall	Hours Spring	Hours
POLS elective	4 HIST or POLS capstone	4
POLS elective	4 Elective	4
HIST elective 6	4 Elective	4
Integrative course	4 Elective	4
	16	16

Total Hours: 130

## History and Religious Studies, BA

The Department of Philosophy and Religion and the Department of History offer an interdisciplinary combined major in religious studies and history. Students interested in the combined major integrate the study of religious traditions, religious praxis, and religious ethics with the study and analysis of human history.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**History Requirements**

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Choose one course from the 1000 level excluding HIS1200/1201.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Choose one course from the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	

**Intermediate/Advanced History**

Complete four History courses numbered 2003 or above that have not been used to fulfill another requirement. 16

**Advanced History**

Complete one history course 3000 level or above that have not been used to fulfill another requirement. 4

**Religious Studies Requirements**

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	

PHIL 3100 The Religious Worlds of Boston: Faith and Devotion in Urban Life

**Comparative Religion Elective 4**

Complete one of the following courses that is not used to satisfy another requirement:

PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1220	The Meaning of Death
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

**Electives 20**

Complete six of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement:

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1111	Introduction to World Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4903	Seminar in Religion

**Integrative Requirements**

**Code Title Hours**  
**Capstone 4**

Complete one of the following courses that is not used to satisfy another requirement:

HIST 4701	Capstone Seminar
PHIL 4903	Seminar in Religion

**Integrative Course 4**

Complete one of the following courses that is not used to satisfy another requirement:

HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
HIST 2370	Renaissance to Enlightenment
PHIL 2395	Japanese Buddhism

**History and Religious Studies Combined Major Credit Requirement**

Complete 78 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1200	1	HIST 1000	1	Vacation		Vacation	
HIST 1201	4	Intro Level History Course	4				
ENGW 1111	4	Lived Religion Elective	4				
PHIL 1110	4	Pre 1800 History Elective	4				
Elective	4	Elective	4				
		17		17		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2301	4	HIST Intermediate/Advanced Elective	4	Vacation		Co-op	
HIST 2302	1	HIST Intermediate/Advanced Elective	4				
Comparative Religion Elective	4	Elective	4				
ANTH area course	4	Elective	4				
Elective	4						
		17		16		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Integrative Course	4	Elective	4	Co-op	
		PHIL 2000 Level Elective	4	Elective	4		

	HIST Advanced Elective	4			
	HIST Intermediate/ Advanced Elective	4			
		0	16	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	HIST Elective	4 Elective	4 Co-op		
	PHIL 3000 Level Elective	4 Elective	4		
	Elective	4			
	Elective	4			
		0	16	8	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	Capstone	4			
	HIST Elective	4			
	Elective	4			
	Elective	4			
		0	16		

Total Hours: 131

## International Affairs and History, BA

This combined major fosters an historically contingent awareness of global affairs and international policy issues since the early 20th century through diverse and cross-disciplinary theories of interstate relations, state-society relations, the future of democracy, the nature of citizenship and rights, the origins and conduct of war, the foundations of racial and ethnic conflict and tolerance, and poverty and prosperity. This combined major highlights the importance of understanding the intersection between global issues and local traditions and is designed to prepare students to be politically, culturally, historically, and linguistically sensitive to their interaction.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement.

Code	Title	Hours
<b>International Affairs/History at Northeastern</b>		
INTL 1000 or HIST 1000	International Affairs at Northeastern History at Northeastern	1

### International Affairs Required Courses

INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
ECON 1115	Principles of Macroeconomics	4
POLS 1160	International Relations	4
POLS 1155 or ANTH 1101	Comparative Politics Peoples and Cultures	4

### International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

### International Affairs Elective

Code	Title	Hours
Complete one of the following:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

### Global Dynamics Requirement

Code	Title	Hours
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268 or PPUA 5268	International Environmental Policy International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	

or WMNS 2480	Women and World Politics
INTL 3520	Global Political Economy
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations
<i>Human Rights and Social Justice</i>	
HIST 2373	Gender and Sexuality in World History
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 3060	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context

INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

## Regional Analysis Requirement

**Code** **Title** **Hours**  
 Complete two of the following, both of which must be in the same region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:

Code	Title	Hours	
<i>Africa</i>			
AFRS 2307	Africa Today	8	
AFRS 2900	Swahili, Culture, and Politics in Kenya		
AFRS 3460	Contemporary Government and Politics in Africa		
AFRS 4939	Community Health, Culture, and Development in Kenya		
ANTH 4510	Anthropology of Africa		
ENTR 3308	Business Economic History of South Africa		
INTL 2464	Natural Resources and Sustainable Development		
or AFRS 2464	Natural Resources and Sustainable Development		
INTL 2465	The Scope and Dynamics of Conflicts in Africa		
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa		
<i>Asia</i>			
ANTH 4350	Ethnography of Southeast Asia		
ASNS 1150	East Asian Studies		
or HIST 1150	East Asian Studies		
CLTR 1500	Modern Chinese History and Culture		
CLTR 1506	Introduction to Chinese Popular Culture		
CLTR 1700	Introduction to Japanese Pop Culture		
HIST 1246	World War II in the Pacific		
HIST 1252	Japanese Literature and Culture		
HIST 1253	History of Vietnam Wars		
HIST 1500	Modern Chinese History and Culture		
HIST 2308	Law, Justice, and Society in Modern China		
HIST 2351	Modern Japan		
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions		
PHIL 1290	Chinese Philosophy and Religion		
PHIL 2395	Japanese Buddhism		
<i>Europe</i>			
CLTR 1501	Introduction to French Culture		
CLTR 1503	Introduction to Italian Culture		
CLTR 1504	Cultural History of Spain		
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath		
HIST 1272	Europe in the Middle Ages, 500–1500		
HIST 2280	Hitler, Germany, and the Holocaust		
HIST 2370	Renaissance to Enlightenment		

HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	8	
HIST 2376	Britain and the British Empire		
HIST 4946	Independent Field Research Abroad: Central Europe		
POLS 3435	Politics and Governance of Europe and the European Union		
<i>Latin America</i>			
ANTH 4500	Latin American Society and Development	8	
CLTR 1240	Latin American Film		
CLTR 1261	Caribbean Literature and Culture		
CLTR 1505	Latin American Culture, History, and Politics		
CLTR 3715	New Narratives: Latin America after 1989		
CLTR 3720	Literature, Arts, and Poverty in Latin America		
CLTR 4655	Latin American Literature		
HIST 2025	Latin American History through Film		
LACS 1220	Latino, Latin American, and Caribbean Studies		
<i>Middle East</i>			
CLTR 1502	Introduction to Arabic Culture		8
ECON 1292	Economic History of the Middle East		
HIST 1185	Introduction to Middle Eastern History		
HIST 1290	Modern Middle East		
INTL 1150	The Mediterranean World: An Overview		
INTL 1160	Middle East Studies		
INTL 2100	Modern Israel		
INTL 2200	America and the Middle East		
INTL 3250	Democracy and Development in North Africa and the Mediterranean		
PHIL 1280	Islam: Rituals, Traditions, and Debates		
PHIL 1285	Jewish Religion and Culture		
POLS 3465	Government and Politics in the Middle East		
POLS 3470	Arab-Israeli Conflict		
POLS 4915	Model Arab League		
<i>Russia</i>			
HIST 1285	Introduction to Russian Civilization	8	
HIST 1286	History of the Soviet Union		

## International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

## History Major Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one course from HIST 1001 to HIST 1999 (excluding 1200/1201).		4

**Pre-1800 History Elective**

Complete one of the following:		4
HIST 1187	Introduction to Latin American History	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 2311	Colonialism/Imperialism	
HIST 2330	Colonial and Revolutionary America	

**Intermediate History Cluster**

Complete four history courses numbered 2000 or above (excluding 2301, 2302, and 2330). 16

**Advanced History**

Complete one history course at the 3000 level or above. 4

**International Affairs and History Integrative Requirements**

**Code Title Hours**  
One course from the Research Methods and Capstone requirements must come from history.

**Research Methods**

Complete one of the following:		4 - 5
INTL 2718	Research Methods in International Affairs	
HIST 2301 and HIST 2302	The History Seminar and Historical Writing	

**Capstone**

INTL 4700	Senior Capstone Seminar in International Affairs	4
or HIST 4701	Capstone Seminar	

**Integrative Course**

HIST 2011	Capitalism and Business: A Global History	4
or HIST 2311	Colonialism/Imperialism	

**International Affairs and History Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	POLS 1160	4	INTL elective	4	Elective	4
INTL 1101	4	ENGW 1111	4	HIST elective	4	Elective	4
HIST 1200	1	HIST elective	4				
HIST 1201	4	Foreign language course	4				

ECON 1115	4			
Foreign language course	4			
	18	16	8	8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1155	4	Co-op		Co-op		INTL elective	4
INTL 2718	4					Elective	4
HIST elective	4						

Foreign language course	4			
EESH 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 3400	4	Co-op		Co-op		INTL elective	4
Foreign language course	4					Elective	4
HIST elective	4						

ENGW 3315	4			
	16	0	0	8

**Year 4**

Fall	Hours	Spring	Hours
Integrative course	4	INTL 4700	4

INTL elective	4	HIST elective	4
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HIST elective	4	HIST elective	4
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Elective	4	Elective	4
	16	16	

Total Hours: 131

**Media and Screen Studies and History, BA**

The Media and Screen Studies Program and the Department of History offer a combined major in media and screen studies and history. The combined major integrates the analysis, research, and production of traditional and emerging media along with the study of local and regional histories as well as of the global exchanges between nations, regions, and cultures.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

## Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320 or MSCR 1420	Media and Social Change Media History	4
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

## Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

## History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory-Level Course</b>		
Complete one course in the following range, not used to fulfill another requirement:		4
HIST 1001–HIST 1999		
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one course from the following:		4
HIST 1187	Introduction to Latin American History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
<b>Intermediate/Advanced History Cluster</b>		
Complete three courses in the following range:		12
HIST 2303–HIST 5999		
<b>Advanced History</b>		
Complete one course in the following range:		4
HIST 3000–HIST 5999		
<b>Capstone</b>		
HIST 4701	Capstone Seminar	

## Integrative Requirement

Code	Title	Hours
HIST 1357	History of Information in the United States: Media, Technology, Law	4

## Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

130 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4	Elective	4
MSCR 1220	4	MSCR foundation course	4	Elective	4	Elective	4

HIST 1200 and HIST 1201	5 Intro-level HIST course	4			
ENGW 1111	4 Foreign Language	4			
Foreign Language	4				
	18	16	8		8
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
MSCR diversity/globalization	4 Co-op	Co-op	Elective	4	
MSCR elective	4		Elective	4	
HIST 2301 and HIST 2302	5				
Elective	4				
EEAM 2000	1				
	18	0	0		8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
MSCR writing-intensive	4 Co-op	Co-op	Elective	4	
Pre-1800 history elective	4		Elective	4	
Intermediate/advanced history elective 1	4				
MSCR elective	4				
	16	0	0		8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
MSCR writing-intensive	4 MSCR elective	4			
Intermediate/advanced history elective 2	4 Intermediate/advanced history elective 3	4			
Advanced history elective	4 HIST 4701	4			
HIST 1357	4 Elective	4			
	16	16			

Total Hours: 132

## History, BS

The Bachelor of Science (BS) degree emphasizes greater specialization in history, either in public history or in a minor field outside of history, and a course in statistics. These programs are designed for students interested in either public history or in quantitative analysis and the mastery of social science models and methods. Students who plan to

go to graduate school in history should consider the possibility of taking language courses as electives, since most graduate programs continue to require foreign language competence.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## History Major Requirements

Code	Title	Hours
<b>Introductory History</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
	Complete two of the following:	8
HIST 1100	Law and History	
HIST 1120	Public History, Public Memory	
HIST 1130	Introduction to the History of the United States	
HIST 1150	East Asian Studies	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1180	African History	
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	
HIST 1190	Picturing Modernity: The Photographic Image in Culture and Society	
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	
HIST 1246	World War II in the Pacific	
HIST 1357	History of Information in the United States: Media, Technology, Law	
HIST 2220	History of Technology	
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	
<b>History Seminar and Historical Writing</b>		
HIST 2301 and HIST 2302	The History Seminar and Historical Writing	5

## Additional History Requirements

Code	Title	Hours
<b>Pre-1800 Course</b>		
	Complete one of the following:	4
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	



1000 History, BS

HIST 1285	Introduction to Russian Civilization
HIST 2330	Colonial and Revolutionary America
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain

**History Outside the United States and Europe**

Complete one of the following: 4

HIST 1150	East Asian Studies
HIST 1180	African History
HIST 1185	Introduction to Middle Eastern History
HIST 1187	Introduction to Latin American History
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1290	Modern Middle East
HIST 1500	Modern Chinese History and Culture
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
HIST 2351	Modern Japan

**Capstone or Project**

*Requirement for Non-Public History Concentrators*

HIST 4701	Capstone Seminar	4
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*Requirement for Public History Concentrators*

Public history concentrators satisfy this requirement within the concentration.

**Intermediate/Advanced History Course Requirement**

Complete three history courses numbered 2000 or higher, excluding HIST 2301 and HIST 2302.

Code	Title	Hours
	Complete three history courses numbered 2000 or higher, excluding HIST 2301 and HIST 2302.	12

**Optional Public History Concentration**

*Note:*Public History, Public Memory (HIST 1120) is a prerequisite for Fieldwork in History 1 (HIST 4903) .

Code	Title	Hours
<b>Public History Courses</b>		
HIST 1120	Public History, Public Memory	4
HIST 4903	Fieldwork in History 1	4

**Graduate Public History Course**

Complete two graduate-level course in public history. See history faculty adviser for an approved list. 8

**Supporting Course**

Code	Title	Hours
<b>Research Methods</b>		
Complete one of the following: 4		
CS 1100	Computer Science and Its Applications	
ECON 2350	Statistics	
ENVR 5260	Geographical Information Systems	
MATH 2280	Statistics and Software	
POLS 2400	Quantitative Techniques	

PSYC 2320	Statistics in Psychological Research
SOCL 2320	Statistical Analysis in Sociology

**History Major Credit Requirement**

Complete 46 semester hours for the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, One Co-op**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1000	1	HIST 1130	4	Vacation		Vacation	
HIST 1170	4	Elective		4			
HIST 1200	1	MATH 1215		4			
HIST 1201	4	Elective		4			
ENGW 1111	4						
Elective	4						
		18		16		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Pre-1800 or non-U.S./ Europe history elective	4	Pre-1800 or non-U.S./ Europe history elective		4	Elective		4
Elective	4	Elective		4	Elective		4
Research methods class	4	Intermediate/Advanced history elective		4			
Elective	4	Elective		4			
		16		16		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST 2301		4	Elective		4
		HIST 2302		1	Elective		4
		Intermediate/Advanced history elective		4			
		Elective		4			
		Elective		4			
		0		17		8	

Year 4			
Fall	Hours	Spring	Hours
Intermediate/Advanced history elective	4	HIST 4701	
Elective	4	Elective	
			4

Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 131

## Five Years, Three Co-ops in Summer 2/Fall

### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1000	1	HIST 1130	4	Vacation	0	Vacation	0
HIST 1170	4	MATH 1215	4				
ENGW 1111	4	Elective	4				
Elective	4	Elective	4				
HIST 1200	1						
HIST 1201	4						
	18		16		0		0

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Research methods course	4	Elective	4	Vacation	0	Co-op	0
Elective	4	Elective	4				
Pre-1800 or non-U.S./ Europe History Elective	4	Elective	4				
Elective	4	Pre-1800 or non-U.S./ Europe History Elective	4				
	16		16		0		0

### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	HIST 2301	4	Elective	4	Co-op	0
		HIST 2302	1	Elective	4		
		Elective	4				
		Elective	4				
		Intermediate/ Advanced History Elective	4				
	0		17		8		0

### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Intermediate/ Advanced History Elective	4	Elective	4	Co-op	0
		Elective	4	Elective	4		
		Elective	4				
		Elective	4				
	0		16		8		0

### Year 5

Fall	Hours	Spring	Hours
Co-op	0	HIST 4701	4

Elective	4
Intermediate/ Advanced History Elective	4
Elective	4
0	16

Total Hours: 131

## Computer Science and History, BS

The computer science and history combined major offers students the opportunity to gain both historical knowledge and a broad range of related analytical skills in both the humanities and computer science. You'll define a history course cluster according to a thematic principle, with a focus on quantitative analysis in the field, complementing your foundation in programming.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
IS 2000	Principles of Information Science	4

### Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 16 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges: 16

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**History Courses**

Code	Title	Hours
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**History Required Courses**

HIST 1200	Historical Research and Writing	1
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HIST 1201	First-Year Seminar	4
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HIST 2301	The History Seminar	4
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HIST 2302	Historical Writing	1
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**History Electives**

Complete one introductory course from the following: 4

ASNS 1150	East Asian Studies
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HIST 1120	Public History, Public Memory
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HIST 1130	Introduction to the History of the United States
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HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
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HIST 1185	Introduction to Middle Eastern History
-----------	--

HIST 1190	Picturing Modernity: The Photographic Image in Culture and Society
-----------	--

WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies
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Complete one course from the following: 4

HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
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HIST 1252	Japanese Literature and Culture
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HIST 1285	Introduction to Russian Civilization
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HIST 1389	History of Espionage 1: Antiquity to World War II
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HIST 2330	Colonial and Revolutionary America
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Intermediate/Advanced History Cluster 12

Complete three HIST courses numbered 2303 or above. Cluster is subject to Department approval.

Complete one advanced-level course: 4

Select from any HIST course numbered 3000 or above.

**History Capstone Seminar or Senior Project**

Complete one capstone experience from the following: 4

HIST 4701	Capstone Seminar
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Public history concentrators may also select from the following:

HIST 4903	Fieldwork in History 1
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**Integrative Course Requirement**

Code	Title	Hours
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HIST 2211	The World Since 1945	4
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**Supporting Courses**

Code	Title	Hours
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**Research Methods**

Complete one course from the following: 4

ECON 2350	Statistics
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ENVR 3300	Geographic Information Systems
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ENVR 5260	Geographical Information Systems
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POLS 2400	Quantitative Techniques
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PSYC 2320	Statistics in Psychological Research
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**Computing and Social Issues**

Complete one of the following: 4

AFAM 2600	Issues in Race, Science, and Technology
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CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies
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CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
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ENGL 2150	Literature and Digital Diversity
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HIST 2220	History of Technology
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INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
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IS 1300	Knowledge in a Digital World
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or PHIL 1300	Knowledge in a Digital World
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PHIL 1145	Technology and Human Values
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SOCL 1280	The Twenty-First-Century Workplace
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SOCL 2485	Environment, Technology, and Society
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SOCL 4528	Computers and Society
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**Computer Science Writing Requirement**

Code	Title	Hours
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**College Writing**

ENGW 1111	First-Year Writing	4
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or ENGW 1102	First-Year Writing for Multilingual Writers
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**Advanced Writing in the Disciplines**

This requirement is satisfied by HIST 2302 taken in conjunction with HIST 2301.

**Required General Electives**

Code	Title	Hours
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Complete 32 credits of general electives. 32

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Computer Science and History GPA/Credit Requirement**

Complete 98 semester hours in the major with a minimum 2.000 GPA

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World

- Conducting Formal and Quantitative Reasoning

- Analyzing and Using Data

- Writing in the First Year

- Writing-Intensive in the Major

- Advanced Writing in the Disciplines

- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

135 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Vacation	0
CS 1800 and CS 1802	5	IS 2000	4	Elective	4		
CS 2500 and CS 2501	5	CS 3200	4				
ENGW 1111	4	Introductory history elective	4				
HIST 1200	1						
HIST 1201	4						
	20		17		9		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	CS 1210	1	Elective	4	Co-op	0
HIST 2301	4	Elective	4	Elective	4		
HIST 2302	1	Khoury elective 1	4				
History Pre-1800 elective	4	Intermediate history elective 1	4				
Research methods requirement	4	Intermediate history elective 2	4				
	17		17		8		0

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury elective 2	4	Elective	4	Co-op	0
		Intermediate history elective 3	4	Elective	4		
		Advanced history elective	4				
		Computing and social issues	4				
	0		16		8		0

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury elective 3	4	Elective	4		

History capstone seminar or senior project	4	Elective	4		
History integrative requirement	4				
Khoury elective 4	4				
	0		16		8

Total Hours: 136

#### Five Years, Three Co-ops in Spring/Summer 1

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	5	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	IS 2000	4				
ENGW 1111	4	Introductory history elective	4				
HIST 1200	1						
HIST 1201	4						
	20		17		0		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	Co-op	4	Co-op	4	Vacation	0
CS 3000	4						
CS 3500 and CS 3501	5						
HIST 2301	4						
HIST 2302	1						
Research methods requirement	4						
	19		0		0		0

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
History Pre-1800 elective	4	Co-op	4	Co-op	4	Elective	4
Intermediate history elective 1	4					Elective	4
Elective	4						
Khoury elective 1	4						
	16		0		0		8

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 2	4	Co-op	4	Co-op	4	Elective	4

Intermediate history elective 2	4		Elective	4
Computing and social issues	4			
Elective	4			
	16	0	0	8

**Year 5**

Fall	Hours	Spring	Hours
Khoury elective 3	4	Khoury elective 4	4
Intermediate history elective 3	4	Advanced history elective	4
Elective	4	History capstone seminar or senior project	4
Elective	4	History integrative requirement	4
	16		16

Total Hours: 136

## History and Economics, BS

The Department of History and the Department of Economics offer an interdisciplinary combined major in history and economics. Students interested in the combined major integrate the study of economic systems and theories with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one history course from the 1000 level except from HIST 1200 and HIST 1201.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1

### Pre-1800 History Elective

Complete one of the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	

### Intermediate/Advanced History Courses

Complete four history courses numbered 2000 or above, excluding HIST 2301 and HIST 2302. 16

### Advanced History

Complete one history course at the 3000 level or above. 4

### Supplemental Course for History—Research Methods

Complete one of the following:		4
ECON 2350	Statistics	
ENVR 5260	Geographical Information Systems	
MATH 2280	Statistics and Software	
POLS 2400	Quantitative Techniques	
PSYC 2320	Statistics in Psychological Research	
SOCL 2320	Statistical Analysis in Sociology	

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000 or HIST 1000	Economics at Northeastern History at Northeastern	1
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

### Economics Electives

Complete four economics elective courses that are found in the following ranges, with no more than two in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy the integrative course requirement may not be used as economics electives: 16

ECON 1200 to ECON 1999	
ECON 3000 to ECON 4689	
ECON 4900 to ECON 4999	
ECON 5200 to ECON 5999	

### Supplemental Courses

CS 1100	Computer Science and Its Applications	4
or MISM 2510	Fundamentals of Information Analytics	
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MATH 1231 or MATH 1241	Calculus for Business and Economics Calculus 1	4

or MATH 1245	Calculus with Applications
or MATH 1251	Calculus and Differential Equations for Biology 1
or MATH 1340	Intensive Calculus for Engineers
or MATH 1341	Calculus 1 for Science and Engineering

### Capstone Requirements

Code	Title	Hours
Complete one of the following options (public history concentrations complete HIST 4903 and HIST 4904):		
ECON 4692	Senior Economics Seminar	4
HIST 4701	Capstone Seminar	

### Integrative Requirements

Code	Title	Hours
Complete one of the following:		
ECON 3470	American Economic History	4
ECON 1292	Economic History of the Middle East	
HIST 2360	History of Capitalism in East Asia	
HIST 2011	Capitalism and Business: A Global History	

### History and Economics Major GPA/Credit Requirement

Grades in the following four economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 88 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ECON 1000 or HIST 1000	1 ECON elective 1	4 ECON elective 2	4 Elective	4	
ECON 1115	4 HIST elective 1	4 Elective	4 Elective	4	
HIST 1200	1 HIST elective 2	4			
HIST 1201	4 ECON 1116	4			
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4				
Elective	4				
	18	16	8	8	

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 2301	4 HIST elective 3	4 HIST elective 5	4 Co-op	
HIST 2302	1 HIST elective 4	4 Elective	4	
CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4 ECON 2316	4		
ECON 2315	4 Elective	4		
Elective	4			
	17	16	8	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ECON 2350	4 ECON 2560	4 Co-op	
	ECON elective 3	4 ECON elective 4	4	
	HIST elective 6	4		
	Elective	4		
	0	16	8	0

#### Year 4

Fall	Hours Spring	Hours
Co-op	ECON 4692 or HIST 4701	4
	ECON 3470, HIST 2360, HIST 2011, or ECON 1292	4
	HIST elective 7	4
	Elective	4
	0	16

Total Hours: 131

### Mechanical Engineering and History, BSME

The combined history and mechanical engineering major is designed to help students develop skills across different intellectual domains. A solid grounding in history helps students better understand the political, cultural, and economic context in which technologies are developed and deployed. Indeed, history offers a myriad of case studies that highlight both the transformative potential and the unintended consequences of new technologies and technological processes. By studying different phases of the past and different societies in the past, students will gain a broad perspective that gives them the range and flexibility required in many work situations. History also provides a terrain for moral contemplation. Greater sensitivity to historical context also helps students see beyond commonly accepted narratives valorizing individual entrepreneurs and appreciate the different ways in which innovation, disruption, official support, and even contingency give rise to new technologies. Finally, by writing effective papers and engaging in productive discussions at the heart of history courses, students also cultivate skills in critical analysis and persuasive communication that could be employed in any future careers.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirement Interpreting Culture (IC) is not explicitly satisfied by required courses. Students are responsible for satisfying this requirement with electives.

## Engineering Requirements

Code	Title	Hours
<b>Required Engineering</b>		
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475 or ME 3480	Fluid Mechanics International Applications of Fluid Mechanics	4
ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5
<b>Senior Capstone Design Project</b>		
MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5
<b>Technical Electives</b>		
Complete two of the following:		8
ME 4508	Mechanical Engineering Computation and Design	
ME 4550	Mechanical Engineering Design	
ME 4555	System Analysis and Control	
ME 4570	Thermal Systems Analysis and Design	
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	

## History Requirements

Code	Title	Hours
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4

HIST 2220	History of Technology	4
<b>Research Methods</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Introductory History</b>		
Complete one course from HIST 1001 to HIST 1999 (excluding HIST 1200/1201).		4
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1187	Introduction to Latin American History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 2000	Native American Resistance: Past and Present	
HIST 2311	Colonialism/Imperialism	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
<b>Intermediate History</b>		
Complete four HIST courses numbered 2000 or above (except HIST 2301/2302).		16
<b>Advanced History</b>		
Complete one HIST course at the 3000 level or above.		4
<b>Supporting Courses: Mathematics/Science</b>		
Complete all mathematics/science courses with a minimum of 30 semester hours.		
<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
<b>Supplemental Credit</b>		
1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	

## Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1

ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:

GE 1501	Cornerstone of Engineering 1 <sup>1</sup>	1
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1 semester hour from the following course counts toward the professional development requirement:

GE 1502	Cornerstone of Engineering 2 <sup>1</sup>	1
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**Writing Requirements**

Code	Title	Hours
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A grade of C or higher is required in each course:

ENGW 1111	First-Year Writing	4
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ENGW 3302	Advanced Writing in the Technical Professions	4
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or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

**Integrative Courses**

Code	Title	Hours
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This course is already required above and also fulfills the integrative requirement.

HIST 2220	History of Technology	
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**Required General Elective**

Code	Title	Hours
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Complete 4 semester hours of academic, nonremedial, nonrepetitive courses.

**Major GPA Requirement**

Minimum 2.000 GPA required in ME courses

Minimum 2.000 GPA required in all HIST courses

**Program Requirement**

141 total semester hours required

<sup>1</sup> Students can substitute GE 1110 and GE 1111 for GE 1501 and 1502 in approved situations.

**Plan of Study**

**Four Years, One Co-op in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 HIST 1200	1		
ENGW 1111 (WF)	4 HIST 1201	4		
GE 1000	1 MATH 1342 (FQ)	4		
GE 1501	4 PHYS 1151 (ND)	3		
MATH 1341 (FQ)	4 PHYS 1152 (AD)	1		
	PHYS 1153	1		
	17	18	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 2000	1 HIST 2301	4 Vacation	0 ME 3475 or 3480	4
MATH 2321 (FQ)	4 HIST 2302 (WD)	1	Introductory history course	4
ME 2340 (WI)	4 MATH 2341	4		
ME 2341	1 ME 2355	4		
ME 2350	4 ME 2380	4		
PHYS 1155 (ND)	3 ME 2381	0		
PHYS 1156 (AD)	1 ME 2356	1		
PHYS 1157	1			
	19	18	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 2220 (SI, DD)	4 Co-op	Co-op	MEIE 4701 (EI, CE, WI)	1
ME 3455	4		ME technical elective	4
ME 3456	1		Intermediate history course	4
ME 4505 (AD)	4			
ME 4506	1			
Pre-1800 history elective	4			
	18	0	0	9

**Year 4**

Fall	Hours Spring	Hours
ENCP 3000	1 Advanced history course	4
ENGW 3302 or 3315 (WD)	4 General elective	4
MEIE 4702 (EI, CE, WI)	5 Intermediate history course	4
Intermediate history course	4 ME technical elective	4
Intermediate history course	4	
	18	16

Total Hours: 141

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	0 Vacation	0
CHEM 1153	0 HIST 1200	1		



1008 History, Minor

ENGW 1111 (WF)	4	HIST 1201	4
GE 1000	1	MATH 1342 (FQ)	4
GE 1501	4	PHYS 1151 (ND)	3
MATH 1341 (FQ)	4	PHYS 1152 (AD)	1
		PHYS 1153	1
		17	18
			0
			0

Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 2000	1 Co-op	0 Co-op	0 Vacation	0
MATH 2321 (FQ)	4			
ME 2350	4			
PHYS 1155 (ND)	3			
PHYS 1156 (AD)	1			
PHYS 1157	1			
HIST 2301	4			
HIST 2302 (WD)	1			
		19	0	0
			0	0

Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2341	4 Co-op	Co-op	ME 2380	4
ME 2340 (WI)	4		ME 2381	0
ME 2341	1		Intermediate history course	4
ME 2355	4			
ME 2356	1			
Introductory history course	4			
		18	0	0
			0	8

Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENCP 3000	1 Co-op	Co-op	ME 3475 or 3480	4
HIST 2220 (SI, DD)	4		MEIE 4701 (EI, CE, WI)	1
ME 3455	4		General elective	4
ME 3456	1			
ME 4505 (AD)	4			
ME 4506	1			
Pre-1800 history elective	4			
		19	0	0
			0	9

Year 5

Fall	Hours Spring	Hours
ENGW 3302 or 3315 (WD)	4 Advanced history course	4
MEIE 4702 (EI, CE, WI)	5 Intermediate history course	4
Intermediate history course	4 ME technical elective	4
Intermediate history course	4 ME technical elective	4
		17
		16

Total Hours: 141

History, Minor

The history minor is designed to be flexible so that students may focus on a tailored course of study. There are no prerequisites: Complete five history courses (20 semester hours), of which at least two must be at or above the 2000 level and must be taken at Northeastern. Students are encouraged to choose a cluster of courses around a particular theme. Existing themes include global conflict and war, ancient and early modern worlds, global cultural history, public history, commodities and capitalism, and global security. Students may also focus on particular areas such as the Americas, Europe, East Asia, and Africa.

Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Required Courses

Complete five history courses, of which at least two must be taken at Northeastern and must be numbered HIST 2000 or higher. History minors must have a total of 20 semester hours in history.

GPA Requirement

2.000 GPA required in the minor

Human Services

Website (<https://cssh.northeastern.edu/humanservices/>)

The human services major prepares students for careers in social change by providing the theoretical and skill-based background necessary for practice and research. Successful students will develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at individual and structural levels. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, and internship opportunities. Upon completion of the degree, students apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development.

## Programs

### Bachelor of Arts (BA)

- Human Services (p. 1009)
- Human Services and Communication Studies (p. 142)
- Human Services and International Affairs (p. 1010)
- Human Services and Sociology (p. 1017)
- Political Science and Human Services (p. 1014)

### Bachelor of Science (BS)

- Human Services (p. 1019)
- Economics and Human Services (p. 919)
- Human Services and Criminal Justice (p. 866)
- Human Services and Sociology (p. 1027)
- American Sign Language and Human Services (p. 889)
- Political Science and Human Services (p. 1029)

### Minor

- Human Services (p. 1032)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Human Services, BA

The human services major prepares students for careers in social change by providing the theoretical and skill-based background necessary for practice and research. Upon completion of the degree, students apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Students have an opportunity to develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at individual and structural levels. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, and internship opportunities. All students declare a specialization within the major that reflects their particular focus in the field.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Human Services Major Requirements

Code	Title	Hours
HUSV 1101	Social Change and Human Services	4

HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4

### Human Services and Diverse Populations

Complete one of the following:			4
HUSV 2355	Race, Identity, Social Change, and Empowerment		
HUSV 2800	Sexual Orientation and Gender Expression		
HUSV 2960	Intercultural Studies through Human Services		

### Human Services Electives

Complete four HUSV courses. 16

### Senior Seminar and Internship

HUSV 4700	Senior Seminar in Human Services	4
HUSV 4994	Human Services Internship	6

### Human Services Major Credit Requirement

Complete 50 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

130 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1000	1	HUSV 2300	4	Vacation	0	Vacation	0
HUSV 1101	4	HSVC elective	4				
ENGW 1111	4	Elective	4				
Elective	4	MATH 1215	4				
Elective	4						
		17		16		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSVC Elective	4	Foreign language core course	4	Vacation	0	Co-op	0
HSVC Elective	4	HUSV 3570	4				
Elective	4	Elective	4				
Foreign language core course	4	Elective	4				
		EESH 2000		1			
		16		17		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315	4	Elective	4	Co-op	0

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	HUSV 2970	4	Elective	4	
	Foreign language core course	4			
	Elective	4			
		0	16	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	0 HUSV 4994	6 Elective	4 Co-op	0	
	HUSV 3900	4 Elective	4		
	HSVC Elective	4			
	Elective	4			
		0	18	8	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	0 HUSV 4700	4			
	HSVC elective	4			
	Elective	4			
	HSVC diverse population course	4			
		0	16		

Total Hours: 132

**Five Years, Three Co-ops in Spring/Summer 1**

<b>Year 1</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
HUSV 1000	1 HUSV 2300	4 Vacation	0 Vacation	0	
HUSV 1101	4 HSVC elective	4			
ENGW 1111	4 Elective	4			
Elective	4 MATH 1215	4			
Elective	4				
	17	16	0	0	
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Elective	4 Co-op	0 Co-op	0 Elective	4	
HSVC elective	4		Elective	4	
Foreign language core course	4				
Elective	4				
EESH 2000	1				
	17	0	0	8	
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Foreign language core course	4 Co-op	0 Co-op	0 Elective	4	
HUSV 3570	4		Elective	4	
Elective	4				

Elective	4				
	16	0	0	8	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
ENGW 3315	4 Co-op	0 Co-op	0 Vacation	0	
HSVC Elective	4				
HUSV 2970	4				
HSVC Elective	4				
	16	0	0	0	
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
HUSV 4994	6 HUSV 4700	4			
HUSV 3900	4 Elective	4			
Foreign language core course	4 Elective	4			
Elective	4 HSVC diverse population course	4			
	18	16			

Total Hours: 132

**Human Services and International Affairs, BA**

The combined human services and international affairs degree offers students an understanding of geopolitical realities paired with the practical skills and theory necessary to work in social services and non governmental organizations (NGOs) impacted by global issues. Students will have the opportunity to prepare for practice in international NGOs through co-ops and Dialogue of Civilization programs. This combined major will prepare students for positions within the nonprofit sector with an international focus.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Human Services Requirements**

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4

HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
or INTL 2718	Research Methods in International Affairs	
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6

**Human Services Electives**

Complete three HUSV courses. 12

**International Affairs Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	

**International Experiential Learning**

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

**International Affairs Elective**

Code	Title	Hours
Complete one of the following courses: 4		

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

**Global Dynamics**

Code	Title	Hours
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements. 4		

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	

SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War. History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	
POLS 2282	The Holocaust and Comparative Genocide	
POLS 3408	International Security	
POLS 3418	Nationalism	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 4918	Model NATO	
<i>Globalization</i>		
AFAM 2600	Issues in Race, Science, and Technology	
ANTH 2305	Global Markets and Local Culture	
ANTH 2315	Religion and Modernity	
ECON 3290	History of the Global Economy	
ECON 4635	International Economics	
HIST 2211	The World Since 1945	
HIST 2311	Colonialism/Imperialism	
INTB 3310	Cultural Aspects of International Business	

INTL 2240	Global Population and Development
INTL 2480 or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 1270 or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203 or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Regional Analysis Requirement**

Code	Title	Hours
	Complete three of the following, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:	12

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464 or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465 or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150 or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 2395	Japanese Buddhism	
<i>Europe</i>		
CLTR 1501	Introduction to French Culture	
CLTR 1503	Introduction to Italian Culture	
CLTR 1504	Cultural History of Spain	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2370	Renaissance to Enlightenment	

HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

*Russia*

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

**Human Services/International Affairs Integrative Courses**

Complete Senior Seminar in Human Services (HUSV 4700) or Senior Capstone Seminar in International Affairs (INTL 4700) or both. Note, however, that students wishing to take HUSV 4700 but not INTL 4700 must meet with an INTL adviser to obtain approval for a substitute INTL course. Similarly, students wishing to take INTL 4700 but not HUSV 4700 must meet with an HUSV adviser to obtain approval for a substitute HUSV course. Substitute courses (HUSV or INTL) must be upper-division courses and must relate to the combined major.

Code	Title	Hours
<b>Human Services</b>		
HUSV 4700	Senior Seminar in Human Services	4
<b>International Affairs</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4

**Human Services and International Affairs Combined Major Credit Requirement**

Complete 84 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 Elective	4 Vacation	0 Vacation	0
INTL 1000	1 Foreign language core course	4		
INTL 1101	4 HUSV 2300	4		
HUSV 1101	4 ECON 3290	4		
HSVC elective	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Elective	4 Vacation	Co-op	0
Foreign language core course	4 HUSV 2970	4		
INTL elective	4 HUSV 3900	4		
HSVC elective	4 INTL 3400	4		
	EESH 2000	1		
	16	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Elective	4 Elective	4 Co-op	0
	INTL elective	4 INTL elective	4	
	HSVC elective	4		
	SOCL 3440	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3315	4 Elective	4 Co-op	0
	Elective	4 INTL elective	4	
	INTL elective	4		

	HUSV 4994	6		
	0	18	8	0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	0 Elective	4		
	INTL elective	4		
	HUSV 4700	4		
	INTL 4700	4		
	0	16		

Total Hours: 132

### Five Years, Three Co-ops in Spring/Summer 1

<b>Year 1</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
ENGW 1111	4 Elective	4 Vacation	0 Vacation	0
INTL 1000	1 Foreign language core course	4		
INTL 1101	4 HUSV 2300	4		
HUSV 1101	4 ECON 3290	4		
HSVC elective	4			
	17	16	0	0

<b>Year 2</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Elective	4 Co-op	0 Co-op	0 Elective	4
Foreign language core course	4		INTL elective	4
HSVC elective	4			
HUSV 3900	4			
EESH 2000	1			
	17	0	0	8

<b>Year 3</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Elective	4 Co-op	0 Co-op	0 Elective	4
INTL elective	4		INTL elective	4
HUSV 2970	4			
HSVC elective	4			
	16	0	0	8

<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
ENGW 3315	4 Co-op	0 Co-op	0 Vacation	0
Elective	4			
INTL elective	4			
HUSV 4994	6			
	18	0	0	0

<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
HSVC policy course	4 INTL elective	4		
SOCL 3440	4 Elective	4		

Elective	4 HUSV 4700	4
INTL elective	4 INTL 4700	4
	16	16

Total Hours: 132

## Political Science and Human Services, BA

The combined degree is designed to prepare students with skills and tools to advocate for social issues at all levels of society. Human services program students prepare for fields in the social change arena (nongovernment organizations [NGOs], counseling, and political advocacy). Political science students prepare to change and shape the domestic and international political landscape in American politics, comparative politics, international relations, and public policy. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, internship, and study-abroad opportunities. Upon completion of the degree, successful students apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Successful students are positioned to pursue law school, graduate school, careers in government and the nonprofit sector, as well as in teaching, journalism, legislative or lobbying positions, public relations activities, and work in international corporations and NGOs.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

### Political Science Electives

Complete three courses in the following range: 12

POLS 2000 to POLS 5999

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 1015)
- Campaigns and Elections (p. 1015)
- Comparative Politics (p. 1016)
- Identity, Culture, and Politics (p. 1016)
- International Relations and Diplomacy (p. 1016)
- Law and Legal Studies (p. 1016)
- Public Policy (p. 1016)
- Security Studies (p. 1016)

### Supporting Course for Political Science

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following to fulfill the prerequisite for POLS 2400:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

### Human Services Requirements

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	

### Human Services Electives

Complete three HUSV courses. 12

### Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3307	Public Policy and Administration	4
HUSV 3900	Social Policy	4
<b>Research Methods</b>		
Complete one of the following:		4
POLS 2399	Research Methods in Political Science	
HUSV 2970	Research Methods for Human Services	

### Capstone and Elective

Complete one of the following options: 8

#### Option A

Complete POLS 4701 or POLS 4703 and complete one additional human services course that has not been used in previous requirements:

POLS 4701 Political Science Senior Capstone  
or POLS 4703 Senior Thesis

HUSV 2000 to HUSV 5999

#### Option B

Complete HUSV 4700 and complete one additional political science course numbered 2300 or higher that has not been used in previous requirements:

HUSV 4700 Senior Seminar in Human Services

POLS 2300 to POLS 5999

### Political Science and Human Services Combined Major Credit Requirement

Complete 86 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Concentrations

#### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

#### Campaigns and Elections Electives

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	



**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1155	4	POLS 1150	4		
ENGW 1111	4	POLS 1160	4		
HUSV 1000 or POLS 1000	1	HUSV 2300	4		
HUSV 1101	4	Foreign Language	4		
HUSV elective	4				
		17	16	0	

## Human Services and Sociology, BA

Students pursuing a combined degree in human services and sociology will integrate the theoretical understandings of these two fields to better understand organizational and group behavior and their implications for individuals and communities utilizing human services. The human services major prepares students for careers in social change by providing students with the theoretical and skill-based background necessary for practice and research. The sociology major prepares students to rigorously analyze the social, political, and economic spheres of society at the local and global levels. Students will develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at the individual and structural levels. The combined major provides students with the conceptual and practical tools to understand how various features of society affect its members as well as how people create social change.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Human Services Requirements

Code	Title	Hours
<b>Required Human Services Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6

### Research Methods

Complete option A or option B: 4-8

#### Option A

Complete the following course:

HUSV 2970 Research Methods for Human Services

#### Option B

Complete the following and one additional HUSV course:

SOCL 2321 Research Methods in Sociology

### Human Services Elective

Complete three additional HUSV courses. 12

### Senior Capstone <sup>1</sup>

HUSV 4700 Senior Seminar in Human Services 4

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EESH 2000	1 Co-op	Co-op	Foreign language	4
POLS thought	4		POLS 2400 supporting course	4
HS Diverse Populations Course	4			
Research Methods course	4			
HUSV elective	4			
	17	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 2400	4 Co-op	Co-op	POLS elective	4
Foreign Language	4		HUSV elective	4
POLS 3307	4			
HUSV 3900	4			
	16	0	0	8

Year 4		
Fall	Hours Spring	Hours
Capstone and Elective	8 POLS elective	4
HUSV4700 + 1 POLS course (Option A) or POLS4701 (Or POLS4703 and 1 HUSV course (Option B)		
POLS elective	4 HUSV 3570	4
Foreign language	4 Elective	4
	Elective	4
	16	16

Year 5	
Fall	Hours
HUSV 4994	6
Elective	4
Elective	4
	14

Total Hours: 128

<sup>1</sup> With permission of human services, the student may complete sociology capstone Senior Seminar (SOCL 4600) and substitute one advanced human services elective for Senior Seminar in Human Services (HUSV 4700).

**Sociology Requirements**

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4

<b>Introductory Electives</b>		
Complete two of the following:		8
ANTH 1101	Peoples and Cultures	
SOCL 1228	Social Problems	
SOCL 1245	Sociology of Poverty	
SOCL 1246	Environment and Society	
SOCL 1255	Sociology of the Family	
SOCL 1260	Gender in a Changing Society	
SOCL 1295	Drugs and Society	

<b>Intermediate-Level Elective</b>		
Complete two of the following:		8
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
ANTH 2305	Global Markets and Local Culture	
SOCL 2358	Current Issues in Cities and Suburbs	
SOCL 3241	Violence and Society	
SOCL 3441	Sociology of Health and Illness	
SOCL 3270	Race and Ethnic Relations	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 3468	Social Movements	
SOCL 3487	Applied Sociology: Practice and Theory	

<b>Advanced-Level Elective</b>		
Complete one of the following:		4
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	
ANTH 4580	Special Topics in Anthropology	
SOCL 4518	Law and Society in a Digital World	
SOCL 4520	Race, Class, and Gender	
SOCL 4580	Special Topics in Sociology	

<b>Senior Seminar <sup>2</sup></b>		
SOCL 4600	Senior Seminar	4

<sup>2</sup> With permission of the sociology head adviser, the student may complete human services capstone Senior Seminar in Human Services (HUSV 4700) and substitute one advanced sociology elective for Senior Seminar (SOCL 4600).

**Human Services/Sociology Integrative Course**

Code	Title	Hours
HUSV 2355	Race, Identity, Social Change, and Empowerment	4

**Sociology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Human Services and Sociology Combined Major Credit Requirement**

Complete a minimum of 78 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study  
Four Years, No Co-op**

<b>Year 1</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
HUSV 1101	4	MATH 1215	4	Vacation	0
ENGW 1111	4	HUSV 2300	4	Vacation	0
SOCL 1101	4	SOCL Introductory Elective 2	4		
SOCL Introductory Elective 1	4	HSVC elective	4		
		16	16	0	0

<b>Year 2</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
Elective	4	AMSL 2102	4	Vacation	0
Elective	4	DEAF 2700	4	Vacation	0
HUSV Elective	4	Elective	4		
HUSV Elective	4	Elective	4		
		16	16	0	0

<b>Year 3</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
HUSV 2355	4	Research (choose one of the following)	4	Vacation	0
HUSV 3570	4	HUSV 2970	4	Vacation	0
SOCL 2320 (elective)	4	SOCL 2321	4		
SOCL 3300	4	Elective	4		
		SOCL Intermediate-Level Elective	4		
		16	16	0	0

		ENGW 3315	4		
		16	16	0	0

**Year 4**

Fall	Hours Spring	Hours
HUSV 3900	4 HUSV 4700	4
HUSV 4994	6 SOCL 4600	4
Elective	4 Elective	4
SOCL Advanced- Level Elective	4 Elective	4
18		16

Total Hours: 130

**Human Services, BS**

The human services major prepares students for careers in social change by providing the theoretical and skill-based background necessary for practice and research. Upon completion of the degree, students apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Students have an opportunity to develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at individual and structural levels. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, and internship opportunities.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Human Services Major Requirements**

Code	Title	Hours
<b>Human Services Overview</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	
<b>Human Services Electives</b>		

Complete six HUSV courses. 24

<b>Senior Seminar and Internship</b>		
HUSV 4700	Senior Seminar in Human Services	4
HUSV 4994	Human Services Internship	6

**Human Services Major Credit Requirement**

Complete 58 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

130 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

<b>Year 1</b>					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
HUSV 1000	1 HUSV 2300	4 Vacation	0 Vacation	0	
HUSV 1101	4 HSVC elective	4			
ENGW 1111	4 Elective	4			
Elective	4 MATH 1215	4			
Elective	4				
17		16	0	0	
<b>Year 2</b>					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
HSVC Elective	4 HUSV 3570	4 Vacation	0 Co-op	0	
HSVC Elective	4 HSVC Elective	4			
Elective	4 Elective	4			
Elective	4 Elective	4			
EESH 2000		1			
16		17	0	0	
<b>Year 3</b>					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	0 ENGW 3315	4 Elective	4 Co-op	0	
HUSV 2970		4 Elective	4		
HSVC Elective		4			
Elective		4			
0		16	8	0	
<b>Year 4</b>					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	0 HUSV 3900	4 Elective	4 Co-op	0	
HUSV 4994		6 Elective	4		
Elective		4			
HSVC Elective		4			
0		18	8	0	

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 HUSV 4700	4
	HSVC elective	4
	HSVC diverse population course	4
	Elective	4
	0	16

Total Hours: 132

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HUSV 1000	1 HUSV 2300	4 Vacation	0 Vacation	0
HUSV 1101	4 Elective	4		
ENGW 1111	4 Elective	4		
Elective	4 MATH 1215	4		
Elective	4			
	17	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSVC Elective	4 Co-op	0 Co-op	0 Elective	4
HSVC Elective	4		Elective	4
Elective	4			
Elective	4			
EESH 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 Elective	4
HUSV 3570	4		Elective	4
ENGW 3315	4			
Elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HUSV 2970	4 Co-op	0 Co-op	0 Vacation	0
Elective	4			
HSVC Elective	4			
HSVC elective	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
HUSV 4994	6 HUSV 4700	4
HUSV 3900	4 HSVC Elective	4

HSVC Elective	4 HSVC diverse population course	4
Elective	4 Elective	4
	18	16

Total Hours: 132

**American Sign Language and Human Services, BS**

Website (<https://cssh.northeastern.edu/asl/>)

**Lori Whynot, PhD, CI, CT, SC: L, CoreCHI, NAATI**

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American Sign Language (ASL) is estimated to be the third most used language in the United States and its visibility in society is on the rise in recent years. There are roughly 500,00 to 2,000,000 Deaf, DeafBlind, or hard of hearing people in the United States who use ASL as their primary language, and a large number of non-Deaf signers use or learn ASL as a second language. A disproportionate percentage of Deaf people experience socioeconomic disadvantage due to their dual status as members of both a cultural linguistic minority group and a disability group. As a result, there is a broad societal misunderstanding of Deaf, signing people's minority language and culture—their lived experience—which creates barriers to educational and economic opportunity. While state and federal legislation enables improved civic engagement by Deaf, hard of hearing, and DeafBlind individuals, there is continued need to elevate quality of life, equity, and the rich contributions of the diverse members of the American Deaf communities.

The Bachelor of Science in American Sign Language and Human Services is an integrated program of study dedicated to preparing individuals to interact in a positive and supportive manner with members of the American Deaf Community. The curriculum is designed to assist students in acquiring competence in ASL, developing an understanding of the diverse American Deaf communities and Deaf culture, and applying linguistic and sociocultural skills and knowledge to the discipline of human services, in order to contribute to civic engagement and social justice for Deaf people.

The combined major offers a wide array of courses as well as volunteer, internship, and practicum opportunities to learn from Deaf people's lived experiences through community and industry connections. The program provides opportunities that will allow students an opportunity to acquire the linguistic, cognitive, and ethical decision-making skills as well as the sociocultural knowledge necessary to work in Deaf Community, sign-language-related disciplines. Students pursuing a combined major in human services integrate their foundation in ASL and the Deaf Community with human service organizations.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## American Sign Language Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
AMSL 3102	Advanced ASL 2	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Linguistics</b>		
LING 1150	Introduction to Language and Linguistics	4
DEAF 2700	ASL Linguistics	4
<b>Performance Interpreting</b>		
INTP 3500	The Interpreting Profession	2
<b>Interpreting</b>		
INTP 3510	Interpreting Inquiry Texts	4

## Human Services Requirements

Code	Title	Hours
<b>Human Services</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4700	Senior Seminar in Human Services	4
<b>Human Services Electives</b>		
Complete two courses in the HUSV subject area.		8

## Integrative Requirement

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
HUSV 4994	Human Services Internship	6

## Combined Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses

Minimum 2.500 overall GPA required

## Combined Major Credit Requirement

Complete 88 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

## Plan of Study

### Four Years, No Co-op

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
AMSL 1101	4	AMSL 1102	4	Vacation	0
DEAF 1500	4	MATH 1215	4	Vacation	0
HUSV 1101	4	HSVC elective	4		
ENGW 1111	4	Elective	4		
		16		16	
				0	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
AMSL 2101	4	AMSL 2102	4	Vacation	0
LING 1150	4	DEAF 2700	4	Vacation	0
Elective	4	HUSV 2300	4		
INTP 3500	2	Elective	4		
		14		16	
				0	
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
DEAF 2500	4	HUSV 2970	4	Vacation	0
INTP 3510	4	Elective	4		
AMSL 3101	4	ENGW 3315	4		
HSVC elective	4	AMSL 3102	4		
		16		16	
				0	
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
HUSV 3900	4	HUSV 4700	4		
HUSV 4994	6	INTP 4940	4		
Elective	4	Elective	4		
Elective	4	Elective	4		
		18		16	

Total Hours: 128

## Economics and Human Services, BS

This combined degree in human services and economics provides students with the opportunity to obtain the skills and knowledge related to each of these areas of study and an in-depth understanding of how these fields inform and impact each other. The study of economics provides students with an understanding of how individuals, firms, governments, and other organizations behave and interact with each other at both a macro and micro level. The study and practice of human services organizations focus on the impact of economic conditions on individuals, families, and communities. Human services organizations and policies use economic theory to inform

responses to societal and economic challenges. Students will pair this knowledge with an understanding of how economics uses data and economic reasoning to help decision makers, businesses, and governments develop better public policy. This degree provides students with both the theoretical and practical curricula utilizing interdisciplinary thinking about inequality and nonprofit/government responses.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Overview and Co-op Courses

Code	Title	Hours
HUSV 1000 or ECON 1000	Human Services at Northeastern Economics at Northeastern	1
EESH 2000	Professional Development for Co-op	1

### Economics Requirements

Code	Title	Hours
<b>Economic Requirements</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Economics Elective Courses</b>		
Complete three economics elective courses found in the following ranges, with no more than one at the 1000 level:		12
ECON 1200–ECON 1999		
ECON 3000–ECON 4689		
ECON 4900–ECON 4999		
ECON 5200–ECON 5999		

### Human Services Requirements

Code	Title	Hours
<b>Human Services Overview</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4

HUSV 2355	Race, Identity, Social Change, and Empowerment
HUSV 2800	Sexual Orientation and Gender Expression
HUSV 2960	Intercultural Studies through Human Services

### Human Services Elective Courses

Complete three additional HUSV courses.	12
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### Supporting Courses

Code	Title	Hours
Complete one of the following:		
MATH 1231	Calculus for Business and Economics	4
MATH 1241	Calculus 1	
MATH 1245	Calculus with Applications	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
Complete one of the following:		
CS 1100	Computer Science and Its Applications	4
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MISM 2510	Fundamentals of Information Analytics	

### Capstone

Complete one of the following capstone/senior seminar options:

Code	Title	Hours
<b>Economics Capstone Option</b>		
ECON 4692	Senior Economics Seminar	4
Complete one additional HUSV elective.		4
<b>Human Services Capstone Option</b>		
HUSV 4700	Senior Seminar in Human Services	4
Complete one additional ECON elective at the 3000 level or above.		4

### Integrative Course

Code	Title	Hours
Complete one of the following:		
ECON 3412	Women's Labor and the Economy	
ECON 3413	Health Economics and Healthcare Policy	
ECON 3416	Behavioral Economics	
ECON 3410	Labor Economics	

### Economics Major Grade Requirement

Grades in the following four economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	
ECON 2316	Microeconomic Theory	
ECON 2350	Statistics	
ECON 2560	Applied Econometrics	

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

##### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 MATH 1231, 1241, 1245, 1251, 1340, or 1341	4 Elective	4 Elective	4
HUSV 1000 or ECON 1000	1 CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4 ECON 2315	4 Elective	4
HUSV 1101	4 HUSV 2300	4		
ECON 1115	4 ECON 1116	4		
Elective	4			
	17	16	8	8

##### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HS diverse populations course	4 HUSV 2970	4 Elective	4 Co-op	
HUSV 2351	HUSV 3570	4 Elective	4	
HUSV 2800	ECON 2350	4		
HUSV 2961	ECON elective 2	4		
ECON 2316	4 EESH 2000	1		
HUSV elective 1	4			
ECON elective 1	4			
	16	17	8	0

##### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ECON 2560	4 HUSV elective 2	4 Co-op	
	HUSV 3900	4 ENGW 3308 or 3315	4	
	ECON elective 3	4		
	HUSV 4994	6		
	0	18	8	0

##### Year 4

Fall	Hours Spring	Hours
Co-op	Integrative course	4
	ECON 3411	
	ECON 3413	
	ECON 3411	

ECON 3916  
(Economics of Race)

Capstone and elective 8

HUSV 4700 + 1 ECON course (Option A) or ECON 4692 and 1 HUSV course (Option B)

Elective 4

0 16

Total Hours: 132

## Human Services and Communication Studies, BA

The intersection of communications studies and human services practices spans several domains. Nonprofit organizations depend on communications professionals to effectively represent their work to the community, partner organizations, and funders. Knowledge and skills developed in communications studies also service human services professionals working in the political realm as they seek to promote impactful social policies.

The human services major is designed to prepare students for careers in social change by providing them with the theoretical and skill-based background necessary for practice and research. Students will develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at the individual and structural levels. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, and internship opportunities.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).



**Human Services Requirements**

Code	Title	Hours
<b>Human Services Overview</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	
<b>Human Services Elective</b>		
Complete two additional HUSV courses.		8

**Communication Studies Requirements**

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Courses</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	

COMM 3532	Theories of Conflict and Negotiation
COMM 4535	Nonverbal Social Interaction
COMM 4605	Youth and Communication Technology
COMM 4631	Crisis Communication and Image Management

**Communication Studies Electives**

Complete three COMM courses 12

**Capstone**

Complete one of the following capstone/senior seminar options:

Code	Title	Hours
<b>Communications Capstone Option</b>		
Complete one of the following courses:		4
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4625	Online Communities	
Complete one additional HUSV elective.		4
<b>Human Services Capstone Option</b>		
HUSV 4700	Senior Seminar in Human Services	4
Complete one course in the following range:		4
COMM 3000 to COMM 4999		

**Integrative Course**

Code	Title	Hours
HUSV 3590	Nonprofit Communications	4

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Sample Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000 or HUSV 1000	1	MATH 1215	4	Communication Studies foundation course	4	Communication Studies cluster course	4
HUSV 1101	4	HUSV 2300	4	Communication Studies elective	4	Communication Studies elective	4
ENGW 1111	4	HUSV Elective	4				
COMM 1101	4	COMM 1112 or 2301	4				
Elective	4						
		17		16		8	
						8	

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HUSV 2970	4 CO-OP	CO-OP	Communication Studies writing-intensive	4
Communicati Studies elective	4		Elective	4
Elective	4			
HUSV Elective	4			
EEAM 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Human Services Diverse Populations	4 CO-OP	CO-OP	Communication Studies writing-intensive	4
HUSV 3570	4		Elective	4
ENGW 3315	4			
Elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours
HUSV 3900	4 Capstone	4
HUSV 3590	4 Elective	4
Additional COMM/ HUSV Elective	4 Elective	4
Elective	4 HUSV 4994	6
	16	18

Total Hours: 132

**Human Services and Criminal Justice, BS**

A combined major in human services and criminal justice appeals to students interested in the intersection of social and legal issues and institutions. The human services major prepares students for careers in social change by providing students with the theoretical and skill-based background necessary for practice and research. Students with criminal justice course work gain a rigorous interdisciplinary and experiential education in the causes and consequences of crime and the responses of criminal justice. The addition of human services course work complements a criminal justice perspective and considers the role of social services and community-based organizations to prevent, intervene, and treat the causes and consequences of crime. The degree allows students to combine interests in the justice system, political advocacy, and community development. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, and internship opportunities.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Human Services Requirements**

Code	Title	Hours
<b>Required Human Services Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
<b>Human Services Internship</b>		
HUSV 4994	Human Services Internship	6
<b>Human Services Electives</b>		
Complete four additional HUSV courses.		16

**Criminal Justice Requirements**

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4

**Current Crime and Justice Issues**

These courses introduce students to topical issues related to crime and justice.

Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	

**Understanding and Experiencing Criminal Justice Institutions and Systems**

How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.

Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	

CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	

**Crime Problems**

The following courses offer students a deeper look at a range of crime problems.

Complete one of the following: 4

CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	

**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3700	Analyzing and Using Data on Crime and Justice	4
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**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	

**Digital Skills**

Successful students develop digital skills and master digital tools useful for careers related to crime and justice. Students choose one of two courses (each has a required lab). The computer science course introduces students to spreadsheets and databases. The data science course introduces students to programming with data.

Complete one of the following (and the appropriate lab): 4-5

CS 1100 and CS 1101	Computer Science and Its Applications and Lab for CS 1100	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum (Social Science practicum section)	

**Criminal Justice Electives**

Rounding out knowledge of crime and justice.

Complete two additional criminal justice electives. One must be from the 3000, 4000 or 5000-level 8

**Additional Courses**

Code	Title	Hours
CRIM 1000 or HUSV 1000	Criminal Justice at Northeastern Human Services at Northeastern	1

**Research Methods**

CRIM 3600 or HUSV 2970	Criminal Justice Research Methods Research Methods for Human Services	4
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**Cooperative Education**

Students going on co-op should take:

EESH 2000	Professional Development for Co-op	1
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Students returning from co-op should take:

CRIM 3000	Co-op Integration Seminar 2	1
CRIM 4000	Co-op Integration Seminar 3	1

**Additional Elective**

Complete one additional course in either CRIM or HUSV. 4

Integrative Course

Code	Title	Hours
CRIM 4949 or HUSV 4700	Senior Capstone Seminar Senior Seminar in Human Services	4

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1000	1	CRIM 1300, 1400, 1500, or 1700	4	Vacation	0	Vacation	0
CRIM 1100	4	HUSV 2300	4				
HUSV 1101	4	CS 1100	4				
ENGW 1111	4	HSVC elective	4				
MATH 1215	4						
		17		16		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1110	4	EESH 2000	1	Vacation	0	Co-op	0
CRIM 1120	4	CJ concentration elective	4				
HSVC intermediate/advanced undergraduate elective	4	CJ concentration elective	4				
Elective	4	Elective	4				
		16		17		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CRIM 3000	1	CRIM 3600	4	Co-op	0
		Elective		8		4	
		HUSV 3900		4			
		HSVC organization course		4			
		0		17		8	

Year 4					Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CRIM 4000	1 Elective	4 Co-op	0	CRIM 3600	4 Co-op	0 Co-op	0 Vacation	0
	CJ system-wide elective	4 Elective	4		HSVC organization course	4			
	ENGW 3315	4			CJ system-wide elective	4			
	Elective	4			Elective	4			
	CRIM 3700	4			CRIM 4000	1			
	0	17	8	0		17	0	0	0
Year 5					Year 5				
Fall	Hours Spring	Hours			Fall	Hours Spring	Hours		
Co-op	0 HUSV 4994	6			CRIM 3700	4 Elective	4		
	Elective	4			HUSV 4994	6 Elective	4		
	CRIM 4949 or HUSV 4700	4			ENGW 3315	4 CRIM 4949 or HUSV 4700	4		
	Elective	4			Elective	4 Elective	4		
	0	18				18	16		

Total Hours: 134

Total Hours: 134

## Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HUSV 1000	1 CRIM 1300, 1400, 1500, or 1700	4 Vacation	0 Vacation	0
CRIM 1100	4 HUSV 2300	4		
HUSV 1101	4 CS 1100	4		
ENGW 1111	4 HSVC elective	4		
MATH 1215	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CRIM 1110	4 Co-op	0 Co-op	0 Elective	4
CRIM 1120	4		Elective	4
HUSV 2300	4			
Elective	4			
EESH 2000	1			
	17	0	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CJ concentration elective	4 Co-op	0 Co-op	0 Elective	4
CJ concentration elective	4		HUSV 3900	4
Elective	4			
Elective	4			
CRIM 3000	1			
	17	0	0	8

## Human Services and Sociology, BS

Students pursuing a combined degree in human services and sociology will integrate the theoretical understandings of these two fields to better understand organizational and group behavior and their implications for individuals and communities utilizing human services. The human services major prepares students for careers in social change by providing students with the theoretical and skill-based background necessary for practice and research. The sociology major prepares students to rigorously analyze the social, political, and economic spheres of society at the local and global levels. Students will develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at the individual and structural levels. The combined major provides students with the conceptual and practical tools to understand how various features of society affect its members as well as how people create social change.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Human Services Requirements

Code	Title	Hours
<b>Human Services Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4

HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6

**Human Services Electives**

Complete three additional HUSV courses.	12
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**Research Methods**

Complete option A or option B:	4-8
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*Option A*

HUSV 2970	Research Methods for Human Services	
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*Option B*

SOCL 2321	Research Methods in Sociology	
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and

Complete an additional HUSV Elective	
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**Senior Capstone <sup>1</sup>**

HUSV 4700	Senior Seminar in Human Services	4
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<sup>1</sup> With permission of human services, the student may complete sociology capstone Senior Seminar (SOCL 4600) and substitute one advanced human services elective for Senior Seminar in Human Services (HUSV 4700).

**Sociology Requirements**

Code	Title	Hours
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**Required Sociology Courses**

SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4

**Introductory Electives**

Complete two of the following:	8
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SOCL 1228	Social Problems	
SOCL 1245	Sociology of Poverty	
SOCL 1246	Environment and Society	
SOCL 1255	Sociology of the Family	
SOCL 1260	Gender in a Changing Society	
SOCL 1295	Drugs and Society	
ANTH 1101	Peoples and Cultures	

**Intermediate-Level Elective**

Complete two of the following:	8
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SOCL 2358	Current Issues in Cities and Suburbs	
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
ANTH 2305	Global Markets and Local Culture	
ANTH 2315	Religion and Modernity	
SOCL 3241	Violence and Society	
SOCL 3270	Race and Ethnic Relations	
SOCL 3441	Sociology of Health and Illness	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 3468	Social Movements	
SOCL 3487	Applied Sociology: Practice and Theory	

**Advanced-Level Elective**

Complete one of the following:	4
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SOCL 4518	Law and Society in a Digital World	
SOCL 4520	Race, Class, and Gender	

SOCL 4580	Special Topics in Sociology	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	
ANTH 4580	Special Topics in Anthropology	

**Senior Seminar <sup>2</sup>**

SOCL 4600	Senior Seminar	4
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<sup>2</sup> With permission of the sociology head adviser, the student may complete Senior Seminar in Human Services (HUSV 4700) and substitute one advanced sociology elective for Senior Seminar (SOCL 4600).

**Human Services/Sociology Integrative Course**

Code	Title	Hours
HUSV 2355	Race, Identity, Social Change, and Empowerment	4

**Sociology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Human Services and Sociology Combined Major Credit Requirement**

Complete 78 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, No Co-op**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1101	4	MATH 1215	4	Vacation	0	Vacation	0
ENGW 1111	4	HUSV 2300	4				
SOCL 1101	4	SOCL Introductory Elective 2	4				
SOCL Introductory Elective 1	4	HSVC elective	4				
		16		16		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV Elective	4	HUSV 2355	4	Vacation	0	Vacation	0
HUSV Elective	4	SOCL Intermediate Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		16		16		0	

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 2320	4 HUSV 2970 or SOCL 2321	4 Vacation	0 Vacation	0
SOCL 3300	4 Elective	4		
Elective	4 SOCL Intermediate- Level Elective	4		
HUSV 3570	4 ENGW 3315	4		
	16	16	0	0

**Year 4**

Fall	Hours Spring	Hours
HUSV 3900	4 HUSV 4700	4
HUSV 4994	6 SOCL 4600	4
Elective	4 Elective	4
SOCL Advanced- Level Elective	4 Elective	4
	18	16

Total Hours: 130

**Political Science and Human Services, BS**

The combined degree seeks to prepare students with skills and tools to advocate for social issues at all levels of society. Human services program students are well positioned to pursue fields in the social change arena (nongovernment organizations, or NGOs; counseling; and political advocacy). Political science students are also well positioned to change and shape the domestic and international political landscape in American politics, comparative politics, international relations, and public policy. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, internship, and study-abroad opportunities. Upon completion of the degree, students can apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Successful students are poised to pursue law school, graduate school, careers in government and the nonprofit sector, as well as in teaching, journalism, legislative or lobbying positions, public relations activities, and work in international corporations and NGOs.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 46).

**Political Science Requirements**

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete three courses in the following range:		12
POLS 2000 to POLS 5999		

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record:

- American Political Institutions (p. 1030)
- Campaigns and Elections (p. 1030)
- Comparative Politics (p. 1030)
- Identity, Culture, and Politics (p. 1030)
- International Relations and Diplomacy (p. 1031)
- Law and Legal Studies (p. 1031)
- Public Policy (p. 1031)
- Security Studies (p. 1031)

**Supporting Course for Political Science**

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following to fulfill the prerequisite for POLS 2400:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

**Human Services Requirements**

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	

HUSV 2960	Intercultural Studies through Human Services	
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**Human Services Electives**

Complete three HUSV courses.	12
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**Integrative Requirements**

Code	Title	Hours
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**Integrative Courses**

POLS 3307	Public Policy and Administration	4
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HUSV 3900	Social Policy	4
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**Research Methods**

Complete one of the following:	4
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POLS 2399	Research Methods in Political Science	
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HUSV 2970	Research Methods for Human Services	
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**Capstone and Elective**

Complete one of the following options:	8
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*Option A*

Complete POLS 4701 or POLS 4703 and complete one additional human services course that has not been used in previous requirements:

POLS 4701	Political Science Senior Capstone	
or POLS 4703	Senior Thesis	
HUSV 1100 to HUSV 5999		

*Option B*

Complete HUSV 4700 and complete one additional political science course numbered 2000 or higher that has not been used in previous requirements:

HUSV 4700	Senior Seminar in Human Services	
POLS 2000 to POLS 5999		

**Political Science and Human Services Combined Major Credit Requirement**

Complete 86 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
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Complete four of the following:	16
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POLS 2350	State and Local Politics	
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POLS 3300	The U.S. Congress	
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POLS 3302	Judicial Process and Behavior	
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POLS 3307	Public Policy and Administration	
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POLS 3310	Public Opinion, Voting, and Elections	
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POLS 3160	Campaign Strategy	
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**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
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**Required Courses**

POLS 3160	Campaign Strategy	4
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POLS 3302	Judicial Process and Behavior	4
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**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:	8
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POLS 2345	Urban Policies and Politics	
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POLS 2350	State and Local Politics	
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POLS 2355	Intergovernmental Relations	
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POLS 3310	Public Opinion, Voting, and Elections	
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POLS 3320	Politics and Mass Media	
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POLS 3304	Presidential Nominating Process	
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**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
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**Theoretical Requirement**

Complete one of the following:	4
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POLS 2370	Religion and Politics	
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POLS 3418	Nationalism	
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POLS 3430	Revolution, Civil War, and Insurrection	
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POLS 3487	Politics of Developing Nations	
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**Regional Requirements**

Complete two of the following:	8
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POLS 3435	Politics and Governance of Europe and the European Union	
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POLS 3465	Government and Politics in the Middle East	
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POLS 3470	Arab-Israeli Conflict	
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**Experiential/Practicum Requirement**

Complete one of the following:	4
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POLS 4915	Model Arab League	
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POLS 4918	Model NATO	
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POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	
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**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
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**Core Course**

POLS 3418	Nationalism	4
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**Electives**

Complete three of the following:	12
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POLS 2368	Music and Politics in America and Abroad	
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POLS 2370	Religion and Politics	
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POLS 2375	Gender and Politics	
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POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
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POLS 3324	Law and Society	
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**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	

POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study****Year 1**

Fall	Hours	Spring	Hours
HUSV 1000 or POLS 1000	1	POLS 1150	4
POLS 1155	4	POLS 1160	4
ENGW 1111	4	HUSV 2300	4
HUSV 1101	4	HUSV elective	4
Elective	4		
		17	16

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EESH 2000	1	Co-op		Co-op		POLS 2400 supporting course	4
POLS thought	4					HUSV elective	4
HUSV diverse population course	4						
HUSV 3570	4						
Research methods course	4						
		17	0	0			8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS elective	4	Co-op		Co-op		POLS elective	4
POLS 2400	4					HUSV elective	4
POLS 3307	4						
HUSV 3900	4						
		16	0	0			8

**Year 4**

Fall	Hours	Spring	Hours
POLS elective	4	Elective	4
Capstone and elective	8	Elective	4



1032 Human Services, Minor

HUSV 4700 and one POLS course (Option A) or POLS 4701 (or POLS 4703) and one HUSV course (Option B)	Elective	4
Elective	4	Elective 4
	16	16

**Year 5**

Fall	Hours
HUSV 4994	6
Elective	4
Elective	4
	14

Total Hours: 128

**Human Services, Minor**

The human services minor is designed to prepare students for careers in social change by providing the theoretical and skill-based background necessary for practice and research. Students have an opportunity to develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at individual and structural levels. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning. The minor provides a nice complement to students who are interested in the role of social change through counseling, nonprofits interventions, or social policy as it relates to their major.

The minor in human services may help lead to careers in many diverse areas of social change or to graduate programs in social work, health, counseling, rehabilitation, and law. Human services professions are among the fastest-growing occupations in the nation. Society recognizes the necessity, value, and reward of dedicating time and energy to helping people and communities. Combining a human services minor with any major gives students the opportunity to learn about the individual, community, and political interventions for social change.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Course**

Code	Title	Hours
HUSV 1101	Social Change and Human Services	4

**Human Services Electives**

Code	Title	Hours
Complete four HUSV courses.		16
HUSV 2300	Counseling in Human Services	

HUSV 2340	Mindfulness in Mental Health
HUSV 2320	Techniques in Individual and Group Counseling
HUSV 2355	Race, Identity, Social Change, and Empowerment
HUSV 2401	Food Justice and Community Development
HUSV 2800	Sexual Orientation and Gender Expression
HUSV 2970	Research Methods for Human Services
HUSV 2960	Intercultural Studies through Human Services
HUSV 3520	Child Intervention and Treatment
HUSV 3540	Addiction and Recovery
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change
HUSV 3580	Sexual Violence: Counseling, Programs, and Policy
HUSV 3590	Nonprofit Communications
HUSV 3900	Social Policy
HUSV 4994	Human Services Internship

**GPA Requirement**

2.000 GPA required in the minor

**International Affairs**

Website (<http://www.northeastern.edu/internationalaffairs/>)

International affairs is an interdisciplinary major in the College of Social Sciences and Humanities. The program is designed to prepare undergraduate students with the knowledge and skills needed to thrive and lead in a diverse world society while promoting global citizenship and social responsibility.

**Academic Progression Standards**

It is recommended that students majoring in international affairs maintain a minimum 3.000 grade-point average until the beginning of their international experience in order to be eligible for the majority of the study-abroad options.

**Cooperative Education**

Cooperative education is recommended for all students pursuing a major or combined major in international affairs.

**Programs**

**Bachelor of Arts (BA)**

- International Affairs (p. 1033)
- International Affairs with African Studies Concentration (p. 1036)
- International Affairs with Asian Studies Concentration (p. 1039)
- International Affairs with European Studies Concentration (p. 1041)
- International Affairs with Latin American Studies Concentration (p. 1044)
- International Affairs with Middle East Studies Concentration (p. 1046)
- Environmental Studies and International Affairs (p. 719)
- Human Services and International Affairs (p. 1010)
- International Affairs and Criminal Justice (p. 844)

- International Affairs and Cultural Anthropology (p. 1061)
- International Affairs and Economics (p. 906)
- International Affairs and History (p. 994)
- International Affairs and Religious Studies (p. 1074)
- Political Science and International Affairs (p. 1079)
- Sociology and International Affairs (p. 1084)
- Spanish and International Affairs (p. 881)

## Bachelor of Science (BS)

- International Affairs and International Business (p. 283)

## Minors

- International Affairs (p. 1092)
- Middle East and Mediterranean Studies (p. 1094)

## International Affairs, BA

The international affairs program provides a rigorous inter- and multidisciplinary curriculum while also giving students flexibility to select the courses and disciplines that interest them most. The curriculum fosters an awareness of global affairs and international issues since the early 20th century through diverse and cross-disciplinary theories of interstate relations: conflict, cooperation, hierarchies; civil society, transnational advocacy networks, global social movements; and state-society relations: democracy, authoritarianism, inequalities, citizenship.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
ANTH 1101	Peoples and Cultures	4
POLS 1160	International Relations	4
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	

ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

## Senior Seminar/Experiential Learning

INTL 4700	Senior Capstone Seminar in International Affairs	4
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## International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

## International Affairs Electives

Code	Title	Hours
Complete one of the following courses:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

## Global Dynamics

Code	Title	Hours
Complete two of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		8

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	

LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 3060	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### Regional Analysis Requirement

Complete three of the following courses, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	

INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

**Asia**

ANTH 4350	Ethnography of Southeast Asia
ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**International Affairs Major Credit/GPA Requirement**

Complete 52 semester hours in the major with a 2.000 GPA.

**Upper-Division Electives**

Complete three general electives at 3000 level or above that do not double-count with the major or NUPath.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	MATH 1215	4	Vacation	0	Vacation	0
INTL 1101	4	HIST 2211	4				
ENGW 1111	4	Foreign language course	4				
Foreign language course	4	POLS 1160	4				
ANTH 1101	4						
	17		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115 or 1116	4	INTL elective	4	Vacation	0	Co-op	0

INTL 2718	4 Foreign language course	4			
Elective	4 INTL elective	4			
Foreign language course	4 Elective	4			
	EESH 2000	1			
		16	17	0	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	0 INTL 3400	4 INTL elective	4 Co-op	0	
	ENGW 3315	4 Elective	4		
	INTL elective	4			
	Upper-division elective	4			
		0	16	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	0 INTL elective	4 Elective	4 Co-op	0	
	INTL elective	4 Elective	4		
	Upper-division elective	4			
	Elective	4			
		0	16	8	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	0 INTL 4700	4			
	Elective	4			
	Upper-division elective	4			
	Elective	4			
		0	16		

Total Hours: 130

### Five Years, Three Co-ops in Spring/Summer 1

<b>Year 1</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
INTL 1000	1 MATH 1215	4 Vacation	0 Vacation	0	
INTL 1101	4 HIST 2211	4			
ENGW 1111	4 Foreign language course	4			
Foreign language course	4 POLS 1160	4			
ANTH 1101	4				
		17	16	0	0
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
INTL 2718	4 Co-op	0 Co-op	0 INTL elective	4	
INTL elective	4		Elective	4	

Foreign language course	4				
Elective	4				
EESH 2000	1				
		17	0	0	8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
ECON 1115 or 1116	4 Co-op	0 Co-op	0 Elective	4	
Elective	4		Elective	4	
INTL elective	4				
Foreign language course	4				
		16	0	0	8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
INTL 3400	4 Co-op	0 Co-op	0 Vacation	0	
ENGW 3315	4				
INTL elective	4				
Upper-division elective	4				
		16	0	0	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
INTL elective	4 INTL 4700	4			
INTL elective	4 Elective	4			
Upper-division elective	4 Upper-division elective	4			
Elective	4 Elective	4			
		16	16		
Total Hours: 130					

### International Affairs with African Studies Concentration, BA

This combined major fosters an awareness of global affairs related to Africa since the early 20th century through diverse and cross-disciplinary theories of interstate relations: conflict, cooperation, hierarchies; civil society, transnational advocacy networks, global social movements; and state-society relations: democracy, authoritarianism, inequalities, citizenship.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

*Note:* Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

## International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
AFRS 1101	Introduction to African Studies	4
ANTH 1101	Peoples and Cultures	4
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
INTL 1101	Globalization and International Affairs	4
INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4

### African Studies Regional Analysis Courses

Complete four of the following, at least two of which must be numbered 2000 or above: 16

INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	

### Senior Seminar/Experiential Learning

INTL 4700	Senior Capstone Seminar in International Affairs	4
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### International Experience in Africa

Complete at least one "international semester" via study abroad, international internship, two Dialogue of Civilizations programs, or international co-op. International students may be exempt from the semester abroad (subject to adviser approval). If they do not complete an international semester, they must participate in Model African Union.

## Foreign Language Requirement

Complete language coursework in Kiswahili, French, or Arabic through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

## Global Dynamics Requirement

Code	Title	Hours
Complete one of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War. History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	

POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<b>Globalization</b>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility

or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International Affairs Major Credit/GPA Requirement**

Complete 60 semester hours in the major with a 2.000 GPA.

**Upper-Division Electives**

Complete three general electives numbered 3000 or above.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	AFRS 1101	4	Vacation		Vacation	
INTL 1101	4	HIST 2211	4				
ENGW 1111	4	POLS 1160	4				
ANTH 1101	4	Foreign Language Course	4				
Foreign Language Course	4						
		17		16		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115	4	POLS 1155	4	Vacation		Co-op	
or 1116							
INTL 2718	4	POLS 1156	0				
Elective	4	Elective	4				
Foreign Language Course	4	Elective	4				
		Foreign Language Course	4				
				4			

EESH 2000		1			
	16	17	0	0	
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	INTL 3400	4 Elective	4 Co-op		
	ENGW 3315	4 Elective	4		
	Elective	4			
	Elective	4			
	0	16	8	0	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	Elective	4 Elective	4 Co-op		
	Elective	4 Elective	4		
	Elective	4			
	Elective	4			
	0	16	8	0	
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	INTL 4700	4			
	Elective	4			
	Elective	4			
	Elective	4			
	0	16			

Total Hours: 130

### International Affairs with Asian Studies Concentration, BA

This combined major fosters an awareness of global affairs related to Asia since the early 20th century through diverse and cross-disciplinary theories of interstate relations: conflict, cooperation, hierarchies; civil society, transnational advocacy networks, global social movements; and state-society relations: democracy, authoritarianism, inequalities, citizenship.

#### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

#### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

#### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

*Note:* Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

### International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics or regional analysis requirements. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
ANTH 1101	Peoples and Cultures	4
ASNS 1150	East Asian Studies	4
or HIST 1150	East Asian Studies	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
INTL 1101	Globalization and International Affairs	4
INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4

#### Asian Studies Regional Analysis Courses

Select courses taken during a study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.

Complete four of the following, at least two of which must be numbered 2000 or above: 16

ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 2395	Japanese Buddhism	

#### Senior Seminar/Experiential Learning

INTL 4700	Senior Capstone Seminar in International Affairs	4
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#### International Experience in Asia

Complete at least one "international semester" via study abroad, international internship, two Dialogue of Civilizations programs, or international co-op. International students may be exempt from the semester abroad (subject to adviser approval).

#### Foreign Language Requirement



Complete language coursework in Chinese or Japanese through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

## Global Dynamics Requirement

**Code** **Title** **Hours**  
Complete one of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.

Code	Title	Hours	
<i>Environment</i>			
ENVR 1110	Global Climate Change	4	
ENVR 2515	Sustainable Development		
INTL 5100	Climate and Development		
INTL 5268	International Environmental Policy		
or PPUA 5268	International Environmental Policy		
SOCL 1246	Environment and Society		
<i>Law, Diplomacy, and Global Governance</i>			
COMM 2303	Global and Intercultural Communication		
INTL 2480	Women and World Politics		
or WMNS 2480	Women and World Politics		
INTL 3520	Global Political Economy		
POLS 1155	Comparative Politics		
POLS 1160	International Relations		
POLS 2370	Religion and Politics		
POLS 3405	International Political Economy		
POLS 3406	International Law		
POLS 3409	Global Governance		
POLS 4910	Model United Nations		
<i>Human Rights and Social Justice</i>			
HIST 2373	Gender and Sexuality in World History		
INTL 2480	Women and World Politics		
or WMNS 2480	Women and World Politics		
LPSC 2302	Global Human Rights: A Social and Economic Perspective		
PHIL 5001	Global Justice		
<i>Conflict and Security</i>			
CRIM 3060	Political Crime and Terrorism		
HIST 1206	Drug Trade and Drug War: History, Security, Culture		
HIST 1389	History of Espionage 1: Antiquity to World War II		
HIST 1390	History of Espionage 2: Cold War Spies		
HIST 3330	The Global Cold War		
HIST 3334	Assassinations in World History		
HIST 3335	History of Modern Terrorism		
INTL 3430	Revolution, Civil War, and Insurrection		
INTL 3450	Security, Culture, Power		
JRNL 3300	Covering Conflicts: Peace, War, and the Media		
or INTL 3300	Covering Conflicts: Peace, War, and the Media		
PHIL 5001	Global Justice		
POLS 2282	The Holocaust and Comparative Genocide		

POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility

INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### International Affairs Major Credit/GPA Requirement

Complete 60 semester hours in the major with a 2.000 GPA.

### Upper-Division Electives

Complete three general electives numbered 3000 or above.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 HIST 2211	4 Vacation	Vacation	
INTL 1101	4 POLS 1160	4		
ENGW 1111	4 ASNS 1150 or HIST 1150	4		
Foreign Language Course	4 Foreign Language Course	4		
ANTH 1101	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ECON 1115 or 1116	4 POLS 1155 and POLS 1156	4 Vacation	Co-op	
INTL 2718	4 Elective	4		
Elective	4 Foreign Language Course	4		
Foreign Language Course	4 Elective	4		
	EESH 2000	1		
	16	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	INTL 3400	4 Elective	4 Co-op	
	ENGW 3315	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Elective	4 Elective	4 Co-op	
	Elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	INTL 4700	4
	Elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 130

### International Affairs with European Studies Concentration, BA

This combined major fosters an awareness of global affairs related to Europe since the early 20th century through diverse and cross-disciplinary theories of interstate relations: conflict, cooperation, hierarchies; civil society, transnational advocacy networks, global social movements; and state-society relations: democracy, authoritarianism, inequalities, citizenship.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

*Note:* Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

## International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
ANTH 1101	Peoples and Cultures	4
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
INTL 1101	Globalization and International Affairs	4
INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 3435	Politics and Governance of Europe and the European Union	4

### European Studies Regional Analysis Courses

Select courses taken during a study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.

Complete four of the following, at least two of which must be numbered 2000 or above: 16

CLTR 1501	Introduction to French Culture	
CLTR 1503	Introduction to Italian Culture	
CLTR 1504	Cultural History of Spain	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
HIST 2376	Britain and the British Empire	
HIST 4946	Independent Field Research Abroad: Central Europe	
POLS 3435	Politics and Governance of Europe and the European Union	

### Senior Seminar/Experiential Learning

INTL 4700	Senior Capstone Seminar in International Affairs	
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### International Experience in Europe

Complete at least one “international semester” via study abroad, international internship, two Dialogue of Civilizations programs, or international co-op. International students may be exempt from the semester abroad (subject to adviser approval). If they do not complete an international semester, they must participate in either Model European Union or Model NATO.

### Foreign Language Requirement

Complete language coursework in French, German, Greek, Italian, Portuguese, or Spanish through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

## Global Dynamics Requirement

**Code** **Title** **Hours**  
Complete one of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements. 4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	
POLS 2282	The Holocaust and Comparative Genocide	
POLS 3408	International Security	
POLS 3418	Nationalism	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	

POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health

POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### International Affairs Major Credit/GPA Requirement

Complete 60 semester hours in the major with a 2.000 GPA.

### Upper-Division Electives

Complete three general electives numbered 3000 or above.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirements

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 HIST 2211	4 Vacation	Vacation	
INTL 1101	4 POLS 1160	4		
ENGW 1111	4 Foreign Language Course	4		
ANTH 1101	4 ECON 1115 or 1116	4		
Foreign Language Course	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1155	4 POLS 3435	4 Vacation	Co-op	
POLS 1156	0 Foreign Language Course	4		
INTL 2718	4 Elective	4		
Elective	4 Elective	4		
Foreign language course	4 EESH 2000	1		
	16	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	INTL 3400	4 Elective	4 Co-op	
	ENGW 3315	4 Elective	4	
	Elective	4		

	Elective	4			
		0	16	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	Elective	4	Elective	4	Co-op
	Elective	4	Elective	4	
	Elective	4			
	Elective	4			
		0	16	8	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	INTL 4700	4			
	Elective	4			
	Elective	4			
	Elective	4			
		0	16		

Total Hours: 130

## International Affairs with Latin American Studies Concentration, BA

This combined major fosters an awareness of global affairs related to Latin America since the early 20th century through diverse and cross-disciplinary theories of interstate relations: conflict, cooperation, hierarchies; civil society, transnational advocacy networks, global social movements; and state-society relations: democracy, authoritarianism, inequalities, citizenship.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

*Note:* Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

### International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
ANTH 1101	Peoples and Cultures	4

ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
INTL 1101	Globalization and International Affairs	4
INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
LACS 1220	Latino, Latin American, and Caribbean Studies	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4

### Latin American Studies Regional Analysis Courses

Select courses taken during a study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.

Complete four of the following, at least two of which must be numbered 2000 or above: 16

ANTH 4500	Latin American Society and Development	
CLTR 1240	Latin American Film	
CLTR 1261	Caribbean Literature and Culture	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3720	Literature, Arts, and Poverty in Latin America	
CLTR 4655	Latin American Literature	
HIST 1187	Introduction to Latin American History	
HIST 2025	Latin American History through Film	
LACS 1220	Latino, Latin American, and Caribbean Studies	

### Senior Seminar/Experiential Learning

INTL 4700	Senior Capstone Seminar in International Affairs	4
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### International Experience in Latin America

Complete at least one "international semester" via study abroad, international internship, two Dialogue of Civilizations programs, or international co-op. International students may be exempt from the semester abroad (subject to adviser approval).

### Foreign Language Requirement

Complete language coursework in Portuguese or Spanish through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

### Global Dynamics Requirement

Code	Title	Hours
Complete one of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268 or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480 or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480 or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	
POLS 2282	The Holocaust and Comparative Genocide	
POLS 3408	International Security	
POLS 3418	Nationalism	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 4918	Model NATO	
<i>Globalization</i>		
AFAM 2600	Issues in Race, Science, and Technology	
ANTH 2305	Global Markets and Local Culture	
ANTH 2315	Religion and Modernity	
ECON 3290	History of the Global Economy	
ECON 4635	International Economics	
HIST 2211	The World Since 1945	
HIST 2311	Colonialism/Imperialism	
INTB 3310	Cultural Aspects of International Business	
INTL 2240	Global Population and Development	
INTL 2480 or WMNS 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 3520	Global Political Economy	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
SOCL 3465	Globalization and the Evolution of Human Societies	
<i>Population, Migration, and Diaspora</i>		
AFRS 1270 or PHTH 1270	Introduction to Global Health	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
ANTH 1101	Peoples and Cultures	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
INTL 2240	Global Population and Development	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
<i>Development</i>		
ANTH 2305	Global Markets and Local Culture	
ECON 1291	Development Economics	
ECON 3404	International Food Policy	
ENTR 2206	Global Social Enterprise	
ENVR 2515	Sustainable Development	
INTB 1203 or INTB 1209	International Business and Global Social Responsibility	
INTL 2240	Global Population and Development	
INTL 3520	Global Political Economy	
INTL 5100	Climate and Development	
PHTH 5230	Global Health	
POLS 3487	Politics of Developing Nations	
<i>Communication and Media</i>		
COMM 2303	Global and Intercultural Communication	
INTB 3310	Cultural Aspects of International Business	

JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International Affairs Major Credit/GPA Requirement**

Complete 60 semester hours in the major with a 2.000 GPA.

**Upper-Division Electives**

Complete three general electives numbered 3000 or above.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 LACS 1220	4 Vacation	Vacation	
INTL 1101	4 HIST 2211	4		
ENGW 1111	4 POLS 1160	4		
Foreign Language Course	4 Foreign Language Course	4		
ANTH 1101	4			
	17	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ECON 1115 or 1116	4 POLS 1155	4 Vacation	Co-op	
INTL 2718	4 POLS 1156	0		
Elective	4 Elective	4		
Foreign Language Course	4 Foreign Language Course	4		
	Elective	4		
	EESH 2000	1		
	16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	INTL 3400	4 Elective	4 Co-op	
	ENGW 3315	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Elective	4 Elective	4 Co-op	
	Elective	4 Elective	4	
	Elective	4		

	Elective	4		
	0	16	8	0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	INTL 4700	4		
	Elective	4		
	Elective	4		
	Elective	4		
	0	16		

Total Hours: 130

**International Affairs with Middle East Studies Concentration, BA**

This combined major fosters an awareness of global affairs related to the Middle East and North Africa since the early 20th century and in the aftermath of the Arab Spring. This is accomplished through diverse and cross-disciplinary theories of interstate relations: conflict, cooperation, hierarchies; civil society, transnational advocacy networks, global social movements; and state-society relations: democracy, authoritarianism, inequalities, citizenship.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

*Note:* Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

**International Affairs Major Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
ANTH 1101	Peoples and Cultures	4
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
INTL 1101	Globalization and International Affairs	4
INTL 1160	Middle East Studies	4
or HIST 1290	Modern Middle East	

INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4

### Middle East Regional Analysis Courses

Select courses taken during a study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.

Complete four of the following, at least two of which must be numbered 2000 or above: <sup>1</sup> 16

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture

### Senior Seminar/Experiential Learning

INTL 4700	Senior Capstone Seminar in International Affairs	4
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### International Experience in the Middle East

Complete at least one "international semester" via study abroad, international internship, two Dialogue of Civilizations programs, or international co-op. International students may be exempt from the semester abroad (subject to adviser approval). If they do not complete an international semester, they must either complete a Dialogue of Civilizations program, co-op, or internship or participate in Model United Nations or Model Arab League.

### Foreign Language Requirement

Complete language coursework in Arabic or Hebrew through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

<sup>1</sup> Middle East Studies (INTL 1160) may not be used as a regional analysis course.

## Global Dynamics Requirement

Code	Title	Hours
	Complete one of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.	4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	

ENVR 2515	Sustainable Development
INTL 5100	Climate and Development
INTL 5268	International Environmental Policy
or PPUA 5268	International Environmental Policy
SOCL 1246	Environment and Society

### Law, Diplomacy, and Global Governance

COMM 2303	Global and Intercultural Communication
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3520	Global Political Economy
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations

### Human Rights and Social Justice

HIST 2373	Gender and Sexuality in World History
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

### Conflict and Security

CRIM 3060	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO

### Globalization

AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy



ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media

JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International Affairs Major Credit/GPA Requirement**

Complete 60 semester hours in the major with a 2.000 GPA.

**Upper-Division Electives**

Complete three general electives numbered 3000 or above.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
INTL 1000	1 INTL 1160 or HIST 1290	4 Vacation	Vacation		
INTL 1101	4 HIST 2211	4			
ENGW 1111	4 Foreign Language Course	4			
ANTH 1101	4 POLS 1160	4			
Foreign Language Course	4				
		17	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ECON 1115 or 1116	4 POLS 1155	4 Vacation	Co-op		
INTL 2718	4 POLS 1156	0			
Foreign Language Course	4 Foreign Language Course	4			
Elective	4 Elective	4			
	Elective	4			
	EESH 2000	1			
		16	17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	INTL 3400	4 Elective	4 Co-op		
	ENGW 3315	4 Elective	4		
	Elective	4			
	Elective	4			
		0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Elective	4 Elective	4 Co-op	
	Elective	4 Elective	4	
	Elective	4		

Elective	4			
0	16	8	0	
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	INTL 4700	4		
	Elective	4		
	Elective	4		
	Elective	4		
0	16			

Total Hours: 130

## Environmental Studies and International Affairs, BA

Through this combined major, successful undergraduates will develop an awareness of the international issues that influence the scientific, cultural, societal, political, and economic aspects of the world's environmental problems and the ways in which such environmental challenges can be ameliorated and/or solved.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Environmental Studies Requirements

Code	Title	Hours
<b>Introductory Courses</b>		
Choose one introductory science:		4-5
ENVR 1101	Environmental Science	
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	
Choose one introductory social science		4
ANTH 1101	Peoples and Cultures	
ENVR 2401	Food Justice and Community Development	
PHIL 1180	Environmental Ethics	
SOCL 1246	Environment and Society	
<b>Scientific Foundations of Environmental Systems:</b>		
Complete one of the following:		4
ENVR 1110	Global Climate Change	
ENVR 3150	Food Security and Sustainability	

ENVR 3200	Water Resources	
<b>Human Foundations of Environmental Systems:</b>		
Complete one of the following:		4
ENVR 2515	Sustainable Development	
PHTH 2414	Environmental Health	
SOCL 4522	Environmental Justice	
<b>Skills Course:</b>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
<b>Electives:</b>		
Complete four of the following, three of which must be at the 3000 level or higher:		16
ARTG 5110	Information Design History	
BUSN 1110	Fundamentals of Business	
BUSN 3110	The Consulting Environment	
CIVE 5280	Remote Sensing of the Environment	
COMM 3500	Environmental Issues, Communication, and the Media	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 3466	Disease Ecology	
EEMB 3700	Desert Ecology	
ENTR 3520	Impact Investing and Social Finance	
ENVR 5210	Environmental Planning	
ENVR 5563	Advanced Spatial Analysis	
ENVR 3701	Energy in the Desert Ecosystem	
FINA 2720	Sustainability in the Business Environment	
JRNL 3650	Science Writing	
LPSC 2301	Introduction to Law, Policy, and Society	
PHIL 1180	Environmental Ethics	
PHTH 1270	Introduction to Global Health	
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	
POLS 2395	Environmental Politics and Policy	
PPUA 5268	International Environmental Policy	
SOCL 2485	Environment, Technology, and Society	

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4

### International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

### International Affairs Elective

Code	Title	Hours
Complete one of the following courses:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

### Global Dynamics Requirement

Code	Title	Hours
	Complete two of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.	8

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	

INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture

ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

**Communication and Media**

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Regional Analysis Requirement**

Code	Title	Hours
	Complete two regional analysis courses, both of which must be in one region, from the following lists. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.	8

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	

CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean

PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<i>Russia</i>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Integrative Courses**

Code	Title	Hours
<b>Integrative Courses</b>		
ECON 1711 or ECON 3290 or ECON 3423	Economics of Sustainability History of the Global Economy Environmental Economics	4
INTL 4700 or ENVS 4997	Senior Capstone Seminar in International Affairs Senior Thesis	4
PHTH 4120 or INTL 5100 or ENVR 3151 or ENVR 4000 or ENVR 3201 or ENVR 3202 or HIST 2211 or HIST 2311	Global Perspectives on Discrimination and Health Climate and Development Food Sustainability in the Mediterranean - Abroad Science Communication and Professional Development Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia Coastal Sustainability: The Blue Economy of the Gulf of Maine The World Since 1945 Colonialism/Imperialism	4

**Environmental Studies and International Affairs Combined Major Credit Requirement**

Complete 81 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 ENVR 1110	4 Vacation	0 Vacation	0
ENVR 1101	4 ENVR 2515	4		
INTL 1101	4 POLS 1160	4		

SOCL 1246	4 Foreign language course	4		
ENVR 1000	1			
		17	16	0
				0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 2211	4 EESC 2000	1 Vacation	0 Co-op	0
ENVR 3300 and ENVR 3301	5 Foreign language course	4		
Foreign language course	4 ENVR 3300 and ENVR 3301	5		
INAF regional analysis course 1	4 INAF global dynamics course 1	4		
	INAF regional analysis course 2	4		
		17	18	0
				0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 International experiential learning	16 Elective	4 Co-op	0
		Quantitative methods course	4-5	
		0	16	8-9
				0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ECON 3423	4 INAF global dynamics course 2	4 Co-op	0
		ENGW 3308 or 3315	4 INTL 4700	4
		INTL 3400	4	
		ENVR elective; 1 of 4		
		0	12	8
				0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 ENVR Elective; 2 of 4	4
		ENVR elective; 3 of 4
		4
		INAF global dynamics course 3
		4

ENVR elective; 4 of 4	4
0	16

Total Hours: 128-129

## Human Services and International Affairs, BA

The combined human services and international affairs degree offers students an understanding of geopolitical realities paired with the practical skills and theory necessary to work in social services and non governmental organizations (NGOs) impacted by global issues. Students will have the opportunity to prepare for practice in international NGOs through co-ops and Dialogue of Civilization programs. This combined major will prepare students for positions within the nonprofit sector with an international focus.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Human Services Requirements

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
or INTL 2718	Research Methods in International Affairs	
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6

### Human Services Electives

Complete three HUSV courses. 12

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4

ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	

### International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

### International Affairs Elective

Code	Title	Hours
Complete one of the following courses:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

### Global Dynamics

Code	Title	Hours
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	

### Human Rights and Social Justice

HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	

LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 3060	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### Regional Analysis Requirement

Code	Title	Hours
		12

Complete three of the following, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	

ENTR 3308	Business Economic History of South Africa
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa
<i>Asia</i>	
ANTH 4350	Ethnography of Southeast Asia
ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism
<i>Europe</i>	
CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union
<i>Latin America</i>	
ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film

LACS 1220	Latino, Latin American, and Caribbean Studies
<i>Middle East</i>	
CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<i>Russia</i>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

### International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

### Human Services/International Affairs Integrative Courses

Complete Senior Seminar in Human Services (HUSV 4700) or Senior Capstone Seminar in International Affairs (INTL 4700) or both. Note, however, that students wishing to take HUSV 4700 but not INTL 4700 must meet with an INTL adviser to obtain approval for a substitute INTL course. Similarly, students wishing to take INTL 4700 but not HUSV 4700 must meet with an HUSV adviser to obtain approval for a substitute HUSV course. Substitute courses (HUSV or INTL) must be upper-division courses and must relate to the combined major.

Code	Title	Hours
<b>Human Services</b>		
HUSV 4700	Senior Seminar in Human Services	4
<b>International Affairs</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4

### Human Services and International Affairs Combined Major Credit Requirement

Complete 84 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required



**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 Elective	4 Vacation	0 Vacation	0
INTL 1000	1 Foreign language core course	4		
INTL 1101	4 HUSV 2300	4		
HUSV 1101	4 ECON 3290	4		
HSVC elective	4			
	17	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Elective	4 Vacation	Co-op	0
Foreign language core course	4 HUSV 2970	4		
INTL elective	4 HUSV 3900	4		
HSVC elective	4 INTL 3400	4		
	EESH 2000	1		
	16	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Elective	4 Elective	4 Co-op	0
	INTL elective	4 INTL elective	4	
	HSVC elective	4		
	SOCL 3440	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3315	4 Elective	4 Co-op	0
	Elective	4 INTL elective	4	
	INTL elective	4		
	HUSV 4994	6		
	0	18	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	0 Elective	4
	INTL elective	4
	HUSV 4700	4
	INTL 4700	4
	0	16

Total Hours: 132

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 Elective	4 Vacation	0 Vacation	0
INTL 1000	1 Foreign language core course	4		
INTL 1101	4 HUSV 2300	4		
HUSV 1101	4 ECON 3290	4		
HSVC elective	4			
	17	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 Elective	4
Foreign language core course	4		INTL elective	4
HSVC elective	4			
HUSV 3900	4			
EESH 2000	1			
	17	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 Elective	4
INTL elective	4		INTL elective	4
HUSV 2970	4			
HSVC elective	4			
	16	0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3315	4 Co-op	0 Co-op	0 Vacation	0
Elective	4			
INTL elective	4			
HUSV 4994	6			
	18	0	0	0

Year 5		
Fall	Hours Spring	Hours
HSVC policy course	4 INTL elective	4
SOCL 3440	4 Elective	4
Elective	4 HUSV 4700	4
INTL elective	4 INTL 4700	4
	16	16

Total Hours: 132

**International Affairs and Criminal Justice, BA**

This combined major fosters an awareness of crime and justice issues within their international, transnational, and global contexts since the early 20th century. The scope and sequence of international affairs courses provide students with a foundation in topics such as interstate

relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; and state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship). Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Upon graduation, students are equipped with the skills and knowledge needed to work across national cultures in fields that relate to understanding and addressing criminal behavior.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### International Affairs Requirements

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
ANTH 1101	Peoples and Cultures	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

### International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

### International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

### International Affairs Elective

Code	Title	Hours
Complete one of the following: 4		
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	

INTL 3520	Global Political Economy
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
INTL 5100	Climate and Development

### Global Dynamics

Code	Title	Hours
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	

POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480 or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270 or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility

or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### Regional Analysis Requirement

Code	Title	Hours
	Complete two of the following, both of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:	8

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464 or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465 or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150 or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	

HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

*Europe*

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

*Russia*

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**Criminal Justice Requirements**

Code	Title	Hours
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**Introduction to Crime, Law, and the Justice System**

What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.

CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4

**Current Crime and Justice Issues**

These courses introduce students to topical issues related to crime and justice.

Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	

**Crime Problems and Criminal Justice Institutions**

The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students a deeper look at a range of crime problems.

Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
CRIM 3010	Criminal Violence	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	
CRIM 3540	Addiction and Recovery	

**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3700	Analyzing and Using Data on Crime and Justice	4
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**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following:		4
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CRIM 3110	Gender, Crime, and Justice
CRIM 3120	Race, Crime, and Justice

**Criminal Justice Electives**

Rounding out knowledge of crime and justice.	
Complete two additional criminal justice electives from the 3000, 4000 or 5000-level.	8

**Introduction and Methods Options**

Code	Title	Hours
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<b>Introduction</b>		
Complete one of the following:		1
INTL 1000	International Affairs at Northeastern	
CRIM 1000	Criminal Justice at Northeastern	

<b>Research Methods</b>		
Complete one of the following:		4
INTL 2718	Research Methods in International Affairs	
CRIM 3600	Criminal Justice Research Methods	

**Supporting Courses**

Code	Title	Hours
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<b>Computer or Data Science</b>		
Complete one of the following:		4
CS 1100	Computer Science and Its Applications	
DS 2000	Programming with Data	

<b>Co-op Integration Requirements</b>		
Complete before the first co-op:		1
EESH 2000	Professional Development for Co-op	
Complete after the first co-op:		1
CRIM 3000	Co-op Integration Seminar 2	
Complete after the second co-op:		1
CRIM 4000	Co-op Integration Seminar 3	

**Integrative Requirement**

Code	Title	Hours
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<b>Integrative Course and Capstone</b>		
CRIM 3030	Global Criminology	4
INTL 4700	Senior Capstone Seminar in International Affairs	4
or CRIM 4949	Senior Capstone Seminar	

**Combined Major Credit Requirement**

Complete 84 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000 or CRIM 1000	1 ANTH 1101, HIST 2211, or HIST 2311	4 Elective	4 Elective (Dialogue of Civilizations possible)	4
INTL 1101	4 ECON 1115 or 1116	4 Elective	4 Elective (Dialogue of Civilizations possible)	4
ENGW 1111	4 CRIM thematic elective	4		
CRIM 1100	4 Foreign language course	4		
Foreign language course	4			
17		16	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1155	4 Co-op	Co-op	CRIM elective	4
CRIM 1110	4		INTL elective	4
CRIM 1120	4			
Foreign language course	4			
EESH 2000	1			
17		0	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 2718 or CRIM 3600	4 Co-op	Co-op	INTL elective (Dialogue of Civilizations possible)	4
INTL 3400	4		Elective (Dialogue of Civilizations possible)	4
Foreign language course	4			
CRIM 1700	4			
CRIM 3000	1			
17		0	0	8
Year 4				
Fall	Hours Spring	Hours		
CRIM 3030	4 INTL 4700 or CRIM 4949	4		
CRIM 3700	4 INTL elective	4		
CRIM elective	4 CRIM elective	4		
INTL elective	4 CRIM elective	4		

CRIM 4000	1	
	17	16
Total Hours: 132		

## International Affairs and Cultural Anthropology, BA

This combined major offers undergraduates the opportunity to develop an awareness of contemporary cultures within their international, transnational, and global contexts since the early 20th century. The combined major addresses diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; and state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
ECON 1115	Principles of Macroeconomics	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	

### International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two approved short-term programs abroad.

### International Affairs Elective

Code	Title	Hours
Please complete one of the following:		
		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	

INTL 3200	Cities in a Global Context
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
INTL 3520	Global Political Economy
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
INTL 5100	Climate and Development

### Global Dynamics

**Code Title Hours**  
Complete one of the following (courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements): 4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	

### *Law, Diplomacy, and Global Governance*

COMM 2303	Global and Intercultural Communication
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3520	Global Political Economy
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations

### *Human Rights and Social Justice*

HIST 2373	Gender and Sexuality in World History
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

### *Conflict and Security*

CRIM 3060	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War. History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media

or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development

INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### Regional Analysis Requirement

Code	Title	Hours
	Complete two regional analysis courses, both of which must be in one region, from the following lists. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty advisor. See department for additional courses:	8

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	

HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

*Europe*

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict

POLS 4915	Model Arab League
<i>Russia</i>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Anthropology Major Requirements**

*Note:* At least nine anthropology courses must be taken to complete the international affairs and cultural anthropology program.

Code	Title	Hours
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 3421	Foundations of Anthropological Theory	4
<b>Anthropology Electives</b>		
Complete three courses in the following range, one of which must be numbered 4000 or above (one study-abroad course may also count toward this requirement with prior permission from the department):		12
ANTH 2300 to ANTH 4999		
<b>Advanced Area Courses</b>		
Complete two of the following:		8
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

**Integrative Requirements**

*Note:* If international affairs courses are taken in both the research methods and capstone areas, then an additional anthropology elective is required.

Code	Title	Hours
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
or ANTH 3410 Ethnographic Field Experience		
<b>Global Markets</b>		
ANTH 2305	Global Markets and Local Culture	4
<b>Capstone</b>		
ANTH 4600	Senior Seminar	4
or INTL 4700 Senior Capstone Seminar in International Affairs		

Students taking Senior Seminar (ANTH 4600) must complete either a one-semester senior project, which they would do in the context of ANTH 4600, or a two-semester senior thesis, which would require them to also enroll in a fall semester directed study.

**Anthropology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**International Affairs and Anthropology Combined Major Credit Requirement**

Complete 76 semester hours in the major.



### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 POLS 1160	4 Vacation	Vacation	
INTL 1101	4 ECON 1115 or HIST 2211	4		
ENGW 1111	4 ANTH 2305	4		
ANTH 1101	4 Elective	4		
Foreign language core course	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 2718 or ANTH 3410	4 ANTH 3421	4 Vacation	Co-op	
Elective	4 Elective	4		
Elective	4 Elective	4		
Foreign language core course	4 Elective	4		
	16	16	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	INTL 3400	4 Elective	4 Co-op	
	ENGW 3315	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Elective	4 Elective	4 Co-op	
	Elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	INTL 4700 or ANTH 4600	4		
	Elective	4		
	Elective	4		
	Elective	4		
	0	16		

Total Hours: 129

#### Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 POLS 1160	4 Vacation	Vacation	
INTL 1101	4 ECON 1115 or HIST 2211	4		
ENGW 1111	4 ANTH 2305	4		
ANTH 1101	4 Elective	4		
Foreign language core course	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 2718 or ANTH 3410	4 Co-op	Co-op	Vacation	
ANTH 3421	4			
Elective	4			
Foreign language core course	4			
	16	0	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 3400	4 Co-op	Co-op	Elective	4
ENGW 3315	4		Elective	4
Elective	4			
Elective	4			
	16	0	0	8
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	Co-op	Elective	4
Elective	4		Elective	4
Elective	4			
Elective	4			
	16	0	0	8
Year 5				
Fall	Hours Spring	Hours		
Elective	4 INTL 4700 or ANTH 4600	4		
Elective	4 Elective	4		
Elective	4 Elective	4		
Elective	4 Elective	4		
	16	16		

Total Hours: 129

### International Affairs and Economics, BA

This combined major fosters an awareness of global affairs and international economic issues since the early 20th century through diverse and cross-disciplinary theories of economic development and growth; states, societies, and markets (the intersection of politics and economics); and the role of states, civil societies, and social

movements in crafting or addressing economic strategies, inequalities, and citizenship rights.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>International Affairs/Economics at Northeastern</b>		
INTL 1000 or ECON 1000	International Affairs at Northeastern Economics at Northeastern	1

#### Required Courses

Code	Title	Hours
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
ANTH 1101 or HIST 2211 or HIST 2311	Peoples and Cultures The World Since 1945 Colonialism/Imperialism	4

#### International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

### International Affairs Elective

Code	Title	Hours
Complete one of the following courses:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

### Global Dynamics Requirement

Code	Title	Hours
Complete two of the following with one course numbered 2000 or above. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		8

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268 or PPUA 5268	International Environmental Policy International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	
POLS 2282	The Holocaust and Comparative Genocide	
POLS 3408	International Security	
POLS 3418	Nationalism	
POLS 3420	U.S. National Security Policy	

POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development

PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### Regional Analysis Requirement

Code	Title	Hours
		12

Complete three of the following, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty advisor. See department for additional courses:

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	

PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism
<i>Europe</i>	
CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union
<i>Latin America</i>	
ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies
<i>Middle East</i>	
CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<i>Russia</i>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

## International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

## Economics Requirements

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 3520	History of Economic Thought	4

## Economics Electives

Code	Title	Hours
Complete 3 Economics elective courses from the following ranges with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy international affairs requirements, courses used to satisfy the integrative courses requirement, and ECON 3520 may not be used as Economics electives.		12
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

## Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Methods</b>		
CS 1100	Computer Science and Its Applications	4
or INTL 2718	Research Methods in International Affairs	
or MISM 2510	Fundamentals of Information Analytics	
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	

## Integrative Requirements

Code	Title	Hours
<b>Development Economics</b>		
ECON 1291	Development Economics	4
<b>Senior Seminar</b>		
Complete one of the following with a thesis or project that integrates both international affairs and economics:		
ECON 4692	Senior Economics Seminar	4
or INTL 4700	Senior Capstone Seminar in International Affairs	

### International Affairs and Economics Combined-Major GPA

Grades in the following Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4

### International Affairs and Economics Combined-Major Credit Requirement

Complete 88 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 MATH 1231, 1241, 1245, 1251, 1340, or 1341	4 ECON elective 1	4 Elective	4
INTL 1101	4 ECON 1116	4 INTL Elective	4 Elective	4
ECON 1115	4 POLS 1160	4		
ENGW 1111	4 HIST 2211	4		
Foreign language core course	4			
	17	16	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1100, MISM 2510, or DS 2000 and DS 2001	4 ECON 2350	4 ECON elective 2	4 Co-op	0
ECON 2315	4 INTL elective	4 Elective	4	
INTL elective	4 Foreign language core course	4		
Foreign language core course	4 ECON 2316	4		
	16	16	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 INTL 3400	4 Elective	4 Co-op	0
	Elective	4 INTL elective	4	
	ECON 3520	4		
	INTL Elective	4		
	0	16	8	0

Year 4		
Fall	Hours Spring	Hours
Co-op	0 ECON elective 3	4
	INTL elective	4
	INTL Elective	4
	ECON 4692	4
	or INTL 4700	
	0	16

Total Hours: 129

### International Affairs and History, BA

This combined major fosters an historically contingent awareness of global affairs and international policy issues since the early 20th century through diverse and cross-disciplinary theories of interstate relations, state-society relations, the future of democracy, the nature of citizenship and rights, the origins and conduct of war, the foundations of racial and ethnic conflict and tolerance, and poverty and prosperity. This combined major highlights the importance of understanding the intersection between global issues and local traditions and is designed to prepare students to be politically, culturally, historically, and linguistically sensitive to their interaction.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement.

Code	Title	Hours
<b>International Affairs/History at Northeastern</b>		
INTL 1000 or HIST 1000	International Affairs at Northeastern History at Northeastern	1
<b>International Affairs Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
ECON 1115	Principles of Macroeconomics	4
POLS 1160	International Relations	4
POLS 1155 or ANTH 1101	Comparative Politics Peoples and Cultures	4

**International Experiential Learning**

Complete at least one “international semester” via study abroad, international internship, international co-op, or two short-term programs.

**International Affairs Elective**

Code	Title	Hours
Complete one of the following:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

**Global Dynamics Requirement**

Code	Title	Hours
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	

HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804

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INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development

INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility

INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business

JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Regional Analysis Requirement**

**Code**                      **Title**    **Hours**  
 Complete two of the following, both of which must be in the same region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:

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**Code**                      **Title**    **Hours**

<i>Africa</i>		
AFRS 2307	Africa Today	8
AFRS 2900	Swahili, Culture, and Politics in Kenya	8
AFRS 3460	Contemporary Government and Politics in Africa	8
AFRS 4939	Community Health, Culture, and Development in Kenya	8
ANTH 4510	Anthropology of Africa	8
ENTR 3308	Business Economic History of South Africa	8
INTL 2464	Natural Resources and Sustainable Development	8
or AFRS 2464	Natural Resources and Sustainable Development	8

INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

*Asia*

ANTH 4350	Ethnography of Southeast Asia
ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

*Europe*

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East

HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

*Russia*

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

### International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

### History Major Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one course from HIST 1001 to HIST 1999 (excluding 1200/1201).		4
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1187	Introduction to Latin American History	
HIST 1389	History of Espionage I: Antiquity to World War II	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 2311	Colonialism/Imperialism	
HIST 2330	Colonial and Revolutionary America	

**Intermediate History Cluster**

Complete four history courses numbered 2000 or above (excluding 2301, 2302, and 2330). 16

**Advanced History**

Complete one history course at the 3000 level or above. 4

### International Affairs and History Integrative Requirements

Code	Title	Hours
One course from the Research Methods and Capstone requirements must come from history.		
<b>Research Methods</b>		
Complete one of the following:		4 - 5
INTL 2718	Research Methods in International Affairs	

HIST 2301 and HIST 2302	The History Seminar and Historical Writing	
<b>Capstone</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4
or HIST 4701	Capstone Seminar	
<b>Integrative Course</b>		
HIST 2011	Capitalism and Business: A Global History	4
or HIST 2311	Colonialism/Imperialism	

### International Affairs and History Combined Major Credit Requirement

Complete 76 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	POLS 1160	4	INTL elective	4	Elective	4
INTL 1101	4	ENGW 1111	4	HIST elective	4	Elective	4
HIST 1200	1	HIST elective	4				
HIST 1201	4	Foreign language course	4				
ECON 1115	4						
Foreign language course	4						
		18		16		8	
							8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1155	4	Co-op		Co-op		INTL elective	4
INTL 2718	4					Elective	4
HIST elective	4						
Foreign language course	4						
EESH 2000	1						
		17		0		0	
							8
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 3400	4	Co-op		Co-op		INTL elective	4
Foreign language course	4					Elective	4
HIST elective	4						
ENGW 3315	4						
		16		0		0	
							8



## Year 4

Fall	Hours Spring	Hours
Integrative course	4 INTL 4700	4
INTL elective	4 HIST elective	4
HIST elective	4 HIST elective	4
Elective	4 Elective	4
	16	16

Total Hours: 131

## International Affairs and International Business, BS

Students who pursue this combined major will have the opportunity to learn how international business practices influence and are influenced by state-society interactions such as labor rights, trade practices, climate and sustainability priorities, political implications, as well international institutions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### International Affairs Requirements

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		1
INTL 1000	International Affairs at Northeastern	
or BUSN 1102	Personal Skill Development for Business	

#### Required International Affairs Courses

A grade of C or higher is required for ECON courses.

ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
INTL 4700	Senior Capstone Seminar in International Affairs	4

#### International Experiential Learning

Complete one of the following:

One semester of study-abroad experience
One co-op abroad experience
Two Dialogue of Civilizations (summer programs)
Two summer traditional study-abroad experiences
One N.U.in experience and one Dialogue of Civilizations or one summer traditional study-abroad experience
Two approved short-term programs abroad

### International Affairs Electives

Code	Title	Hours
Complete two of the following:		8

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

### Regional Analysis Requirement

Code	Title	Hours
Complete three of the following, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:		12

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	

HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

*Europe*

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

*Russia*

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**Business Requirements**

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>Business Core Option</b>		
Complete one of the following:		
ACCT 2301	Managerial Accounting	
ENTR 2301	Innovation!	
MISM 2301	Management Information Systems	
SCHM 2301	Supply Chain and Operations Management	

**Global Business and Strategy Concentration**

Code	Title	Hours
<b>Required Courses</b>		
INTB 1202	Becoming a Global Manager	4
INTB 2202	Analyzing the Global Business Environment	4
INTB 4202	Executing Global Strategy	4
<b>Elective Course</b>		
Complete one of the following:		
INTB 3310	Cultural Aspects of International Business	
MKTG 4512	International Marketing	
FINA 4320	International Financial Management	
SCHM 3301	Global Supply Chain Strategy	

**Integrative Course Requirements**

Code	Title	Hours
INTB 4202	Executing Global Strategy	4
INTL 4700	Senior Capstone Seminar in International Affairs	4

**Supporting Courses**

Code	Title	Hours
<b>Co-op Preparation</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EESH 2000	Professional Development for Co-op	
<b>Statistics Requirement</b>		
MGSC 2301	Business Statistics	4
or INTL 2718	Research Methods in International Affairs	

**Second Business Concentration (Optional)**

A second business concentration is optional and may be chosen from the following list.

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Business GPA Requirement**

Minimum 2.000 GPA required in business courses

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

The plan below is a sample. Students should consult with their academic adviser to confirm individual academic plans.

This program requires one of the following abroad options:

Semester-long student abroad experience; cooperative education abroad experience; two Dialogue of Civilizations (summer programs); two summer traditional study-abroad experiences; N.U.*in* experience combined with either Dialogue of Civilizations or traditional summer study-abroad experience.

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
ENGW 1111	4	MGSC 2301 or INTL 2718	4	NUpath	4	MKTG 2201	4	
INTB 1202	4	INTL undergraduate elective	4	FINA 2201	4	INTL undergraduate elective	4	
ECON 1115 or 1116	4	ACCT 1201	4					
INTL 1101	4	NUpath	4					
BUSN 1102 or INTL 1000	1							
		17			16			8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL undergraduate elective	4	Co-op	4	Co-op	4	Elective	4

INTL undergraduate elective	4			Elective	4						
Complete one of the approved business core: ACCT 2301, ENTR 2301, MISM 2301, SCHM 2301	4			Student may choose to participate in a Dialogue of Civilizations experience							
INTB 2202	4										
BUSN 1103 or EESH 2000	1										
		17			0			0			8

Year 3											
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours				
INTL 3400	4	Co-op	4	Co-op	4	Elective	4				
ORGB 3201	4					Elective	4				
ENGW 3304 or 3315	4										
Complete one of the following:											
INTB 3310, FINA 4320, MKTG 4512, or SCHM 3301	4										
		16			0			0			8

Year 4					
Fall	Hours	Spring	Hours		
Elective	4	Elective	4		
NUpath	4	NUpath	4		
INTL undergraduate elective	4	Elective	4		
INTL 4700	4	INTB 4202	4		
		16			16

Total Hours: 130

**International Affairs and Religious Studies, BA**

Introduces the interaction of religious views with institutions and cultures in national and international contexts since the early 20th century. The combined major addresses diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social/religious movements; state-society relations (religion, democracy, authoritarianism, social justice and ethics, citizenship); comparative study of religious theology and praxis; and knowledge of particular religious traditions, including Buddhism, Christianity, Hinduism, Islam, and Judaism.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
POLS 1155	Comparative Politics	4
or ECON 1115	Principles of Macroeconomics	
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	

### International Experiential Learning

Complete at least one international semester via study abroad, international internship, international co-op, or two approved short-term programs abroad.

### International Affairs Elective

Code	Title	Hours
Complete one of the following courses:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

### Global Dynamics Requirement

Code	Title	Hours
Complete one of the following (courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements):		4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	

INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	
POLS 2282	The Holocaust and Comparative Genocide	
POLS 3408	International Security	
POLS 3418	Nationalism	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 4918	Model NATO	
<i>Globalization</i>		
AFAM 2600	Issues in Race, Science, and Technology	
ANTH 2305	Global Markets and Local Culture	
ANTH 2315	Religion and Modernity	
ECON 3290	History of the Global Economy	
ECON 4635	International Economics	

HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media

JRNL 5360 Global Reporting

MSCR 2325 Global Media

**Regional Analysis Requirement**

Code	Title	Hours
	Complete two of the following, both of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty advisor. See department for additional courses.	8

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 2395	Japanese Buddhism	
<i>Europe</i>		
CLTR 1501	Introduction to French Culture	
CLTR 1503	Introduction to Italian Culture	
CLTR 1504	Cultural History of Spain	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1272	Europe in the Middle Ages, 500–1500	

HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

*Russia*

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Religious Studies Requirements**

Code	Title	Hours
<b>Required Foundational Course</b>		<b>4</b>
PHIL 1110	Introduction to Religious Studies	
<b>Lived Religion Elective</b>		<b>4</b>

Complete one of the following courses that is not used to satisfy another requirement:

PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions

**Comparative Religion Elective** 4

Complete one of the following courses that is not used to satisfy another requirement:

PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1220	The Meaning of Death
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism

**Electives** 24

Complete six of the following courses, one of which must be at the 2000 level or above and two of which must be at the 3000 level or above, that is not used to satisfy another requirement:

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1111	Introduction to World Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2390	Cults and Sects
PHIL 2395	Japanese Buddhism

PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4903	Seminar in Religion
PHIL 4992	Directed Study

**International Affairs and Religious Studies Integrative Requirement**

Code	Title	Hours
<b>Capstone</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
or PHIL 4903	Seminar in Religion	

**International Affairs and Religious Studies Combined Major Credit Requirement**

Complete 76 semester hours in the major

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 POLS 1160	4 Vacation	Vacation	
INTL 1101	4 Lived religion elective	4		
ENGW 1111	4 Elective	4		
Foreign language course	4 Elective	4		
PHIL 1110	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Comparative religion elective	4 Elective	4 Vacation	Co-op	
Elective	4 Elective	4		
Elective	4 Elective	4		
Elective	4 Elective	4		
	16	16	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	INTL 3400	4 Elective	4 Co-op	
	ENGW 3315	4 Elective	4	

	PHIL level-2000 elective	4		
	Elective	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHIL level-3000 elective	4 Elective	4 Co-op	
	Elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	INTL 4700	4		
	Research method course	4		
	Elective	4		
	Elective	4		
	0	16		

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 POLS 1160	4 Vacation	Vacation	
INTL 1101	4 Lived religion elective	4		
ENGW 1111	4 Elective	4		
Foreign language course	4 Elective	4		
PHIL 1110	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Foreign language course	4 Co-op	Co-op	Elective	4
Comparative religion elective	4		Elective	4
Elective	4			
Elective	4			
	16	0	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3315	4 Co-op	Co-op	Elective	4
PHIL level-2000 elective	4		Elective	4
Elective	4			

Elective	4			
	16	0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>
INTL 3400	4	Co-op		Co-op
PHIL level-3000 elective	4			Vacation
Elective	4			
Elective	4			
	16	0	0	0

<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
Elective	4	INTL 4700	4	
Elective	4	Research method course	4	
Elective	4	Elective	4	
Elective	4	Elective	4	
	16		16	

Total Hours: 129

## Political Science and International Affairs, BA

Through this combined major, successful undergraduates will develop an awareness of global affairs and international relations since the early 20th century. The combined major addresses diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; political processes, institutions, and actors; and state-society relations (democracy, authoritarianism, inequalities, citizenship).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4

<b>Political Theory</b>		Hours
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

### Political Science Electives/Concentration for BA

Complete four upper-division political science electives, or complete one of the following concentrations. If you are working toward a concentration, declare it with your adviser in order for it to be added to your record.

Code	Title	Hours
<b>Political Science Electives</b>		
Complete four political science courses at or above POLS 2000.		16

- American Political Institutions (p. 1082)
- Campaigns and Elections (p. 1082)
- Comparative Politics (p. 1082)
- Identity, Culture, and Politics (p. 1082)
- International Relations and Diplomacy (p. 1082)
- Law and Legal Studies (p. 1083)
- Public Policy (p. 1083)
- Security Studies (p. 1083)

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

### International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

### International Relations Elective

Code	Title	Hours
Complete one of the following courses:		
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	



INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
INTL 5100	Climate and Development

### Global Dynamics Requirement

**Code**                      **Title**    **Hours**  
 Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.    4

**Code**                      **Title**    **Hours**  
*Environment*

ENVR 1110	Global Climate Change
ENVR 2515	Sustainable Development
INTL 5100	Climate and Development
INTL 5268	International Environmental Policy
or PPUA 5268	International Environmental Policy
SOCL 1246	Environment and Society

*Law, Diplomacy, and Global Governance*

COMM 2303	Global and Intercultural Communication
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3520	Global Political Economy
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations

*Human Rights and Social Justice*

HIST 2373	Gender and Sexuality in World History
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

*Conflict and Security*

CRIM 3060	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide

POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO

*Globalization*

AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility

INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Regional Analysis Requirement**

Code	Title	Hours
	Complete three of the following, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:	12

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 2308	Law, Justice, and Society in Modern China	

HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

*Europe*

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

*Russia*

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

### International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

### Integrative Requirements

Code	Title	Hours
<b>Research Methods</b>		
POLS 2399	Research Methods in Political Science	4
or INTL 2718	Research Methods in International Affairs	
<b>Capstone</b>		
Complete one of the following:		4
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	
INTL 4700	Senior Capstone Seminar in International Affairs	

### Political Science and International Affairs Combined Major Credit Requirement

Complete 76 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
ENGW 1111	4	HIST 2211	4	Vacation	0	Vacation	0		
MATH 1215	4	POLS 1150	4						
POLS 1155	4	Foreign language core course	4						
INTL 1101	4	POLS 1160	4						
POLS 1000	1								
		17			16			0	0

Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
ECON 3290	4	INTL undergraduate elective	4	Vacation	0	Co-op	0		
POLS undergraduate elective	4	POLS 2400	4						
POLS Thought course	4	POLS undergraduate elective	4						
Foreign language core course	4	Foreign language core course	4						
		16			16			0	0

Year 3									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Co-op	0	INTL 3400	4	INTL undergraduate elective	4	Co-op	0		
		POLS undergraduate elective	4	POLS undergraduate elective	4				
		INTL undergraduate elective	4						
		ENGW 3315	4						
		0			16			8	0

Year 4									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Co-op	0	INTL undergraduate elective	4	Elective	4	Co-op	0		
		INTL undergraduate elective	4	Elective	4				
		POLS undergraduate elective	4						
		Elective	4						
		0			16			8	0

Year 5					
Fall	Hours	Spring	Hours		
Co-op	0	INTL 4700	4		
		Elective	4		
		Elective	4		
		Elective	4		
		0			16

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	HIST 2211	4	Vacation	0	Vacation	0
MATH 1215	4	Foreign language core course	4				

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POLS 1155	4	POLS 1150	4		
INTL 1101	4	POLS 1160	4		
POLS 1000	1				
	17		16	0	0
<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
ECON 3290	4	Co-op	0	Co-op	0
				0	POLS undergraduate elective
					4
Foreign language core course	4				INTL undergraduate elective
					4
POLS Thought course	4				
POLS undergraduate elective	4				
	16		0	0	8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
INTL undergraduate elective	4	Co-op	0	Co-op	0
					INTL undergraduate elective
					4
POLS 2400	4				POLS undergraduate elective
					4
POLS undergraduate elective	4				
Foreign language core course	4				
	16		0	0	8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
INTL 3400	4	Co-op	0	Co-op	0
					0
POLS undergraduate elective	4				
INTL undergraduate elective	4				
ENGW 3315	4				
	16		0	0	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
INTL undergraduate elective	4	INTL 4700	4		
POLS undergraduate elective	4	Elective	4		
Elective	4	Elective	4		
Elective	4	Elective	4		
	16		16		

Total Hours: 129

## Sociology and International Affairs, BA

Through this combined major, successful undergraduates develop an awareness of societies within their international, transnational, and global contexts since the early 20th century. The combined major addresses diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; and state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Sociology Requirements

Code	Title	Hours
<b>Sociology Required Courses</b>		
ANTH 2305	Global Markets and Local Culture	4
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4
SOCL 2321	Research Methods in Sociology	4
or INTL 2718	Research Methods in International Affairs	
<b>Sociology Electives A</b>		
Complete two courses in the following range:		8
SOCL 1000 to SOCL 2999		
<b>Sociology Electives B</b>		
Complete two courses in the following range:		8
SOCL 3000 to SOCL 5999		
<b>Capstone Requirement</b>		
SOCL 4600	Senior Seminar	4
or INTL 4700	Senior Capstone Seminar in International Affairs	

### International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours		
<b>Required Courses</b>			HIST 3334	Assassinations in World History
			HIST 3335	History of Modern Terrorism
ECON 1115	Principles of Macroeconomics	4	PHIL 5001	Global Justice
or HIST 2211	The World Since 1945		POLS 2282	The Holocaust and Comparative Genocide
or HIST 2311	Colonialism/Imperialism		POLS 3408	International Security
INTL 1101	Globalization and International Affairs	4	POLS 3418	Nationalism
INTL 3400	International Conflict and Negotiation	4	POLS 3420	U.S. National Security Policy
POLS 1155	Comparative Politics	4	POLS 3423	Terrorism and Counterterrorism
POLS 1160	International Relations	4	POLS 3430	Revolution, Civil War, and Insurrection
<b>International Affairs Elective</b>			POLS 4918	Model NATO
Complete one of the following courses:			<i>Globalization</i>	
INTL 2240	Global Population and Development		ANTH 2305	Global Markets and Local Culture
INTL 2480	Women and World Politics		ANTH 2315	Religion and Modernity
INTL 3200	Cities in a Global Context		ECON 3290	History of the Global Economy
INTL 5100	Climate and Development		ECON 4635	International Economics
INTL 5200			ENGL 2450	
<b>Global Dynamics</b>			HIST 2211	The World Since 1945
Complete one of the following courses:			HIST 2311	Colonialism/Imperialism
<i>Environment</i>			INTB 3310	Cultural Aspects of International Business
ENVR 1110	Global Climate Change		INTL 2240	Global Population and Development
ENVR 2515	Sustainable Development		INTL 2480	Women and World Politics
INTL 5100	Climate and Development		or WMNS 2480	Women and World Politics
SOCL 1246	Environment and Society		INTL 3200	Cities in a Global Context
<i>Law, Diplomacy, and Global Governance</i>			INTL 5200	
COMM 2303	Global and Intercultural Communication		LPSC 2302	Global Human Rights: A Social and Economic Perspective
INTL 2480	Women and World Politics		POLS 1160	International Relations
or WMNS 2480	Women and World Politics		POLS 2370	Religion and Politics
INTL 5200			POLS 3405	International Political Economy
POLS 1155	Comparative Politics		POLS 3406	International Law
POLS 1160	International Relations		SOCL 3465	Globalization and the Evolution of Human Societies
POLS 2370	Religion and Politics		<i>Population, Migration, and Diaspora</i>	
POLS 3405	International Political Economy		AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
POLS 3406	International Law		ANTH 1101	Peoples and Cultures
POLS 3409	Global Governance		HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
POLS 4910	Model United Nations		INTL 2240	Global Population and Development
<i>Human Rights and Social Justice</i>			INTL 2400	
HIST 2373	Gender and Sexuality in World History		INTL 3200	Cities in a Global Context
INTL 2400			PHIL 1270	
INTL 2480	Women and World Politics		PHIL 1271	Sex in Judaism, Christianity, and Islam
or WMNS 2480	Women and World Politics		<i>Development</i>	
LPSC 2302	Global Human Rights: A Social and Economic Perspective		ANTH 2305	Global Markets and Local Culture
PHIL 5001	Global Justice		ECON 1291	Development Economics
<i>Conflict and Security</i>			ECON 3404	International Food Policy
CRIM 4630			ENTR 2206	Global Social Enterprise
HIST 1206	Drug Trade and Drug War: History, Security, Culture		ENVR 2515	Sustainable Development
HIST 1389	History of Espionage 1: Antiquity to World War II		HIST 2011	Capitalism and Business: A Global History
HIST 1390	History of Espionage 2: Cold War Spies			
HIST 3330	The Global Cold War			
JRNL 3300	Covering Conflicts: Peace, War, and the Media			
or INTL 3300	Covering Conflicts: Peace, War, and the Media			

INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

**Communication and Media**

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Senior Seminar/Experiential Learning**

INTL 4700	Senior Capstone Seminar in International Affairs	4
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**International Experiential Learning**

Complete at least one "international semester" via study abroad, international internship, international co-op, or two approved short-term programs abroad.

**Regional Analysis Requirement**

Code	Title	Hours
	Complete two of the following courses, both of which must be in one region, from the following lists. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.	8

**Africa**

AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

**Asia**

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	

or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
or INTL 4500	
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 1240	Latin American Film
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	
INTL 2100	Modern Israel

INTL 2200	America and the Middle East
INTL 2400	
INTL 3250	Democracy and Development in North Africa and the Mediterranean
CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
PHIL 1270	
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<b>Russia</b>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	

### International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

### Integrative Requirements

Code	Title	Hours
SOCL 3465	Globalization and the Evolution of Human Societies	4

### Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### Sociology and International Affairs Combined Major Credit Requirement

Complete 76 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 1000	1 ANTH 1101	4 Vacation	Vacation	
SOCL 1101	4 ENGW 1111	4		
INTL 1101	4 POLS 1160	4		
HIST 2211 or ECON 1115	4 Elective	4		
Foreign Language Course	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 3300	4 POLS 1155	4 Vacation	Co-op	
SOCL 2320	4 POLS 1156	0		

Elective	4 SOCL 2321 or INTL 2718	4		
Foreign Language Course	4 ANTH 2305	4		
	Elective	4		
	16	16	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	SOCL 3465	4 Elective	4 Co-op	
	INTL 3400	4 Elective	4	
	ENGW 3315	4		
	Elective	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Elective	4 Elective	4 Co-op	
	Elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	SOCL 4600 or INTL 4700	4		
	Elective	4		
	Elective	4		
	Elective	4		
	0	16		
Total Hours: 129				
Five Years, Three Co-ops in Spring/Summer 1				
Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 1000	1 ANTH 1101	4 Vacation	Vacation	
SOCL 1101	4 ENGW 1111	4		
INTL 1101	4 POLS 1160	4		
HIST 2211 or ECON 1115	4 Elective	4		
Foreign Language Course	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 3300	4 Co-op	Co-op	Elective	4
SOCL 2320	4		Elective	4
Foreign Language Course	4			
Elective	4			
	16	0	0	8



**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1155	4 Co-op	Co-op	Elective	4
POLS 1156	0		Elective	4
SOCL 2321 or INTL 2718	4			
ANTH 2305	4			
Elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 3465	4 Co-op	Co-op	Vacation	
INTL 3400	4			
ENGW 3315	4			
Elective	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
Elective	4 SOCL 4600 or INTL 4700	4
Elective	4 Elective	4
Elective	4 Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 129

## Spanish and International Affairs, BA

This combined major offers undergraduates the opportunity to develop an awareness of global affairs and international issues since the 19th century through diverse and cross-disciplinary theories of: (1) Interstate relations: conflict, cooperation, hierarchies; (2) Civil society, transnational advocacy networks, global social movements; and (3) the politics of culture, linguistic and cultural diversity, religious and ideological divides; (4) State-society relations: democracy, authoritarianism, inequalities, citizenship.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Spanish Language Requirements**

Code	Title	Hours
<b>Spanish Language Requirements</b>		
SPNS 2102	Intermediate Spanish 2	4
SPNS 3101	Advanced Spanish 1	4
SPNS 3102	Advanced Spanish 2: Hispanic and Latinx Identity	4
<b>Language and Linguistics</b>		
Complete one of the following courses:		4
CLTR 1120	Introduction to Languages, Literature, and Culture	4
LING 1150	Introduction to Language and Linguistics	4
<b>Culture, Literature, and History</b>		
Complete four of the following courses:		16
ANTH 4500	Latin American Society and Development	
CLTR 1240	Latin American Film	
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 2001	World Cultures through Film	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3720	Literature, Arts, and Poverty in Latin America	
CLTR 3725	Representing Violence and Human Rights in Latin America	
CLTR 3805	Culture, Politics, and Media in Spain	
CLTR 4655	Latin American Literature	
CLTR 4944	Cultural Engagement Abroad	
HIST 1187	Introduction to Latin American History	
LACS 1220	Latino, Latin American, and Caribbean Studies	
<b>Spanish Electives</b>		
Complete two of the following courses:		8
SPNS 2900	Specialized Instruction in Spanish	
SPNS 3401	Advanced Spanish 1 for Healthcare Professionals	
SPNS 3501	Advanced Spanish Conversation: Global Communication	
SPNS 3601	Exploring Spoken Spanish	
SPNS 3800	Special Topics in Spanish	
SPNS 3900	Specialized Instruction in Spanish	
<b>Study Abroad/Experiential Learning</b>		
See department for details		
<b>International Affairs Requirements</b>		
Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.		
Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4

INTL 3400	International Conflict and Negotiation	4
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

### International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

### International Affairs Elective

Code	Title	Hours
Complete one of the following courses:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

### Global Dynamics Requirement

Code	Title	Hours
Complete two of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		8

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	

PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 3060	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora

ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### Regional Analysis Requirement

Complete three of the following courses, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	

INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa
<i>Asia</i>	
ANTH 4350	Ethnography of Southeast Asia
ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism
<i>Europe</i>	
CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union
<i>Latin America</i>	
ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies
<i>Middle East</i>	
CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East

HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<i>Russia</i>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

### Integrative Courses

Code	Title	Hours
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
<b>Capstone</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4

### Spanish and International Affairs Combined Major Credit/GPA Requirements

Complete 84 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 MATH 1215	4 Vacation	0 Vacation	0
ENGW 1111	4 ECON 1115 or 1116	4		
INTL 1101	4 Elective	4		
CLTR 1120	4 SPNS 2102	4		
SPNS 2101	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL elective	4 INTL elective	4 Vacation	0 Co-op	0
Elective	4 Elective	4		
Elective	4 Elective	4		

SPNS 3101	4 Spanish elective 3000-5000	4		
	16	16	0	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 INTL elective	4 INTL elective	4 Co-op	0
	INTL elective	4 Upper division elective	4	
	Advanced literature/cultural course	4		
	Advanced literature/cultural course	4		
	0	16	8	0

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3315	4 Upper division elective	4 Co-op	0
	INTL 3400	4 INTL elective	4	
	Elective	4		
	Spanish elective 3000-5000	4		
	0	16	8	0

#### Year 5

Fall	Hours Spring	Hours
Co-op	0 INTL 4700	4
	Upper division elective	4
	Spanish elective 3000-5000	4
	CLTR 4655	4
	0	16

Total Hours: 129

#### Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 MATH 1215	4 Vacation	0 Vacation	0
ENGW 1111	4 ECON 1115 or 1116	4		
INTL 1101	4 SPNS 2102	4		
CLTR 1120	4 Elective	4		
SPNS 2101	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 INTL elective	4

Elective	4	Elective	4
Spanish elective 3000-5000	4		
SPNS 3101	4		
	16	0	0
			8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL elective	4 Co-op	0 Co-op	0 INTL elective	4
INTL elective	4		Upper division elective	4
Advanced literature/cultural course	4			
Advanced literature/cultural course	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 3400	4 Co-op	0 Co-op	0 Vacation	0
ENGW 3315	4			
Elective	4			
Spanish elective 3000-5000	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
INTL elective	4 INTL elective	4
Upper division elective	4 INTL 4700	4
Elective	4 CLTR 4655	4
Spanish elective 3000-5000	4 Upper division elective	4
	16	16

Total Hours: 129

**International Affairs, Minor**

The minor in international affairs is an interdisciplinary program that exposes students to a variety of different perspectives on the field, while providing the flexibility to select the courses in the disciplines that interest them most. The minor provides an international lens to students' primary degree, preparing them for our globalized world and workplaces.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Course**

Code	Title	Hours
INTL 1101	Globalization and International Affairs	4

**Regional Analysis Elective Courses**

Code	Title	Hours
	Complete two of the following. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser:	8

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	

*Asia*

ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 2395	Japanese Buddhism	

*Europe*

CLTR 1501	Introduction to French Culture	
CLTR 1503	Introduction to Italian Culture	
CLTR 1504	Cultural History of Spain	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 2280	Hitler, Germany, and the Holocaust	

HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

*Russia*

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**Global Dynamics Elective Courses**

Code	Title	Hours
Complete two of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on minor requirements:		8

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	

or PPUA 5268	International Environmental Policy
SOCL 1246	Environment and Society
<i>Law, Diplomacy, and Global Governance</i>	
COMM 2303	Global and Intercultural Communication
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3520	Global Political Economy
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations
<i>Human Rights and Social Justice</i>	
HIST 2373	Gender and Sexuality in World History
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 3060	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism

INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480 or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 1270 or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203 or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**GPA Requirement**

2.000 GPA required in the minor

**Middle East and Mediterranean Studies, Minor**

The minor in Middle East and Mediterranean studies is an inter- and cross-disciplinary program, drawing on courses from within the International Affairs Program as well as departments and units across the college. The program provides an in-depth study of the Middle East and North Africa (Arab world, Israel, Iran, and Turkey); its place within the broader Mediterranean region; and its relations with other world regions. As such, it seeks to enhance students' understanding of this culturally diverse and politically important region of the world. Students are encouraged to take advantage of the university's study-abroad and Dialogue of Civilizations programs (faculty-led summer programs) in Egypt, Morocco, Tunisia, Jordan, Turkey, Israel and Palestine, and other approved programs in the region.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
POLS 3465	Government and Politics in the Middle East	4
or POLS 3470	Arab-Israeli Conflict	
or INTL 3250	Democracy and Development in North Africa and the Mediterranean	
INTL 1150 or INTL 3250	The Mediterranean World: An Overview	4
INTL 1160 or HIST 1290	Middle East Studies	4
	Modern Middle East	

**Elective Courses**

Elective courses may include courses taken as part of an approved study-abroad program. *Note: Courses used as required courses (above) may not be used as elective courses.*

Code	Title	Hours
Complete two of the following:		
ARAB 1301	Elementary Arabic Immersion 1	8
CLTR 1502	Introduction to Arabic Culture	
HIST 1185	Introduction to Middle Eastern History	
HIST 1290	Modern Middle East	
INTL 2100	Modern Israel	
INTL 2200	America and the Middle East	
INTL 3250	Democracy and Development in North Africa and the Mediterranean	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1285	Jewish Religion and Culture	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
POLS 4915	Model Arab League	

## GPA Requirement

2.000 GPA required in the minor

### Jewish Studies

Website (<http://www.northeastern.edu/jewishstudies/>)

Jewish studies offers the opportunity to explore Jewish history, religion, and cultures. Because of the geographic, ethnic, racial, and cultural diversity of the Jewish people, as well as the long timeline of Jewish history, Jewish studies provides students with rich possibilities for cross-cultural and comparative study. Jewish studies is an interdisciplinary program embracing history, music, literature, political science, international affairs, sociology, gender studies, religion, philosophy, Hebrew, and more. The program also explores the evolving interactions between Judaism and other religions and offers exciting courses in both Israel studies and the history and cultures of Diaspora Jewish communities around the world. A wide range of elective courses is available through the relevant departments.

The Jewish studies program offers both a minor and a preapproved template for a combined major. A unique feature of the minor is the Jewish studies module, in which students create an original project that brings an aspect of Jewish studies together with an aspect of their major field.

Jewish studies classes seek to help students develop a more critical and analytical understanding of the religious and secular world around them. They are designed to prepare students for any field that requires critical thinking and cross-cultural understanding, including careers in education, social services, politics, museums and archives, and Jewish communal organizations, as well as for graduate and professional studies.

Study abroad, either through the Dialogues of Civilization program in Israel, Germany, and/or Poland, or through traditional study-abroad programs, is a significant aspect of Jewish studies. Experiential learning in the Jewish studies program includes these study-abroad opportunities, as well as internships or co-ops at organizations such as the Jewish Community Relations Council, Facing History and Ourselves, the Jewish Women's Archive, the Arava Institute, and the Israeli Consulate. The Ruderman merit-based scholarship supports selected Jewish studies majors and minors; the Gideon Klein award supports a student in research on music and the Holocaust.

For more information, visit the department website (<http://www.northeastern.edu/jewishstudies/>).

## Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 27)."

## Programs

### Bachelor of Arts

- Jewish Studies and Religion (p. 1095)

### Minor

- Jewish Studies (p. 1097)

### Jewish Studies and Religion, BA

The combined major in Jewish studies and religion offers students an integrated program of study of two naturally complementary fields. Study of Judaism as a religion is greatly enhanced by broad familiarity with the

world's religious traditions; conversely, in-depth knowledge of Jewish history, identity, and cultures provides students of religion with valuable insight into the ways in which religion interacts with a wide variety of forces to shape the experiences of the adherents of a particular faith. The combined major is designed to enable students to understand the history, cultures, and religion of the Jewish people; analyze and apply theoretical understanding to the interaction between religious, social, and historical factors that have shaped the experiences of the Jewish people; and demonstrate fluency in understanding the major religious traditions of the world. The combined major in Jewish studies and religion is designed to prepare students for graduate work in Jewish studies, religion, or many of the other disciplines that make up Jewish studies or for work within the Jewish community or in communal organizations associated with other religions.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Jewish Studies Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHIL 1285	Jewish Religion and Culture	4
or JWSS 1285	Jewish Religion and Culture	
JWSS 4660	Jewish Studies Module	1
<b>Jewish Religion and Thought</b>		
HIST 1100	Law and History	
<b>Israel Studies</b>		
Complete one of the following:		4
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
INTL 2100	Modern Israel	
POLS 3470	Arab-Israeli Conflict	
<b>Jewish History</b>		
Complete one of the following:		4
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2282	The Holocaust and Comparative Genocide	
HIST 2285	America and the Holocaust	
or JWSS 2285	America and the Holocaust	
HIST 2431	Immigration and Identity in the American Jewish Experience	
or JWSS 2431	Immigration and Identity in the American Jewish Experience	



**Jewish Art and Culture**

Complete one of the following:		4
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	

**Jewish Studies Electives**

Complete three of the following:		12
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2282	The Holocaust and Comparative Genocide	
or JWSS 2282	The Holocaust and Comparative Genocide	
HIST 2285	America and the Holocaust	
or JWSS 2285	America and the Holocaust	
HIST 2431	Immigration and Identity in the American Jewish Experience	
or JWSS 2431	Immigration and Identity in the American Jewish Experience	
INTL 2100	Modern Israel	
JWSS 4992	Directed Study	
PHIL 1120	Understanding the Bible	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
POLS 2370	Religion and Politics	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
SOCL 3241	Violence and Society	
SOCL 3270	Race and Ethnic Relations	

**Religion Requirements**

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	

PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2390	Cults and Sects
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

**Comparative Religion Elective**

Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2395	Japanese Buddhism	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	

**Electives**

Complete five of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement:		20
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1111	Introduction to World Religions	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1285	Jewish Religion and Culture	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1666	The Problem of Evil in Film	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 2395	Japanese Buddhism	
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	

PHIL 4903	Seminar in Religion	
<b>Capstone</b>		
Complete the following course that is not used to satisfy another requirement:		4
PHIL 4903	Seminar in Religion	

### Integrative Requirements

Code	Title	Hours
Complete one of the following courses that is not used to satisfy another requirement:		4
HIST/JWSS 1294	History of the Jews in the Modern World	
or JWSS 1294	History of the Jews in the Modern World	
HIST 2431	Immigration and Identity in the American Jewish Experience	
or JWSS 2431	Immigration and Identity in the American Jewish Experience	

### Hebrew Language Introduction

Complete two courses in Hebrew. These courses also count toward the BA language requirement.	8
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### Jewish Studies and Religion Major Credit Requirement

80 major semester hours required

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 Lived Religion Elective	4 Vacation	0 Elective	4
PHIL 1110	4 Israel Studies	4	Elective	4
PHIL 1285 or JWSS 1285	4 HBRW 1101	4		
Elective	4 HIST 1100	4		
	16	16	0	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	Co-op	0 Elective	4
Jewish History Course	4		JS Elective	4
Comparative Religion Elective	4			
HBRW 1102	4			
	16	0	0	8

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHIL 2000 Level Elective	4 Elective	4 Elective	4 Elective	4
Jewish Art and Culture Course	4 JWSS 4660	1 Elective	4 Elective	4
Elective	4 Elective			
JS Elective	4 JS Elective	4		
	16	9	8	8

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHIL 3000 Level Elective	4 Co-op	Co-op	Elective	4
Elective	4		Elective	4
Intergrative Requirement Course	4			
PHIL Capstone	4			
	16	0	0	8

Total Hours: 129

### Jewish Studies, Minor

The Jewish studies minor provides an excellent broad-based introduction to the history, religion, and cultures of the Jewish people while also offering a unique opportunity to bring students' major fields of study to bear on Jewish studies topics. In our innovative 1-credit capstone Jewish studies module, minors integrate their work in Jewish studies into their major field—for example, bringing together Jewish studies and psychology through a service-learning project with Gateways, a nonprofit that offers Jewish educational resources for children with special needs, or combining Jewish studies and history through a research project on the role of Jewish women in the women's health movement.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
JWSS 4660	Jewish Studies Module	1
Complete one of the following:		4
JWSS 1285 or PHIL 1285	Jewish Religion and Culture	
JWSS 1294 or HIST 1294	History of the Jews in the Modern World	

### Elective Courses

Code	Title	Hours
Complete an additional four courses from the following lists. A maximum of two courses may be taken from the Affiliated Courses list below.		16

**Jewish Studies Courses**

ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
HBRW 1101	Elementary Hebrew 1
HBRW 1102	Elementary Hebrew 2
HIST 2280	Hitler, Germany, and the Holocaust
INTL 2100	Modern Israel
JWSS 1120	Understanding the Bible
or PHIL 1120	Understanding the Bible
JWSS 1285	Jewish Religion and Culture
or PHIL 1285	Jewish Religion and Culture
JWSS 1294	History of the Jews in the Modern World
or HIST 1294	History of the Jews in the Modern World
JWSS 2282	The Holocaust and Comparative Genocide
or HIST 2282	The Holocaust and Comparative Genocide
JWSS 1990	Elective
JWSS 2285	America and the Holocaust
or HIST 2285	America and the Holocaust
JWSS 2430	Digital Histories of Ethnic Boston
JWSS 2990	Elective
JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
JWSS 3685	Modern and Contemporary Jewish Literature
or ENGL 3685	Modern and Contemporary Jewish Literature
JWSS 3990	Elective
JWSS 4992	Directed Study
<i>Affiliated Courses</i> <sup>1</sup>	
JRNL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 1271	Sex in Judaism, Christianity, and Islam
POLS 2370	Religion and Politics
POLS 3470	Arab-Israeli Conflict
SOCL 3270	Race and Ethnic Relations

<sup>1</sup> Additional affiliated courses may be approved by the program director by semester.

**GPA Requirement**

2.000 GPA required in the minor

**Philosophy and Religion**

Website (<http://www.northeastern.edu/cssh/philosophy/>)

**Ronald Sandler, PhD**

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Philosophy addresses questions and theories related to morality, society, religion, and the natural and social sciences. Coursework in philosophy provides students with an understanding of the methods and traditions of philosophical thought, as well as with opportunities to critically and collaboratively reflect on the nature of the world and the human situation in it. Through readings, discussion, and writing, students examine questions concerning the validity of moral judgments, political ideas, and scientific theories, as well as questions about values and policy in such areas as law, medicine, environment, and technology. Coursework in philosophy significantly strengthens study in other areas. The major emphasizes development of analytic, reasoning, and communication abilities, and it is designed to enable students to tailor it to their particular interests.

Religious studies offers students the opportunity to acquire an understanding of religious experience within its social, historical, literary, and political context. Courses in religious studies examine specific religious traditions such as Judaism, Islam, and Hinduism, and using a comparative approach they explore themes across faith traditions. The religious studies major at Northeastern emphasizes the lived religious experience, or how religion permeates and impacts people's lives through everything from politics and economics to fashion, relationships, and music. Through the major, students have the opportunity to study a range of religions and a variety of methods of understanding the key dimensions of religious life.

Information on experiential learning opportunities, student life, and department faculty can be found at the department website (<http://www.northeastern.edu/cssh/philosophy/>).

**Academic Progression Standards**

A minimum cumulative grade-point average of 2.000 is required to remain in good standing in the major.

**Philosophy Major**

The department offers five ways to take the stand-alone major in philosophy: the standard major; the concentration in law and ethics; the concentration in ethics; the concentration in formal methods (e.g., game theory, social choice theory, and logic); and the concentration in religious studies. More information on these can be found on the program page.

**Religious Studies Major**

The religious studies major is designed to introduce students to a wide variety of religious experience and expression in the world. Through this major, students are exposed to the basic features of the world's religions and the ethical systems that accompany them. Students also have an opportunity to explore diverse methodological approaches to the study of religion.

**Combined Majors**

The analytical and critical skills gained from the study of philosophy are a valuable complement to any other area of study. So, too, is having an understanding of the history of ideas and of alternative world views and value systems. For this reason, the department offers combined majors with political science, economics, physics, environmental studies, history, English, computer science, behavioral neuroscience, criminal justice, sociology, anthropology, and media and screen studies. Details regarding these majors can be found on the program pages.

The combined majors in religious studies bring together knowledge of religious traditions, awareness of religious experience, and methods of understanding the key dimensions of religious life with other areas

in which religion plays a large role. The department currently offers combined majors in religious studies with history, international affairs, Africana studies, sociology, anthropology, and Jewish studies. More information on these majors can be found on the program pages.

## Minors

The Department of Philosophy and Religion offers minors in philosophy and religious studies, as well as popular minors in ethics and information ethics. Each of these minors is structured to be highly flexible and to complement study in other majors, while also providing depth of knowledge in philosophy, religion, and ethics. The department also collaborates with the Department of Applied Psychology on a minor in mindfulness studies. Information on these minors can be found on the program pages.

## Programs

### Bachelor of Arts (BA)

- Philosophy (p. 1099)
- Religious Studies (p. 1106)
- Cultural Anthropology and Philosophy (p. 1108)
- Cultural Anthropology and Religious Studies (p. 1109)
- English and Philosophy (p. 952)
- Environmental Studies and Philosophy (p. 723)
- History and Philosophy (p. 987)
- History and Religious Studies (p. 992)
- International Affairs and Religious Studies (p. 1074)
- Jewish Studies and Religion (p. 1095)
- Media and Screen Studies and Philosophy (p. 156)
- Political Science and Philosophy (p. 1127)
- Religious Studies and Africana Studies (p. 825)
- Sociology and Philosophy (p. 1131)
- Sociology and Religious Studies (p. 1133)

### Bachelor of Science (BS)

- Philosophy (p. 1134)
- Behavioral Neuroscience and Philosophy (p. 619)
- Computer Science and Philosophy (p. 376)
- Criminal Justice and Philosophy (p. 855)
- Economics and Philosophy (p. 922)
- Physics and Philosophy (p. 769)
- Political Science and Philosophy (p. 1151)
- Politics, Philosophy, and Economics (p. 821)

## Minors

- Information Ethics (p. 1157)
- Philosophy (p. 1157)
- Religious Studies (p. 1158)
- Ethics (p. 1158)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Philosophy, BA

Philosophy is a basic field of inquiry. Its range encompasses ideas and issues in every domain of human experience, and its methods apply to problems of an unlimited variety. The major in philosophy can develop not only philosophical skill and sophistication but also critical thinking and

writing abilities that are readily applicable to pursuits in other academic areas, useful in careers far removed from philosophy, and valuable in everyday social and personal life. The study of philosophy can profoundly affect both the thinking one does and the kind of person one is.

There are varieties of concentrations of the philosophy major that students may choose from in accordance with their own backgrounds and interests. These include:

- **Philosophy generalist**

Offers students a maximum number of electives so they may choose in accordance with their own backgrounds and interests

- **Concentration in law and ethics**

Focuses elective course work in the areas of law, social and political philosophy, and applied ethics

- **Concentration in ethics**

Focuses elective course work in the areas of ethical theory, applied ethics, and social and political philosophy

- **Concentration in religious studies**

Uses electives to explore a variety of both religious expressions and methods of inquiry

- **Concentration in formal methods**

Focuses elective course work in areas of logic and formal methods.

- **Combined majors** in media and screen studies and philosophy, economics and philosophy, environmental studies and philosophy, political science and philosophy, English and philosophy, history and philosophy, computer science and philosophy, criminal justice and philosophy, and physics and philosophy.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Concentrations

Complete one of the following concentrations:

- Philosophy Generalist requirements (p. 1100)
- Concentration in Law and Ethics (p. 1100)
- Concentration in Ethics (p. 1101)

- Concentration in Religious Studies (p. 1102)
- Concentration in Formal Methods (p. 1102)

## Philosophy Major Credit Requirement

Complete 36 semester hours in the major.

## Upper-Division Electives

Complete three general electives at 3000 level or above that do not double-count with the major or NUPath.

## General Electives

Additional courses taken beyond college and major course requirements to satisfy graduation credit requirements.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

### PHILOSOPHY GENERALIST

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Philosophy Advanced Elective/Seminar</b>		
Complete three of the following courses with one at the 4000 or 5000 level:		12
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

### Additional Electives

Complete three additional courses in philosophy and religion. 12

### CONCENTRATION IN LAW AND ETHICS

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4

PHIL 2301	Philosophical Problems of Law and Justice	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 3435	Moral Philosophy	4
<b>Philosophy Advanced Elective/Seminar</b>		
Complete two of the following courses with one at the 4000 or 5000 level:		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

### Ethics-Related Electives

Complete two of the following (not used to fulfill another requirement):		8
PHIL 1102	Introduction to Contemporary Moral Issues	
PHIL 1111	Introduction to World Religions	
PHIL 1112	Debating Ethical Controversies	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1145	Technology and Human Values	
PHIL 1160	Introduction to Economic Justice	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1170	Business, Ethics, and Human Rights	
PHIL 1180	Environmental Ethics	
PHIL 1185	The Ethics of Food	
PHIL 1195	Research Ethics	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1300	Knowledge in a Digital World	
PHIL 1666	The Problem of Evil in Film	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	

PHIL 2001	Ethics and Evolutionary Games
PHIL 2016	The Philosophy and Ethics of Lying and Deception
PHIL 2143	Philosophy for Children
PHIL 2155	Human Rights
PHIL 2303	Social and Political Philosophy
PHIL 2305	Philosophy of Emotions
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 2395	Japanese Buddhism
PHIL 4550	Philosophy of Economics
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Law-Related Electives**

Complete two courses from social science departments. 8  
These courses are to be chosen in consultation with the department:

AFAM 2360	Politics of Poverty
AFRS 3460	Contemporary Government and Politics in Africa
CRIM 1110	Criminal Due Process
CRIM 1120	Criminology
CRIM 2320	Youth Crime and Justice
CRIM 3060	Political Crime and Terrorism
CRIM 3110	Gender, Crime, and Justice
CRIM 3120	Race, Crime, and Justice
ECON 3440	Public Finance
ECON 3442	Money and Banking
ECON 3520	History of Economic Thought
ENGL 3325	Rhetoric of Law
INTL 1101	Globalization and International Affairs
INTL 3400	International Conflict and Negotiation
JRNL 3550	The First Amendment and the Media
LPSC 1101	Introduction to Law
POLS 2357	Growth and Decline of Cities and Suburbs
POLS 3302	Judicial Process and Behavior
POLS 3324	Law and Society
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties
SOCL 1245	Sociology of Poverty
SOCL 1246	Environment and Society
SOCL 2358	Current Issues in Cities and Suburbs
SOCL 3241	Violence and Society
SOCL 4518	Law and Society in a Digital World

**CONCENTRATION IN ETHICS**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	

PHIL 2330	Modern Philosophy	4
PHIL 3435	Moral Philosophy	4
<b>Philosophy Advanced Elective/Seminar</b>		
Complete two of the following courses with one at the 4000 or 5000 level: 8		
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Ethics Courses**

Complete four of the following (not used to fulfill another requirement): 16

PHIL 1102	Introduction to Contemporary Moral Issues
PHIL 1111	Introduction to World Religions
PHIL 1112	Debating Ethical Controversies
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1145	Technology and Human Values
PHIL 1160	Introduction to Economic Justice
PHIL 1162	Ethics and Philosophy through Sport
PHIL 1165	Moral and Social Problems in Healthcare
PHIL 1170	Business, Ethics, and Human Rights
PHIL 1180	Environmental Ethics
PHIL 1185	The Ethics of Food
PHIL 1195	Research Ethics
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1290	Chinese Philosophy and Religion
PHIL 1300	Knowledge in a Digital World
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2001	Ethics and Evolutionary Games
PHIL 2016	The Philosophy and Ethics of Lying and Deception
PHIL 2143	Philosophy for Children
PHIL 2155	Human Rights

PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2303	Social and Political Philosophy
PHIL 2305	Philosophy of Emotions
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 2395	Japanese Buddhism
PHIL 2390	Cults and Sects
PHIL 4550	Philosophy of Economics
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**CONCENTRATION IN RELIGIOUS STUDIES**

Code	Title	Hours
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**Philosophy Required Courses**

PHIL 1110	Introduction to Religious Studies	4
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Philosophy Advanced Elective/Seminar**

Complete two of the following courses with one at the 4000 or 5000 level: 8

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3343	Existentialism
PHIL 3360	Scientific Approaches to Philosophy
PHIL 3435	Moral Philosophy
PHIL 3460	Philosophy and Literature
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Religious Studies Courses**

Complete three of the following (not used to fulfill another requirement): 12

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1120	Understanding the Bible
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam

PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 2230	Music and Religion
PHIL 2395	Japanese Buddhism
PHIL 4903	Seminar in Religion

**CONCENTRATION IN FORMAL METHODS**

Code	Title	Hours
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**Philosophy Required Courses**

PHIL 1115	Introduction to Logic	16
PHIL 2325	Ancient Philosophy and Political Thought	
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	
PHIL 4515	Advanced Logic	

**Formal Methods Courses**

Complete four of the following at least three of which must be PHIL (one of which must be 3000 or above) 16

CS 2800	Logic and Computation
ECON 4681	Information Economics and Game Theory
INSH 1500	Digital Methods for Social Sciences and Humanities
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
MATH 2280	Statistics and Software
MATH 3081	Probability and Statistics
PHIL 1105	Science and Pseudoscience
PHIL 1162	Ethics and Philosophy through Sport
PHIL 1300	Knowledge in a Digital World
PHIL 2001	Ethics and Evolutionary Games
PHIL 2016	The Philosophy and Ethics of Lying and Deception
PHIL 3050	Information and Uncertainty
PHIL 3360	Scientific Approaches to Philosophy
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
POLS 3310	Public Opinion, Voting, and Elections

**Philosophy Electives**

Complete two other PHIL courses (not used to fulfill another requirement) at least one of which is at the 4000/ 5000 level 8

**Plan of Study**  
**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1215	4 Elective	4 Vacation	0 Vacation	0
ENGW 1111	4 PHIL undergraduate elective	4		
PHIL 1101	4 Foreign language core course	4		
Foreign language core course	4 Elective	4		
	16	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Foreign language core course	4 Elective	4 Vacation	0 Co-op	0
Elective	4 PHIL 2330	4		
PHIL 2325	4 Elective	4		
Elective	4 PHIL undergraduate elective	4		
	EESH 2000	1		
	16	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Elective	4 Elective	4 Co-op	0
	PHIL 1115	4 Elective	4	
	Advanced philosophy elective	4		
	ENGW 3315	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Elective	4 Elective	4 Co-op	0
	Philosophy seminar	4 Upper-division elective	4	
	PHIL undergraduate elective	4		
	Upper-division elective	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	0 Elective	4		
	PHIL undergraduate elective	4		

Upper-division elective	4
Elective	4
0	16

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1215	4 Elective	4 Vacation	0 Vacation	0
ENGW 1111	4 PHIL undergraduate elective	4		
PHIL 1101	4 Foreign language core course	4		
Foreign language core course	4 Elective	4		
	16	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Foreign language core course	4 Co-op	0 Co-op	0 Elective	4
Elective	4		Elective	4
PHIL 2325	4			
Elective	4			
EESH 2000	1			
	17	0	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 Elective	4
PHIL 2330	4		PHIL undergraduate elective	4
Upper-division elective	4			
Elective	4			
	16	0	0	8
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 Vacation	0
PHIL 1115	4			
Advanced philosophy elective	4			
ENGW 3315	4			
	16	0	0	0
Year 5				
Fall	Hours Spring	Hours		
Elective	4 Elective	4		



1104 Philosophy, BA

Philosophy seminar	4 PHIL undergraduate elective	4
PHIL undergraduate elective	4 Upper-division elective	4
Upper-division elective	4 Elective	4
		16
		16

Total Hours: 129

**Philosophy with Concentration in Law and Ethics, BA**

**FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1215	4 Elective	4 Vacation	0 Vacation	0
ENGW 1111	4 Moral and political elective	4		
PHIL 1101	4 Foreign language core course	4		
Foreign language core course	4 Elective	4		
		16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Foreign language core course	4 Elective	4 Vacation	0 Co-op	0
Elective	4 PHIL 2330	4		
PHIL 2325	4 Elective	4		
Elective	4 Law-related elective	4		
	EESH 2000	1		
		16	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Elective	4 Elective	4 Co-op	0
	PHIL 1115	4 Elective	4	
	PHIL 3435	4		
	ENGW 3315	4		
		0	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Elective	4 Elective	4 Co-op	0
	Moral and political elective	4 Upper-division elective	4	
	Law-related elective	4		
	Upper-division elective	4		
		0	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 Elective	4
	Philosophy seminar	4
	Upper-division elective	4
	Elective	4
		0
		16

Total Hours: 129

**FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1215	4 Elective	4 Vacation	0 Vacation	0
ENGW 1111	4 Moral and political elective	4		
PHIL 1101	4 Foreign language core course	4		
Foreign language core course	4 Elective	4		
		16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Foreign language core course	4 Co-op	0 Co-op	0 Elective	4
Elective	4		Elective	4
PHIL 2325	4			
Elective	4			
EESH 2000	1			
		17	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 Elective	4
PHIL 2330	4		Elective	4
Law-related elective	4			
Upper-division elective	4			
		16	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 Vacation	0
PHIL 1115	4			
PHIL 3435	4			
ENGW 3315	4			
		16	0	0

**Year 5**

Fall	Hours Spring	Hours
Elective	4 Elective	4

Moral and political elective	4	Philosophy seminar	4
Law-related elective	4	Upper-division elective	4
Upper-division elective	4	Elective	4
		16	16

Total Hours: 129

### Philosophy with Concentration in Religious Studies, BA

#### FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	Religious studies elective	4				
PHIL 1101	4	Foreign language core course	4				
Foreign language core course	4	Elective	4				
		16	16	0	0	0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Elective	4	Vacation	0	Co-op	0
Foreign language core course	4	PHIL 2330	4				
PHIL 2325	4	Elective	4				
Elective	4	Religious studies elective	4				
		EESH 2000	1				
		16	17	0	0	0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Elective	4	Elective	4	Co-op	0
		PHIL 1115	4	Elective	4		
		PHIL 3435	4				
		ENGW 3315	4				
		0	16	8	0	0	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Elective	4	Elective	4	Co-op	0
		Philosophy elective	4	Upper-division elective	4		
		Upper-division elective	4				
		Elective	4				
		0	16	8	0	0	0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	Elective	4
		Religious studies seminar	4
		Upper-division elective	4
		Elective	4
		0	16

Total Hours: 129

#### FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	Religious studies elective	4				
PHIL 1101	4	Foreign language core course	4				
Foreign language core course	4	Elective	4				
		16	16	0	0	0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language core course	4	Co-op	0	Co-op	0	Elective	4
Elective	4					Elective	4
PHIL 2325	4						
Elective	4						
EESH 2000	1						
		17	0	0	0	8	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Elective	4
PHIL 2330	4					Elective	4
Religious studies elective	4						
Upper-division elective	4						
		16	0	0	0	8	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Vacation	0
PHIL 1115	4						
PHIL 3435	4						
ENGW 3315	4						
		16	0	0	0	0	0

## Year 5

Fall	Hours Spring	Hours
Elective	4 Elective	4
Philosophy seminar	4 Religious studies seminar	4
Upper-division elective	4 Upper-division elective	4
Elective	4 Elective	4
	16	16

Total Hours: 129

## Religious Studies, BA

The program in religious studies offers the opportunity to acquire an understanding of religion within various cultural, historical, and political contexts through comparative approaches and an engagement with religion in everyday life. The major in religious studies is designed to enable students to not only gain a breadth of knowledge across a variety of religious traditions but also to pursue in-depth mastery of particular traditions in their practical and cultural dimensions, including the various normative and ideological issues that arise out the manifestation of religion in human affairs. In addition to the study of particular religious traditions, religious studies majors will be expected to gain a general knowledge of the theoretical and methodological approaches employed in the academic study of religion. Through the major, a student will enhance the ability to think, interpret, and write critically about a range of religious traditions through diverse methodological approaches.

- **The standard religion major** offers students a maximum number of electives so they may choose in accordance with their own backgrounds and interests.
- **Combined majors** are offered in Jewish studies and religion, history and religious studies, religious studies and African-American studies, and international affairs and religious studies.
- **The half-major template** in religious studies can be used by students to create their own combined majors.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Religious Studies Major Requirements

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
<b>Comparative Religion</b>		
Complete one of the following that is not used to satisfy another requirement:		4
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2395	Japanese Buddhism	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
<b>Electives</b>		
Complete five of the following, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement:		20
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1111	Introduction to World Religions	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1285	Jewish Religion and Culture	
PHIL 1290	Chinese Philosophy and Religion	

PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1666	The Problem of Evil in Film	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 2390	Cults and Sects	
PHIL 2395	Japanese Buddhism	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 4903	Seminar in Religion	
<b>Capstone</b>		
Complete the following that is not used to satisfy another requirement:		4
PHIL 4903	Seminar in Religion	

Religious studies elective	4		Elective	4
Elective	4			
	16	0	0	12
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Capstone	4 Open elective	4 Elective	4 Vacation	0
Open elective	4 Elective	4 Elective	4	
Religious studies elective	4 Elective	4		
Elective	4 Elective	4		
	16	16	8	0
Total Hours: 128				

### Religious Studies Major Credit Requirement

Complete 36 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Spring/Summer 1

<b>Year 1</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
ENGW 1111	4 Open elective	4 Vacation	0 Vacation	0
PHIL 1110	4 Elective	4		
Elective	4 Elective	4		
Elective	4 Elective	4		
	16	16	0	0
<b>Year 2</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Comparative elective	4 Co-op	0 Co-op	0 Elective	4
Open elective	4		Elective	4
Lived elective	4		Elective	4
Elective	4			
	16	0	0	12
<b>Year 3</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Advanced-level elective	4 Co-op	0 Co-op	0 Elective	4
Open elective	4		Elective	4
Religious studies elective	4			
Elective	4			
	16	0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Open elective	4 Co-op	Co-op	Vacation	0
Elective	4			
Religious studies elective	4			

### Five Years, Three Co-ops in Spring/Summer 1

<b>Year 1</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
ENGW 1111	4 Open elective	4 Vacation	0 Vacation	0
PHIL 1110	4 Elective	4		
Elective	4 Elective	4		
Elective	4 Elective	4		
	16	16	0	0
<b>Year 2</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Comparative elective	4 Co-op	0 Co-op	0 Elective	4
Open elective	4		Elective	4
Lived elective	4			
Elective	4			
	16	0	0	8
<b>Year 3</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Advanced-level elective	4 Co-op	0 Co-op	0 Elective	4
Open elective	4		Elective	4
Religious studies elective	4			
Elective	4			
	16	0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Open elective	4 Co-op	Co-op	Vacation	0
Elective	4			
Religious studies elective	4			

Elective	4			
	16	0	0	0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
Capstone	4	Elective	4	
Religious studies elective	4	Religious studies elective	4	
Open elective	4	Elective	4	
Elective	4	Elective	4	
	16		16	

Total Hours: 128

## Cultural Anthropology and Philosophy, BA

The Department of Sociology and Anthropology and the Department of Philosophy and Religion offer an interdisciplinary combined major in sociology and philosophy. Students in the combined major integrate the study of culture and social structures with the study of social and political philosophy, ethics, and the philosophy of science. The combined major enables students to understand and appreciate cultural differences in human interaction, ways of knowing, and systems of logic and human classification.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Anthropology Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
<b>Area Courses</b>		
Additional area courses taken may count as anthropology electives. Complete two of the following:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	

ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India

### Capstone

Students are expected to complete the following course in spring of their senior year:

ANTH 4600	Senior Seminar	4
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### Electives

Complete three 4-semester-hour courses in addition to the above requirements. One study-abroad course may also count toward this requirement with prior permission from the department.

### Philosophy Requirements

Code	Title	Hours
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#### Required Courses

PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

#### Foundational Philosophy of Science Elective

Complete one of the following:		4
PHIL 1105	Science and Pseudoscience	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 3050	Information and Uncertainty	
PHIL 3360	Scientific Approaches to Philosophy	

#### Intermediate/Advanced Electives

Complete two of the following courses that are not used to satisfy another requirement:		8
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

#### Philosophy 4000/5000 Electives

Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	

PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy Electives**

Complete three additional courses from the philosophy department. 12

**Integrative Requirement**

Code	Title	Hours
One integrative course is required from each discipline. Courses taken as electives above may not be used as integrative courses.		
PHIL 4500 or PHIL 4510 or PHIL 4550	Theory of Knowledge Philosophy of Science Philosophy of Economics	4
SOCL 3450	Class, Power, and Social Change	4

**Anthropology and Philosophy Combined Major Credit Requirement**

Minimum 2.000 GPA required in anthropology and philosophy courses  
88 semester hours required

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/ Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 1101	4 ANTH 2305	4 Elective	4 ANTH elective	4
PHIL 1115	4 PHIL 2325	4 Elective	4 Elective	4
ENGW 1111	4 PHIL elective	4		
PHIL elective	4 ANTH elective	4		
	16	16	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHIL 2330	4 PHIL advanced elective	4 Elective	4 Co-op	
ANTH elective	4 ANTH 3410	4 Elective	4	
ANTH area course	4 ANTH 3421	4		
Elective	4 PHIL elective	4		
	16	16	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Integrative course	4 Elective	4 Co-op	

ANTH area course	4 Elective	4
ANTH elective	4	
PHIL 4000/5000-level course	4	

0 16 8 0

**Year 4**

Fall	Hours Spring	Hours
Co-op	PHIL capstone	4
	ANTH capstone	4
	Integrative course	4
	Elective	4
	0	16

Total Hours: 128

**Cultural Anthropology and Religious Studies, BA**

The Department of Sociology and Anthropology and the Department of Philosophy and Religion offer an interdisciplinary combined major in anthropology and religious studies. Students in the combined major integrate the study of culture and social structures with the study of religious traditions and praxis.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Cultural Anthropology Requirements**

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
<b>Area Courses</b>		
Additional area courses taken may count as anthropology electives. Complete two of the following:		8
ANTH 4350	Ethnography of Southeast Asia	

ANTH 4500	Latin American Society and Development
ANTH 4505	Native North Americans
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India

**Capstone**

Students are expected to complete the following course in spring of their senior year:

ANTH 4600	Senior Seminar	4
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**Electives**

Complete three 4-semester-hour courses in addition to the above requirements. One study-abroad course may also count toward this requirement with prior permission from the department. 12

**Religion Requirements**

Code	Title	Hours
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**Required Foundational Course**

PHIL 1110	Introduction to Religious Studies	4
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**Lived Religion Electives**

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2390	Cults and Sects
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

**Comparative Religion Elective**

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1220	The Meaning of Death
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

**Electives**

Complete five of the following courses that have not been used to satisfy another requirement in the combined major. At least one must be at the 2000 level or above and at least one must be at the 3000 level or above: 20

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1111	Introduction to World Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2390	Cults and Sects
PHIL 2395	Japanese Buddhism
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

**Seminar**

PHIL 4903	Seminar in Religion	4
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**Integrative Requirements**

Code	Title	Hours
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One integrative course is required for each discipline. Courses taken as electives above may not be used as integrative courses. 4

ANTH 2315	Religion and Modernity
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions

**Cultural Anthropology GPA Requirement**

Minimum 2.000 GPA required in all anthropology courses

**Religion GPA Requirement**

Minimum 2.000 GPA required in all religion courses

**Cultural Anthropology and Religion Major Credit Requirement**

84 semester hours required in the major

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Summer 2/ Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 1101	4 ANTH 2305	4 Elective	4 Elective	4
PHIL 1110	4 Lived religion elective	4 Elective	4 Elective	4
PHIL elective	4 PHIL elective	4		
ANTH elective	4 ANTH elective	4		
	16	16	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Comparative religion elective	4 ANTH 3410	4 Elective	4 Co-op	
ANTH elective	4 ANTH 3421	4 Elective	4	
ANTH area course	4 Elective	4		
PHIL elective	4 PHIL elective	4		
	16	16	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHIL elective	4 Elective	4 Co-op	
	ANTH area course	4 Elective	4	
	Elective	4		
	Integrative course	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours		
Co-op	PHIL seminar	4		
	ANTH capstone	4		
	Integrative course	4		
	Elective	4		
	0	16		

Total Hours: 128

## English and Philosophy, BA

The Department of English and the Department of Philosophy and Religion offer an interdisciplinary combined major in English and philosophy. Students in the combined major in English and philosophy integrate the study of literature and writing with the study of ethical and philosophical issues and problems.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### English Requirements

Code	Title	Hours
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#### English Course-Level Requirement

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

#### Introduction to College

ENGL 1000	English at Northeastern	1
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#### Foundational Courses

ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
ENGL 1400	Introduction to Literary Studies	4

#### Diversity

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below.

ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2470	Asian-American Literature	
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	

#### Pre-Nineteenth-Century Literature

Complete one of the following: 4

ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	
ENGL 2296	Early African-American Literature	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3618	Milton	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	

#### Nineteenth-, Twentieth-, and Twenty-First-Century Literature

Complete one of the following: 4



ENGL 2301	The Graphic Novel
ENGL 2330	The American Renaissance
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3140	19th-Century Literatures
ENGL 3619	Emerson and Thoreau
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3720	19th-Century Major Figure
ENGL 3730	20th- and 21st-Century Major Figure

**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3700	Narrative Medicine
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

**Comparative Literature**

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1500	British Literature to 1800
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

**English Electives**

Complete two additional ENGL electives. 8

**Philosophy Requirements**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Restricted Electives**

Take two of the following with at least one at the 4000 or 5000 level: 8

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3343	Existentialism
PHIL 3460	Philosophy and Literature
PHIL 3360	Scientific Approaches to Philosophy
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy Electives**

Complete three additional electives from the philosophy department. 12

## Integrative Requirement

Code	Title	Hours
PHIL 3435	Moral Philosophy	4
ENGL 3619	Emerson and Thoreau	4

## English and Philosophy Combined Major Credit Requirement

Complete 88 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHIL 1115	4 PHIL 2325	4 Vacation	Vacation	
ENGL 1000	1 ENGL 1160	4		
ENGL 1400	4 Elective	4		
Elective	4 ENGL Diversity Course	4		
Elective	4			
	17	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGL Pre Nineteenth Century Literature Course	4 Co-op	Co-op	Elective	4
Elective	4		Elective	4
PHIL 2330	4		Elective	4
ENGL Nineteenth, Twentieth, and Twenty First Century Literature	4			
	16	0	0	12

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHIL Restricted Elective	4 Co-op	Co-op	Elective	4
Elective	4		Elective	4
ENGL Comparative Literature Course	4		Elective	4
ENGL Theories and Methods Course	4			
	16	0	0	12

Year 4			
Fall	Hours Spring	Hours Summer 1	Hours
ENGL Writing Course	4 Integrative Course	4 Elective	4
ENGL Capstone	4 Elective	4 Elective	4
PHIL Restricted Elective	4 Elective	4	
Elective	4 Elective	4	
	16	16	8

Total Hours: 129

## Environmental Studies and Philosophy, BA

Through this combined major, successful undergraduates will develop an awareness of the scientific, cultural, and political aspects of the world's environmental problems while considering the philosophical, moral, and ethical impacts that such decisions have on human-environment interactions. Due to overlap in course content, students majoring in Environmental Studies or any Environmental Studies combined majors may not complete a minor in Environmental and Sustainability Sciences.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

## Environmental Studies Requirements

Code	Title	Hours
<b>Introductory Courses</b>		
<i>Choose one introductory science course:</i>		4-5
ENVR 1101	Environmental Science	
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	
<i>Choose one introductory social science course:</i>		4
ANTH 1101	Peoples and Cultures	
ENVR 2401	Food Justice and Community Development	
PHIL 1180	Environmental Ethics	
SOCL 1246	Environment and Society	

**Scientific Foundations of Environmental Systems:**

Complete one of the following:	4
ENVR 1110 Global Climate Change	
ENVR 3150 Food Security and Sustainability	
ENVR 3200 Water Resources	

**Human Foundations of Environmental Systems:**

Complete one of the following:	4
ENVR 2515 Sustainable Development	
PHTH 2414 Environmental Health	
SOCL 4522 Environmental Justice	

**Skills Course:**

ENVR 3300 Geographic Information Systems and ENVR 3301 and Lab for ENVR 3300	5
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**Electives:**

Complete four of the following, three of which must be at the 3000 level or higher:	16
ARTG 5110 Information Design History	
BUSN 1110 Fundamentals of Business	
BUSN 3110 The Consulting Environment	
CIVE 5280 Remote Sensing of the Environment	
COMM 3500 Environmental Issues, Communication, and the Media	
EEMB 3466 Disease Ecology	
EEMB 3700 Desert Ecology	
ENVR 3201 Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia	
ENVR 3202 Coastal Sustainability: The Blue Economy of the Gulf of Maine	
ENVR 3701 Energy in the Desert Ecosystem	
ENVR 4504 Environmental Pollution	
ENVR 5210 Environmental Planning	
ENVR 5563 Advanced Spatial Analysis	
FINA 2720 Sustainability in the Business Environment	
JRNL 3650 Science Writing	
LPSC 2301 Introduction to Law, Policy, and Society	
PHIL 1180 Environmental Ethics	
PHTH 1270 Introduction to Global Health	
POLS 2395 Environmental Politics and Policy	
PPUA 5268 International Environmental Policy	

**Philosophy Requirements**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 1180	Environmental Ethics	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Philosophy of Science/Environment</b>		
Complete one of the following:		4
PHIL 1105	Science and Pseudoscience	
PHIL 3050	Information and Uncertainty	

PHIL 4510	Philosophy of Science
PHIL 4555	Philosophy of Biology
<b>Restricted Electives</b>	
Complete two of the following not used to fulfill another requirement with at least one course at the 4000 or 5000 level:	8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3343	Existentialism
PHIL 3360	Scientific Approaches to Philosophy
PHIL 3435	Moral Philosophy
PHIL 3460	Philosophy and Literature
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Additional Electives**

Complete two additional PHIL courses.	8
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**Integrative Courses**

Code	Title	Hours
Complete two of the following. Courses used for electives may not be used as integrative courses:		8
ENVR 4050	Solving Emerging Environmental Challenges through Capstone	
ENVR 4997	Senior Thesis	
ENVR 5210	Environmental Planning	
ENVR 5220	Ecosystem-Based Management	
COMM 3532	Theories of Conflict and Negotiation	

**Environmental Studies and Philosophy Combined Major Credit Requirement**

Complete 78 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 1115	4	PHIL 2325 or POLS 2325	4	Vacation		Vacation	
ENVR 1101	4	ENVR 3150	4				
INTL 2240	4	ENVR 2515	4				

PHIL 1180	4 Elective	4		
	16	16	0	0
<b>Year 2</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
PHIL 1105 or 4510	4 PHIL Restricted Elective	4 Elective	4 Co-op	
ENVR 3300 and ENVR 3301	5 ENVR elective; 2 of 4	4 Elective	4	
ENVR elective; 1 of 4	4 Elective	4		
PHIL 2330	4 Elective	4		
	17	16	8	0
<b>Year 3</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Co-op	PHIL Elective	4 Vacation	Co-op	
	PHIL 4000/5000 Elective	4		
	ENVR elective; 3 of 4	4		
	ENVR elective; 4 of 4	4		
	0	16	0	0
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Co-op	PHIL Elective	4 Elective	4 Co-op	
	Elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	Integrative Course #1	4		
	Integrative Course #2	4		
	Elective	4		
	Elective	4		
	0	16		

Total Hours: 129

## History and Philosophy, BA

The Department of Philosophy and Religion and the Department of History offer an interdisciplinary combined major in philosophy and history. Students interested in the combined major integrate the study of philosophy and ethics with the study and analysis of human history.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Choose one course from the 1000 level, excluding HIST 1200/1201		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Choose one course from the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
<b>Intermediate/Advanced History Cluster</b>		
Complete (3) History courses numbered 2000 or above, excluding 2301/2302.		12
<b>Advanced History</b>		
Complete one history course 3000 level or above		4
<b>History Capstone Seminar or Senior Project</b>		
HIST 4701	Capstone Seminar	
Public history concentrators may also select from the following:		
HIST 4903	Fieldwork in History 1	

### Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Intermediate/Advanced Electives</b>		
Complete three of the following with at least one course at the 4000 or 5000 level:		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Additional Electives**  
Complete three additional PHIL courses. 8

### Integrative Courses

Code	Title	Hours
Complete one of the following: 4		
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2395	Japanese Buddhism	

### History and Philosophy Combined Major Credit Requirement

Complete 85 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 1200	1 HIST Introductory Level	4 Vacation	Vacation	

HIST 1201	4 HIST Pre 1800 History Elective	4		
ENGW 1111	4 HIST 1000	1		
PHIL 1115	4 PHIL Intermediate/Advanced Elective	4		
PHIL 2325 or POLS 2325	4 PHIL 2330	4		
		17	17	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 2301	4 HIST Intermediate/Advanced Elective	4 Vacation	Co-op	
HIST 2302	1 HIST Intermediate/Advanced Elective	4		
PHIL Elective	4 PHIL Intermediate/Advanced Elective	4		
ANTH Area Course	4 PHIL Intermediate/Advanced Elective	4		
PHIL Elective	4 Elective	1		
		17	17	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	HIST Intermediate/Advanced Elective	4 Elective	4 Co-op	
	PHIL Integrative Course	4 Elective	4	
	PHIL Elective	4		
	HIST Advanced Elective	4		
		0	16	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	HIST Elective or Integrative Course	4 Elective	4 Co-op	
	PHIL Elective	4		
	PHIL Elective	4		
	Elective	4		
		0	16	4

Year 5		
Fall	Hours Spring	Hours
Co-op	HSIT Capstone or Senior Project	4
	HIST Elective or Integrative Course	4
	PHIL Intermediate/ Advanced Elective	4
	Elective	4
	0	16

Total Hours: 128

## History and Religious Studies, BA

The Department of Philosophy and Religion and the Department of History offer an interdisciplinary combined major in religious studies and history. Students interested in the combined major integrate the study of religious traditions, religious praxis, and religious ethics with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Choose one course from the 1000 level excluding HIS1200/1201.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Choose one course from the following:		4

HIST 1185	Introduction to Middle Eastern History
HIST 1187	Introduction to Latin American History
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
HIST 1252	Japanese Literature and Culture
HIST 1285	Introduction to Russian Civilization
HIST 2330	Colonial and Revolutionary America
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain

### Intermediate/Advanced History

Complete four History courses numbered 2003 or above that have not been used to fulfill another requirement. 16

### Advanced History

Complete one history course 3000 level or above that have not been used to fulfill another requirement. 4

### Religious Studies Requirements

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	

### Comparative Religion Elective 4

Complete one of the following courses that is not used to satisfy another requirement:

PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1220	The Meaning of Death
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

### Electives

20

Complete six of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement:

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1111	Introduction to World Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4903	Seminar in Religion

### Integrative Requirements

Code	Title	Hours
<b>Capstone</b>		<b>4</b>

Complete one of the following courses that is not used to satisfy another requirement:

HIST 4701	Capstone Seminar
PHIL 4903	Seminar in Religion

<b>Integrative Course</b>		<b>4</b>
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Complete one of the following courses that is not used to satisfy another requirement:

HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
HIST 2370	Renaissance to Enlightenment
PHIL 2395	Japanese Buddhism

### History and Religious Studies Combined Major Credit Requirement

Complete 78 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

## Plan of Study

### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1200	1	HIST 1000	1	Vacation		Vacation	
HIST 1201	4	Intro Level History Course	4				
ENGW 1111	4	Lived Religion Elective	4				
PHIL 1110	4	Pre 1800 History Elective	4				
Elective	4	Elective	4				
	17		17		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2301	4	HIST Intermediate/Advanced Elective	4	Vacation		Co-op	
HIST 2302	1	HIST Intermediate/Advanced Elective	4				
Comparative Religion Elective	4	Elective	4				
ANTH area course	4	Elective	4				
Elective	4						
	17		16		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Integrative Course	4	Elective	4	Co-op	
		PHIL 2000 Level Elective	4	Elective	4		
		HIST Advanced Elective	4				
		HIST Intermediate/Advanced Elective	4				
	0		16		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST Elective	4	Elective	4	Co-op	
		PHIL 3000 Level Elective	4	Elective	4		
		Elective	4				
		Elective	4				
	0		16		8		0

## Year 5

Fall	Hours Spring	Hours
Co-op	Capstone	4
	HIST Elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 131

### International Affairs and Religious Studies, BA

Introduces the interaction of religious views with institutions and cultures in national and international contexts since the early 20th century. The combined major addresses diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social/religious movements; state-society relations (religion, democracy, authoritarianism, social justice and ethics, citizenship); comparative study of religious theology and praxis; and knowledge of particular religious traditions, including Buddhism, Christianity, Hinduism, Islam, and Judaism.

#### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

#### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

#### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
POLS 1155	Comparative Politics	4
or ECON 1115	Principles of Macroeconomics	
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	

#### International Experiential Learning

Complete at least one international semester via study abroad, international internship, international co-op, or two approved short-term programs abroad.

#### International Affairs Elective

Code	Title	Hours
Complete one of the following courses:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

#### Global Dynamics Requirement

Code	Title	Hours
Complete one of the following (courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements):		4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	



HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context

INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### Regional Analysis Requirement

Code	Title	Hours
	Complete two of the following, both of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty advisor. See department for additional courses.	8

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		

ANTH 4350	Ethnography of Southeast Asia
ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

*Europe*

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

*Latin America*

ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

*Middle East*

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies

INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<i>Russia</i>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Religious Studies Requirements**

Code	Title	Hours
<b>Required Foundational Course</b>		<b>4</b>
PHIL 1110	Introduction to Religious Studies	
<b>Lived Religion Elective</b>		<b>4</b>
Complete one of the following courses that is not used to satisfy another requirement:		
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
<b>Comparative Religion Elective</b>		<b>4</b>
Complete one of the following courses that is not used to satisfy another requirement:		
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2395	Japanese Buddhism	

**Electives** **24**

Complete six of the following courses, one of which must be at the 2000 level or above and two of which must be at the 3000 level or above, that is not used to satisfy another requirement:

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1111	Introduction to World Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2390	Cults and Sects
PHIL 2395	Japanese Buddhism
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4903	Seminar in Religion
PHIL 4992	Directed Study

**International Affairs and Religious Studies Integrative Requirement**

Code	Title	Hours
<b>Capstone</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
or PHIL 4903	Seminar in Religion	

**International Affairs and Religious Studies Combined Major Credit Requirement**

Complete 76 semester hours in the major

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study  
Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	POLS 1160	4	Vacation		Vacation	
INTL 1101	4	Lived religion elective		4			
ENGW 1111	4	Elective		4			
Foreign language course	4	Elective		4			
PHIL 1110	4						
		17		16		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Comparative religion elective	4	Elective		4	Vacation		Co-op
Elective	4	Elective		4			
Elective	4	Elective		4			
Elective	4	Elective		4			
		16		16		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		INTL 3400	4	Elective		4	Co-op
		ENGW 3315	4	Elective		4	
		PHIL level-2000 elective		4			
		Elective		4			
		0		16		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL level-3000 elective		4	Elective		4
		Elective		4	Elective		4
		Elective		4			
		Elective		4			
		0		16		8	
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		INTL 4700	4				
		Research method course		4			
		Elective		4			
		Elective		4			
		0		16			

Total Hours: 129

## Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 POLS 1160	4 Vacation	Vacation	
INTL 1101	4 Lived religion elective	4		
ENGW 1111	4 Elective	4		
Foreign language course	4 Elective	4		
PHIL 1110	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Foreign language course	4 Co-op	Co-op	Elective	4
Comparative religion elective	4		Elective	4
Elective	4			
Elective	4			
	16	0	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3315	4 Co-op	Co-op	Elective	4
PHIL level-2000 elective	4		Elective	4
Elective	4			
Elective	4			
	16	0	0	8
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 3400	4 Co-op	Co-op	Vacation	
PHIL level-3000 elective	4			
Elective	4			
Elective	4			
	16	0	0	0
Year 5				
Fall	Hours Spring	Hours		
Elective	4 INTL 4700	4		
Elective	4 Research method course	4		
Elective	4 Elective	4		
Elective	4 Elective	4		
	16	16		

Total Hours: 129

## Jewish Studies and Religion, BA

The combined major in Jewish studies and religion offers students an integrated program of study of two naturally complementary fields. Study of Judaism as a religion is greatly enhanced by broad familiarity with the world's religious traditions; conversely, in-depth knowledge of Jewish history, identity, and cultures provides students of religion with valuable insight into the ways in which religion interacts with a wide variety of forces to shape the experiences of the adherents of a particular faith. The combined major is designed to enable students to understand the history, cultures, and religion of the Jewish people; analyze and apply theoretical understanding to the interaction between religious, social, and historical factors that have shaped the experiences of the Jewish people; and demonstrate fluency in understanding the major religious traditions of the world. The combined major in Jewish studies and religion is designed to prepare students for graduate work in Jewish studies, religion, or many of the other disciplines that make up Jewish studies or for work within the Jewish community or in communal organizations associated with other religions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Jewish Studies Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHIL 1285 or JWSS 1285	Jewish Religion and Culture	4
JWSS 4660	Jewish Studies Module	1
<b>Jewish Religion and Thought</b>		
HIST 1100	Law and History	
<b>Israel Studies</b>		
Complete one of the following:		4
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
INTL 2100	Modern Israel	
POLS 3470	Arab-Israeli Conflict	
<b>Jewish History</b>		
Complete one of the following:		4
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2282	The Holocaust and Comparative Genocide	
HIST 2285	America and the Holocaust	

or JWSS 2285	America and the Holocaust
HIST 2431	Immigration and Identity in the American Jewish Experience
or JWSS 2431	Immigration and Identity in the American Jewish Experience

**Jewish Art and Culture**

Complete one of the following: 4

ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature

**Jewish Studies Electives**

Complete three of the following: 12

ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2282	The Holocaust and Comparative Genocide
or JWSS 2282	The Holocaust and Comparative Genocide
HIST 2285	America and the Holocaust
or JWSS 2285	America and the Holocaust
HIST 2431	Immigration and Identity in the American Jewish Experience
or JWSS 2431	Immigration and Identity in the American Jewish Experience
INTL 2100	Modern Israel
JWSS 4992	Directed Study
PHIL 1120	Understanding the Bible
PHIL 1271	Sex in Judaism, Christianity, and Islam
POLS 2370	Religion and Politics
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
SOCL 3241	Violence and Society
SOCL 3270	Race and Ethnic Relations

**Religion Requirements**

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2390	Cults and Sects
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

**Comparative Religion Elective**

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1220	The Meaning of Death
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

**Electives**

Complete five of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement: 20

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1111	Introduction to World Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion

PHIL 2390	Cults and Sects
PHIL 2395	Japanese Buddhism
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4903	Seminar in Religion

**Capstone**

Complete the following course that is not used to satisfy another requirement: 4

PHIL 4903	Seminar in Religion
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**Integrative Requirements**

Code	Title	Hours
Complete one of the following courses that is not used to satisfy another requirement: 4		

HIST/JWSS 1294	History of the Jews in the Modern World	4
or JWSS 1294	History of the Jews in the Modern World	
HIST 2431	Immigration and Identity in the American Jewish Experience	4
or JWSS 2431	Immigration and Identity in the American Jewish Experience	

**Hebrew Language Introduction**

Complete two courses in Hebrew. These courses also count toward the BA language requirement. 8

**Jewish Studies and Religion Major Credit Requirement**

80 major semester hours required

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Four Years, Two Co-ops in Spring/Summer 1**

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ENGW 1111	4 Lived Religion Elective	4 Vacation	0 Elective	4	
PHIL 1110	4 Israel Studies	4	Elective	4	
PHIL 1285 or JWSS 1285	4 HBRW 1101	4			
Elective	4 HIST 1100	4			
	16	16	0	8	
Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Elective	4 Co-op	Co-op	0 Elective	4	
Jewish History Course	4		JS Elective	4	

Comparative Religion Elective	4			
HBRW 1102	4			
	16	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHIL 2000 Level Elective	4 Elective	4 Elective	4 Elective	4
Jewish Art and Culture Course	4 JWSS 4660	1 Elective	4 Elective	4
Elective	4 Elective			
JS Elective	4 JS Elective	4		
	16	9	8	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHIL 3000 Level Elective	4 Co-op	Co-op	Elective	4
Elective	4		Elective	4
Intergrative Requirement Course	4			
PHIL Capstone	4			
	16	0	0	8

Total Hours: 129

**Media and Screen Studies and Philosophy, BA**

The Media and Screen Studies Program and the Department of Philosophy and Religion offer a combined major in media and screen studies and philosophy. The combined major integrates the analysis, research, and production of traditional and emerging media along with the study of questions and theories related to morality, society, religion, and the natural and social sciences.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Societies and Institutions (SI), Analyzing and Using

Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), and Difference and Diversity (DD) may be met through electives in the major.

## Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

## Media and Screen Studies Electives

Code	Title	Hours
(NUpath capstone recommendation: Complete MSCR 4623 as one of your MSCR electives if a philosophy capstone course is not selected for "Restricted Philosophy Electives.")		
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

## Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	

PHIL 2330	Modern Philosophy	4
<b>Restricted Philosophy Electives</b>		
Complete three of the following with at least one course at the 4000 or 5000 level:		12
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4510	Philosophy of Science	
PHIL 4500	Theory of Knowledge	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

<b>Philosophy Electives</b>		
Complete three additional electives from the philosophy department.		12

## Integrative Requirement

Code	Title	Hours
MSCR 3600	Film Theory	4

## Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements

## Major Credit Requirement

Complete 76 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Elective	4	Elective	4
PHIL 1115	4	PHIL 2325 or POLS 2325	4				
ENGW 1111	4	Foreign Language	4				
Foreign Language	4						
		17		16		8	
						8	

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
EEAM 2000	1 Restricted PHIL elective 1	4 Elective	4 Co-op	
MSCR elective	4 MSCR writing-intensive	4 Elective	4	
PHIL 2330	4 PHIL elective	4		
MSCR diversity/globalization	4 Elective	4		
PHIL elective	4			
	17	16	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Restricted PHIL elective 2	4 Elective	4 Co-op	
	MSCR writing-intensive	4 Elective	4	
	PHIL elective	4		
	MSCR elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	MSCR 3600	4
	MSCR elective	4
	Restricted PHIL elective 3	4
	Elective	4
	0	16

Total Hours: 130

## Political Science and Philosophy, BA

The combined major in political science and philosophy enables students to develop an integrated understanding of politics, political theory, ethical theory, and theories of justice. Successful students who complete the major will have the training to critically evaluate and assess public policies and social issues on both political and ethical grounds, including issues such as tax policy, immigration, environmental protection, trade policy, healthcare, education, defense policy, and much more.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Political Science Requirements**

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
POLS 2399	Research Methods in Political Science	4

**Political Thought**

Complete two of the following:	8
POLS 2325	Ancient Philosophy and Political Thought
POLS 2328	Modern Political Thought
POLS 2330	American Political Thought
POLS 2332	Contemporary Political Thought

**Political Science Electives**

Complete four courses in the following range:	16
POLS 2000 to POLS 5999	

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record. Requirements for the concentrations are listed below (p. ).

- American Political Institutions (p. 1128)
- Campaigns and Elections (p. 1128)
- Comparative Politics (p. 1128)
- Identity, Culture, and Politics (p. 1128)
- International Relations and Diplomacy (p. 1128)
- Law and Legal Studies (p. 1129)
- Public Policy (p. 1129)
- Security Studies (p. 1129)

**Philosophy Requirements**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 2303	Social and Political Philosophy	4

**Philosophy Restricted Electives**

Complete two of the following (not used to fulfill another requirement):	8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3343	Existentialism
PHIL 3360	Scientific Approaches to Philosophy



PHIL 3435	Moral Philosophy
PHIL 3460	Philosophy and Literature
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4901	Topics in Philosophy Seminar
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Additional Electives**

Complete three additional electives in philosophy or religion. 12

**Integrative Requirement**

Code	Title	Hours
Complete one of the following:		
PHIL 5001	Global Justice	4
or PHIL 5002	Ethics and Public Policy	

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	

POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1			
Fall	Hours Spring	Hours Summer 1	Hours
POLS 1000	1 POLS 1150	4 PHIL 2325 or POLS 2325	4
POLS 1155	4 POLS 1160	4 PHIL Restricted Elective	4
ENGW 1111	4 Foreign Language	4	
PHIL 1115	4 MATH 1215	4	
POLS elective	4		
17		16	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS Thought	4 Co-op	Co-op	Foreign Language	4
POLS 2399	4		Elective	4
Foreign Language	4			
PHIL 2330	4			
16		0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours
	Co-op	Co-op	
PHIL 2303	4		
PHIL 5001	4		
POLS 2400	4		
PHIL Restricted Elective	4		
16		0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
POLS elective	4 Co-op	Co-op	
POLS elective	4		
POLS Thought course	4		
PHIL Elective	4		
16		0	0

**Year 5**

Fall	Hours Spring	Hours
PHIL Elective	4 Elective	4
PHIL Elective	4 Elective	4
POLS Elective	4 Elective	4
Elective	4 PHIL Elective	4
16		16

Total Hours: 129

**Religious Studies and Africana Studies, BA**

The Department of Philosophy and Religion and the Program in Africana Studies offer an interdisciplinary combined major in religious studies and Africana studies. Students interested in the combined major integrate the study of religious traditions, religious praxis, and religious ethics with critical and systematic examination of the cultural, political, social, economic, and historical experiences of African Americans throughout the hemisphere and peoples of African descent around the world.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses

where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Religious Studies Major Requirements

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
<b>Comparative Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2395	Japanese Buddhism	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
<b>Electives</b>		

Complete five of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement:

PHIL 1111	Introduction to World Religions
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 2390	Cults and Sects
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4903	Seminar in Religion
PHIL 4992	Directed Study

#### Capstone

Complete the following course that is not used to satisfy another requirement:

PHIL 4903	Seminar in Religion	4
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### Africana Studies Requirements

Code	Title	Hours
<b>Foundational</b>		
AFAM 1101	Introduction to African American and Africana Studies	4
or AFRS 1101	Introduction to African Studies	
<b>Introductory</b>		
Complete one of the following:		4
AFAM 1101	Introduction to African American and Africana Studies	
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following:		8
AFAM 2296	Early African-American Literature	
AFAM 2455	American Women Writers	
AFAM 3663	The African American Novel	
<b>Social Sciences</b>		
Complete two of the following:		8
AFRS 2307	Africa Today	
AFAM 2399	Black Community and Social Change	
AFRS 2465	The Scope and Dynamics of Conflicts in Africa	

AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
AFRS 2464	Natural Resources and Sustainable Development
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora

**Electives**

Note: Electives may not double count for other AFAM or HIST combined-major requirements.

Complete one AFAM/AFRS course at the 2000 level or above	4
Complete one AFAM/AFRS course at the 3000 level or above	4

**Senior Capstone**

Choose one capstone course from the list below. 4

AFAM 4700	Capstone
PHIL 4903	Seminar in Religion

**Integrative Requirement**

Code	Title	Hours
Complete the following course: 4		
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	4
or AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 Lived Religion Elective	4 Elective	4 Elective	4
PHIL 1110	4 Introductory Course	4 Elective	4 Elective	4
Elective	4 Elective	4		
AFAM 1101 or AFRS 1101	4 Elective	4		
16	16	8	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Comparative Religion Elective	4 Co-op	Co-op	Elective	4
Social Sciences Course	4		Elective	4
PHIL 2000 Level Elective	4			
Elective	4			
16	0	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	Co-op	Elective	4
Humanities Course	4		Elective	4
Social Sciences Course	4			
AFAM/AFRS 2000 Level Elective	4			
16	0	0	0	8

Year 4		
Fall	Hours Spring	Hours
AFAM/AFRS 3000 Level Elective	4 Humanities Course	4
PHIL 3000 Level Elective	4 Integrative Requirement Course	4
Elective	4 PHIL Advanced Level Elective	4
Elective	4 Capstone	4
16	16	

Total Hours: 128

**Sociology and Philosophy, BA**

The Department of Sociology and Anthropology and the Department of Philosophy and Religion offer an interdisciplinary combined major in sociology and philosophy. Students in the combined major integrate the study of social structures and systems with the study of social and political philosophy, ethics, and the philosophy of science.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Sociology Requirements**

Code	Title	Hours
<b>Sociology Required Courses</b>		
SOCL 1101	Introduction to Sociology	4

SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
SOCL 2320	Statistical Analysis in Sociology	4
ANTH 2305	Global Markets and Local Culture	4

**Electives**

One course can be taken at the 2000 level and three other courses at the 3000 level or higher. 16

**Capstone**

Students are expected to complete the following course in spring of their senior year. 4

SOCL 4600	Senior Seminar
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**Philosophy Requirements**

Code	Title	Hours
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**Required Courses**

PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Foundational Philosophy of Science Elective**

Complete one of the following: 4

PHIL 1105	Science and Pseudoscience
PHIL 2001	Ethics and Evolutionary Games
PHIL 3050	Information and Uncertainty
PHIL 3360	Scientific Approaches to Philosophy

**Intermediate/Advanced Electives**

Complete two of the following courses that are not used to satisfy another requirement: 8

PHIL 3343	Existentialism
PHIL 3360	Scientific Approaches to Philosophy
PHIL 3435	Moral Philosophy
PHIL 3460	Philosophy and Literature
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy 4000/5000 Electives**

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice

PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy Electives**

Complete two additional courses from the philosophy department. 8

**Integrative Requirement**

Code	Title	Hours
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One integrative course is required for each discipline. Courses taken as electives above may not be used as integrative courses. 4

PHIL 4500	Theory of Knowledge
or PHIL 4510	Philosophy of Science
or PHIL 4550	Philosophy of Economics
SOCL 3450	Class, Power, and Social Change

**Sociology GPA Requirement**

Minimum 2.000 GPA required in all sociology courses

**Philosophy GPA Requirement**

Minimum 2.000 GPA required in all philosophy courses

**Sociology and Philosophy Major Credit Requirement**

80 semester hours required in the major

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/ Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHIL 1115	4 PHIL 2325 or POLS 2325	4 Elective	4 Elective	4
SOCL 1101	4 PHIL 2330	4 Elective	4 Elective	4
PHIL elective	4 PHIL elective	4		
SOCL elective	4 SOCL elective	4		
	16	16	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 2305	4 SOCL 3300	4 Elective	4 Co-op	
SOCL 2320	4 SOCL 2321	4 Elective	4	
PHIL advanced elective	4 PHIL advanced elective	4		
SOCL 2000 elective	4 PHIL elective	4		
	16	16	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Integrative course	4 Elective	4 Co-op	
	SOCL 4000 elective	4 Elective	4	
	SOCL 5000 elective	4		
	PHIL 4000/5000 elective	4		
	0	16	8	0

Year 4		
Fall	Hours Spring	Hours
Co-op	PHIL capstone	4
	SOCL capstone	4
	Integrative course	4
	SOCL 5000 elective	4
	0	16

Total Hours: 128

## Sociology and Religious Studies, BA

The Department of Sociology and Anthropology and the Department of Philosophy and Religion offer an interdisciplinary combined major in sociology and religious studies. Students in the combined major integrate the study of social structures and systems with the study of religious traditions and praxis.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Sociology Requirements

Code	Title	Hours
<b>Sociology Required Courses</b>		
ANTH 2305	Global Markets and Local Culture	4
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4

SOCL 3300	Social Theory	4
<b>Electives</b>		
One course can be taken at the 2000 level and three other courses at the 3000 level or higher.		16
<b>Capstone</b>		
Students are expected to complete the following course in spring of their senior year.		
SOCL 4600	Senior Seminar	4

### Religion Requirements

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	

### Comparative Religion Elective

Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2395	Japanese Buddhism	

### Electives

Complete five of the following courses that have not been used to satisfy another requirement in the combined major. At least one must be at the 2000 level or above and at least one must be at the 3000 level or above:		20
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1111	Introduction to World Religions	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	

PHIL 1260	Apocalypticism in Film
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2390	Cults and Sects
PHIL 2395	Japanese Buddhism
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4903	Seminar in Religion

**Seminar**

Complete the following course that is not used to satisfy another requirement:

PHIL 4903	Seminar in Religion	4
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**Integrative Requirements**

Code	Title	Hours
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One integrative course is required for each discipline. Courses taken as electives above may not be used as integrative courses.

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	4
ANTH 2315	Religion and Modernity	4

**Major Credit Requirement**

Complete 84 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Four Years, Two Co-ops in Summer 2/ Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours
PHIL 1110	4 SOCL 2320	4 Elective	4
SOCL 1101	4 PHIL elective	4 Elective	4
PHIL elective	4 SOCL elective	4	
SOCL elective	4 Lived religion elective	4	
	16	16	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 2305	4 SOCL 2321	4 Elective	4 Co-op	
PHIL elective	4 PHIL elective	4 Elective	4	
Comparative religion elective	4 PHIL elective	4		
SOCL 2000 elective	4 Elective	4		
	16	16	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	SOCL 3300	4 Elective	4 Co-op	
	SOCL 5000 elective	4 Elective	4	
	Integrative course	4		
	SOCL 5000 elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
Co-op	PHIL seminar	4 Elective	4
	SOCL capstone	4 Elective	4
	Integrative course	4	
	SOCL 5000 elective	4	
	0	16	8

Total Hours: 128

**Philosophy, BS**

Philosophy is a basic field of inquiry. Its range encompasses ideas and issues in every domain of human experience, and its methods apply to problems of an unlimited variety. The major in philosophy can develop not only philosophical skill and sophistication but also critical thinking and writing abilities that are readily applicable to pursuits in other academic areas, useful in careers far removed from philosophy, and valuable in everyday social and personal life. The study of philosophy can profoundly affect both the thinking one does and the kind of person one is.

There are a variety of ways to major in philosophy that students may choose from in accordance with their own backgrounds and interests. These include:

- **Philosophy generalist**

Offers students a maximum number of electives so they may choose in accordance with their own backgrounds and interests

- **Concentration in law and ethics**

Focuses elective course work in the areas of law, social and political philosophy, and applied ethics

- **Concentration in ethics**

Focuses elective course work in the areas of ethical theory, applied ethics, and social and political philosophy

- **Concentration in religious studies**

Uses electives to explore a variety of both religious expressions and methods of inquiry

- **Concentration in formal methods**

Focuses elective course work in areas of logic and formal methods

- **Combined majors** in media and screen studies and philosophy, economics and philosophy, environmental studies and philosophy, political science and philosophy, English and philosophy, history and philosophy, criminal justice and philosophy, computer science and philosophy, and physics and philosophy.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Concentration

Complete one of the following concentrations:

- Philosophy Generalist (p. 1135)
- Concentration in Law and Ethics (p. 1135)
- Concentration in Ethics (p. 1136)
- Concentration in Religious Studies (p. 1137)
- Concentration in Formal Methods (p. 1137)

## Philosophy Major Credit Requirement

Complete 36 semester hours in the major.

## Upper-Division Electives

Complete three general electives at 3000 level or above that do not double-count with the major or NUpath.

## General Electives

Additional courses taken beyond college and major course requirements to satisfy graduation credit requirements.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

## Concentrations

### PHILOSOPHY GENERALIST

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Philosophy Advanced Elective/Seminar</b>		
Complete three of the following courses with one at the 4000 or 5000 level:		12
PHIL 3343	Existentialism	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	

### Additional Electives

Complete three additional courses in philosophy and religion. 12

### CONCENTRATION IN LAW AND ETHICS

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 3435	Moral Philosophy	4
<b>Philosophy Advanced Elective/Seminar</b>		
Complete two of the following courses with one at the 4000 or 5000 level:		8
PHIL 3343	Existentialism	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	

### Ethics-Related Electives

Complete two of the following:		8
PHIL 1102	Introduction to Contemporary Moral Issues	
PHIL 1111	Introduction to World Religions	
PHIL 1112	Debating Ethical Controversies	



PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1145	Technology and Human Values
PHIL 1160	Introduction to Economic Justice
PHIL 1165	Moral and Social Problems in Healthcare
PHIL 1170	Business, Ethics, and Human Rights
PHIL 1180	Environmental Ethics
PHIL 1185	The Ethics of Food
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1290	Chinese Philosophy and Religion
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2001	Ethics and Evolutionary Games
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2303	Social and Political Philosophy
PHIL 2305	Philosophy of Emotions
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 2395	Japanese Buddhism
PHIL 4550	Philosophy of Economics
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy

**Law-Related Electives**

Complete two courses from social science departments. 8  
These courses are to be chosen in consultation with the department:

AFAM 2360	Politics of Poverty
AFRS 3460	Contemporary Government and Politics in Africa
CRIM 1110	Criminal Due Process
CRIM 1120	Criminology
CRIM 2320	Youth Crime and Justice
CRIM 3060	Political Crime and Terrorism
CRIM 3110	Gender, Crime, and Justice
CRIM 3120	Race, Crime, and Justice
ECON 3440	Public Finance
ECON 3442	Money and Banking
ECON 3520	History of Economic Thought
ENGL 3325	Rhetoric of Law
INTL 1101	Globalization and International Affairs
INTL 3400	International Conflict and Negotiation
JRNL 3550	The First Amendment and the Media
LPSC 1101	Introduction to Law
POLS 2357	Growth and Decline of Cities and Suburbs
POLS 3302	Judicial Process and Behavior
POLS 3324	Law and Society
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

SOCL 1245	Sociology of Poverty
SOCL 1246	Environment and Society
SOCL 2358	Current Issues in Cities and Suburbs
SOCL 3241	Violence and Society
SOCL 4518	Law and Society in a Digital World

**CONCENTRATION IN ETHICS**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 3435	Moral Philosophy	4
<b>Philosophy Advanced Elective/Seminar</b>		
Complete two of the following courses with one at the 4000 or 5000 level:		8
PHIL 3343	Existentialism	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	

**Ethics Courses**

Complete four of the following:		16
PHIL 1102	Introduction to Contemporary Moral Issues	
PHIL 1111	Introduction to World Religions	
PHIL 1112	Debating Ethical Controversies	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1145	Technology and Human Values	
PHIL 1160	Introduction to Economic Justice	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1170	Business, Ethics, and Human Rights	
PHIL 1180	Environmental Ethics	
PHIL 1185	The Ethics of Food	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1666	The Problem of Evil in Film	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2301	Philosophical Problems of Law and Justice	

PHIL 2303	Social and Political Philosophy
PHIL 2305	Philosophy of Emotions
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4550	Philosophy of Economics
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy

**CONCENTRATION IN RELIGIOUS STUDIES**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 3435	Moral Philosophy	4
<b>Philosophy Advanced Elective/Seminar</b>		
Complete two of the following courses with one at the 4000 or 5000 level:		8
PHIL 3343	Existentialism	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
<b>Religious Studies Courses</b>		
Complete three of the following:		12
PHIL 1110	Introduction to Religious Studies	
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1120	Understanding the Bible	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1285	Jewish Religion and Culture	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1666	The Problem of Evil in Film	
PHIL 2395	Japanese Buddhism	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 4903	Seminar in Religion	
PHIL 4992	Directed Study	

**CONCENTRATION IN FORMAL METHODS**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	
PHIL 2325	Ancient Philosophy and Political Thought	
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	
PHIL 4515	Advanced Logic	
<b>Formal Methods Courses</b>		
Complete four of the following at least three of which must be PHIL (one of which must be 3000 or above)		16
CS 2800	Logic and Computation	
ECON 4681	Information Economics and Game Theory	
INSH 1500	Digital Methods for Social Sciences and Humanities	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
MATH 2280	Statistics and Software	
MATH 3081	Probability and Statistics	
PHIL 1105	Science and Pseudoscience	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 1300	Knowledge in a Digital World	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 3050	Information and Uncertainty	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
POLS 3310	Public Opinion, Voting, and Elections	

**Philosophy Electives 8**

Complete two other PHIL courses (not used to fulfill another requirement) at least one of which is at the 4000/ 5000 level

**Plan of Study**  
**Five Years, Three Co-ops in Summer 2/Fall**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1215	4 Elective	4 Vacation	0 Vacation	0
ENGW 1111	4 PHIL undergraduate elective	4		
PHIL 1101	4 Elective	4		
Elective	4 Elective	4		
				16
				16
				0
				0

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Elective	4 Vacation	0 Co-op	0
PHIL 2325	4 PHIL 2330	4		
Elective	4 Elective	4		
Elective	4 Elective	4		

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	EESH 2000	1		
	16	17	0	0
<b>Year 3</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Co-op	0 PHIL 1115	4 PHIL undergraduate elective	4 Co-op	0
	PHIL undergraduate elective	4 Elective	4	
	ENGW 3315	4		
	Elective	4		
	0	16	8	0

<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Co-op	0 Advanced philosophy elective	4 Upper-division elective	4 Co-op	0
	Upper-division elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0

<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	0 Philosophy seminar	4		
	Elective	4		
	Upper-division elective	4		
	Elective	4		
	0	16		

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

<b>Year 1</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
MATH 1215	4 Elective	4 Vacation	0 Vacation	0
ENGW 1111	4 PHIL undergraduate elective	4		
PHIL 1101	4 Elective	4		
Elective	4 Elective	4		
	16	16	0	0

<b>Year 2</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Elective	4 Co-op	0 Co-op	0 Elective	4
PHIL 2325	4		Elective	4
Elective	4			
Elective	4			
EESH 2000	1			
	17	0	0	8

<b>Year 3</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Elective	4 Co-op	0 Co-op	0 Upper-division elective	4
PHIL 2330	4		Elective	4
Elective	4			
Elective	4			
	16	0	0	8

<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
PHIL undergraduate elective	4 Co-op	0 Co-op	0 Vacation	0
PHIL 1115	4			
Elective	4			
ENGW 3315	4			
	16	0	0	0

<b>Year 5</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
Advanced philosophy elective	4 Philosophy seminar	4
PHIL undergraduate elective	4 Elective	4
Upper-division elective	4 Upper-division elective	4
Elective	4 Elective	4
	16	16

Total Hours: 129

**Philosophy with Concentration in Law and Ethics, BS**  
**FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL**

<b>Year 1</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
MATH 1215	4 Elective	4 Vacation	0 Vacation	0
ENGW 1111	4 Moral and political elective	4		
PHIL 1101	4 Elective	4		
Elective	4 Elective	4		
	16	16	0	0

<b>Year 2</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Elective	4 Elective	4 Vacation	0 Co-op	0
PHIL 2325	4 PHIL 2330	4		
Elective	4 Elective	4		
Elective	4 Law-related elective	4		
	EESH 2000	1		
	16	17	0	0

Year 3					Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 PHIL 1115	4 Elective	4 Co-op	0	Elective	4 Co-op	0 Co-op	0 Upper-division elective	4
	Moral and political elective	4 Elective	4		PHIL 2330	4		Elective	4
	ENGW 3315	4			Elective	4			
	Elective	4			Moral and political elective	4			
	0	16	8	0		16	0	0	8
Year 4					Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 PHIL 3435	4 Upper-division elective	4 Co-op	0	Law-related elective	4 Co-op	0 Co-op	0 Vacation	0
	Law-related elective	4 Elective	4		PHIL 1115	4			
	Upper-division elective	4			Elective	4			
	Elective	4			ENGW 3315	4			
	0	16	8	0		16	0	0	0
Year 5					Year 5				
Fall	Hours Spring	Hours			Fall	Hours Spring	Hours		
Co-op	0 Philosophy seminar	4			PHIL 3435	4 Philosophy seminar	4		
	Elective	4			Upper-division elective	4 Elective	4		
	Upper-division elective	4			Elective	4 Upper-division elective	4		
	Elective	4			Elective	4 Elective	4		
	0	16				16	16		

Total Hours: 129

Total Hours: 129

**FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1215	4 Elective	4 Vacation	0 Vacation	0
ENGW 1111	4 Moral and political elective	4		
PHIL 1101	4 Elective	4		
Elective	4 Law-related elective	4		
	16	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 Elective	4
PHIL 2325	4		Elective	4
Elective	4			
Elective	4			
EESH 2000	1			
	17	0	0	8

**Philosophy with Concentration in Religious Studies, BS**  
**FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1215	4 Elective	4 Vacation	0 Vacation	0
ENGW 1111	4 Religious studies elective	4		
PHIL 1101	4 Elective	4		
Elective	4 Elective	4		
	16	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Elective	4 Vacation	0 Co-op	0
PHIL 2325	4 PHIL 2330	4		
Elective	4 Elective	4		
Elective	4 Elective	4		
	EESH 2000	1		
	16	17	0	0

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**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 PHIL 1115	4 Upper-division elective	4 Co-op	0
	Religious studies elective	4 Elective	4	
	ENGW 3315	4		
	Elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 PHIL 3435	4 PHIL undergraduate elective	4 Co-op	0
	Religious studies elective	4 Elective	4	
	Upper-division elective	4		
	Elective	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 Elective	4
	Philosophy seminar	4
	Upper-division elective	4
	Elective	4
	0	16

Total Hours: 129

**FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1215	4 Elective	4 Vacation	0 Vacation	0
ENGW 1111	4 Religious studies elective	4		
PHIL 1101	4 Elective	4		
Elective	4 Elective	4		
	16	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 Elective	4
PHIL 2325	4		Elective	4
Elective	4			
Elective	4			
EESH 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 Co-op	0 Co-op	0 Upper-division elective	4
PHIL 2330	4		Elective	4
Religious studies elective	4			
Elective	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Religious studies elective	4 Co-op	0 Co-op	0 Vacation	0
Elective	4			
PHIL 1115	4			
ENGW 3315	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
PHIL 3435	4 Philosophy seminar	4
PHIL undergraduate elective	4 PHIL undergraduate elective	4
Upper-division elective	4 Elective	4
Elective	4 Upper-division elective	4
	16	16

Total Hours: 129

**Behavioral Neuroscience and Philosophy, BS**

The behavioral neuroscience and philosophy combined degree program engages students in the interdisciplinary study across the biology, psychology, and philosophy departments. The major provides rigorous training in both disciplines with a specific focus on understanding seminal questions concerning human nature and the mind. Courses in the basic sciences will lay a strong foundation in biology, chemistry, and data analytics that are relevant to neuroscience. In behavioral neuroscience core courses, students will examine the structure and function of the human nervous system in order to explore brain mechanisms that give rise to behavioral functions, including cognitive processes, as well as pathological states. In philosophy courses, successful students will develop core analytics skills, including ethical reasoning; learn to recognize and question deep theoretical assumptions at the heart of scientific theories and practice; and explore the social and ethical dimensions of neuroscience and scientific practice more broadly. The fields of behavioral neuroscience and philosophy are further bridged with course work that is designed to enable students to apply neuroscientific concepts to philosophical, moral, and ethical questions.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

## Behavioral Neuroscience Requirements

Code	Title	Hours
<b>Behavioral Neuroscience Overview</b>		
BNSC 1000	Behavioral Neuroscience at Northeastern <sup>1</sup>	1
EESC 2000	Professional Development for Co-op <sup>2</sup>	1
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Statistics Foundation</b>		
Complete one of the following:		4-5
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
or PSYC 2320	Statistics in Psychological Research	
<b>Behavioral Neuroscience Foundation</b>		
PSYC 3200	Clinical Neuroanatomy	4
PSYC 3458	Biological Psychology	4
<b>Psychology Elective</b>		
Complete one of the following:		4
PSYC 1214	The Moral Mind: The Science Underlying Ethical Decision-Making and Virtuous Character	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	

PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	
<b>Behavioral Neuroscience Core Courses</b>		
Complete two of the following:		8
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	
PSYC 4510	Psychopharmacology	
PSYC 4512	Neuropsychology	
PSYC 4514	Clinical Neuroscience	
PSYC 4570	Behavioral Genetics	

### Upper-Division Elective

Complete one course that is not already taken as long as pre-requisites have been met:		4
BNSC 4970 or higher		
BIOL 3403 or higher		
PSYC 3404 or higher		

<sup>1</sup> Students entering through CSSH may take Philosophy at Northeastern (PHIL 1000).

<sup>2</sup> Students entering through CSSH may take Professional Development for Co-op (EESH 2000).

### Philosophy Requirements

Code	Title	Hours
<b>Philosophy Foundation</b>		
PHIL 1105	Science and Pseudoscience	4
or PHIL 3050	Information and Uncertainty	
PHIL 1115	Introduction to Logic	4
PHIL 1145	Technology and Human Values	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Philosophy Restricted Electives</b>		
Complete eight credits from the following list, not taken to fulfill other requirements:		8
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4535	Philosophy of Mind	
PHIL 4555	Philosophy of Biology	

### Additional Electives

Complete two additional PHIL courses, not taken to fulfill other requirements. **8**

### Integrative Requirements

Code	Title	Hours
BIOL 4709 or BIOL 5587	Neurobiology of Learning and Memory Comparative Neurobiology	4
PHIL 4535 or PHIL 4555	Philosophy of Mind Philosophy of Biology	4

### Writing Courses

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3307 or ENGW 3308 or ENGW 3309 or ENGW 3315	Advanced Writing in the Sciences Advanced Writing in the Social Sciences Advanced Writing in the Humanities Interdisciplinary Advanced Writing in the Disciplines	4

### Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

### Behavioral Neuroscience GPA Requirement

A minimum 2.000 GPA in all behavioral neuroscience courses is required.

### Major Credit Hour Requirement

96 total semester hours required in major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

130 total semester hours required

### Plan of Study

#### SAMPLE PATTERNS: 5 YEARS, 3 CO-OPS

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BNSC 1000	1 ENGW 1111	4 Vacation	Vacation	
BIOL 1107 and BIOL 1108	5 BIOL 2299	4		
CHEM 1161 and CHEM 1162 and CHEM 1163	5 MATH 1251	4		
PSYC 1101	4 PSYC 3458	4		
PHIL 1145	4			
	19	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PSYC 3200	4 EESC 2000	1 Vacation	Co-op	
BIOL 2301 and BIOL 2302	5 CHEM 2311 and CHEM 2312	5		
PHIL 1105	4 PSYC 2320	4		
PHIL 1115	4 PHIL 2330	4		
	PHIL restricted elective	4		
	17	18	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHIL restricted elective	4 PHIL 2325	4 Co-op	
	BNS core course	4 General elective	4	
	PSYC elective	4		
	General elective	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	BIOL 4709 or 5587	4 Vacation	Co-op	
	BNS core course	4	ENGW 3315 (online)	4
	PHIL elective	4		
	General elective	4		
	0	16	0	4

Year 5				
Fall	Hours Spring	Hours		
Co-op	PHIL 4535 or 4555	4		
	PHIL elective	4		
	BNS upper- level elective	4		
	General elective	4		
	0	16		

Total Hours: 130

#### 4 YEARS, 2 CO-OPS

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
BNSC 1000	1 ENGW 1111	4 PHIL 2325	4 Vacation	
BIOL 1107 and BIOL 1108	5 BIOL 2299	4 PSYC elective	4	

CHEM 1161 and CHEM 1162 and CHEM 1163	5	MATH 1251	4		
PSYC 1101	4	PSYC 3458	4		
PHIL 1145	4				
	19		16	8	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	EESC 2000	1	PSYC 2320	4	Co-op	
BIOL 2301 and BIOL 2302	5	CHEM 2311 and CHEM 2312	5	General elective	4		
PHIL 1115	4	PHIL 2330	4				
PHIL 1105	4	PHIL restricted elective	4				
		BNS core course	4				
	17		18		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BNS core course	4	PHIL elective	4	Co-op	
		PHIL restricted elective	4	General elective	4	ENGW 3315 (online)	4
		PHIL elective	4				
		General elective	4				
	0		16		8		4

**Year 4**

Fall	Hours	Spring	Hours
Co-op		BIOL 4709 or 5587	4
		PHIL 4535 or 4555	4
		BNS upper- level elective	4
		General elective	4
	0		16

Total Hours: 130

## Computer Science and Philosophy, BS

The computer science and philosophy combined major offers an opportunity to obtain a fluency in formal logic, including logical proofs and the ability to represent arguments clearly and evaluate them for cogency. Students will find that logic plays a fundamental role in computer science as they experience an in-depth programming foundation. The philosophy curriculum also focuses on oral and written communication, as well as ethical and social issues related to computing and information technologies.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Computer Science Courses

Code	Title	Hours
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### Computer Science Overview

CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

### Computer Science Fundamental Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
CS 3000	Algorithms and Data	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

### Khoury Elective

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken for upper-division electives.

Complete 8 credits of upper-division CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	8
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CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## Philosophy Courses

Code	Title	Hours
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### Philosophy Required Courses

PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
or PHIL 2330	Modern Philosophy	
PHIL 1145	Technology and Human Values	4



PHIL 4515	Advanced Logic	4
PHIL 5005 or PHIL 5010	Information Ethics AI Ethics	4

**Electives**

Take four additional PHIL courses, at least one of which is 4000 or above	16
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**Integrative Course Requirement**

Code	Title	Hours
These courses will double count in other areas of your major:		
CS 3800	Theory of Computation	
PHIL 4515	Advanced Logic	

**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3309	Advanced Writing in the Humanities	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 44 credits of general electives.		44

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing-Intensive in the Major
- Interpreting Culture
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5	Vacation	0
CS 1800 and CS 1802	5	CS 2800 and CS 2801	5	Elective	4		
CS 2500 and CS 2501	5	PHIL 2325, POLS 2325, or PHIL 2330	4				
ENGW 1111	4	Elective	4				
PHIL 1115	4						
		19		18		9	
						0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Khoury Elective	4	ENGW 3302, 3309, or 3315	4	Co-op	4
PHIL 1145	4	PHIL elective 2	4	Elective	4		
PHIL elective 1	4	PHIL elective 3	4				
Elective	4	Elective	4				
		CS 1210		1			
		16		17		8	
						0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3800	4	Elective	4	Co-op	4
		Khoury Elective	4	Elective	4		
		PHIL 4515	4				
		Elective	4				
		0		16		8	
						0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4500	4	Elective	4		
		PHIL intermediate/ advanced elective	4	Elective	4		
		PHIL capstone	4				
		Elective	4				
		0		16		8	

Total Hours: 135

## Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 1800 and CS 1802	5 CS 2800 and CS 2801	5		
CS 2500 and CS 2501	5 PHIL 2325, POLS 2325, or PHIL 2330	4		
ENGW 1111	4 Elective	4		
PHIL 1115	4			
	19	18	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 Khoury Elective	4 Vacation	Co-op	
CS 3500 and CS 3501	5 PHIL elective 1	4		
PHIL 1145	4 PHIL elective 2	4		
Elective	4 Elective	4		
	CS 1210	1		
	17	17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CS 3800	4 ENGW 3302, 3309, or 3315	4 Co-op	
	PHIL 4515	4 Elective	4	
	PHIL elective 3	4		
	Elective	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Khoury Elective	4 Elective	4 Co-op	
	PHIL intermediate/ advanced elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	CS 4500	4		
	PHIL capstone	4		
	Elective	4		
	Elective	4		
	0	16		

Total Hours: 135

## Criminal Justice and Philosophy, BS

The School of Criminology and Criminal Justice and the Department of Philosophy and Religion offer a combined major in criminal justice and philosophy. This combined major educates students in criminal justice and philosophy and in the interface between the two disciplines. The scope and sequence of philosophy courses provide students with a foundation in topics such as social and political philosophy, philosophy of law, and moral philosophy, while also developing robust analytical and evaluative skills. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should have depth of knowledge with respect to analyzing and addressing criminal behavior, as well as with respect to the philosophical and ethical aspects of topics such as law, punishment, justice, and social institutions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Criminal Justice Major Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	

### Crime Problems and Criminal Justice Institutions

The 2000-level courses in this list ask how does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions. The 3000-level courses in this list provide students with a deeper look at a range of crime problems.

Complete one of the following:

4

CRIM 2310	Courts: The Third Branch of Government
CRIM 2320	Youth Crime and Justice
CRIM 2330	Punishment in the Age of Mass Incarceration
CRIM 2340	Corporate Security: Securing the Private Sector
CRIM 2350	Policing a Democratic Society
CRIM 3010	Criminal Violence
CRIM 3030	Global Criminology
CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3060	Political Crime and Terrorism
CRIM 3070	Corporate and White-Collar Crime
CRIM 3540	Addiction and Recovery

**Systemic Issues**

These courses consider systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 3110	Gender, Crime, and Justice
CRIM 3120	Race, Crime, and Justice

**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? These courses study how to harness data to learn about issues, identify solutions, and advocate for change.

CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

**Co-op Integration Seminars**

Co-op students should complete the seminars below. Non-co-op students should complete a 4-semester-hour CRIM elective.

Complete two of the following courses. CRIM 2000 and CRIM 3000 are required for the first co-op. CRIM 4000 is required if a second co-op is taken. 2-4

EESH 2000	Professional Development for Co-op
CRIM 3000	Co-op Integration Seminar 2
CRIM 4000	Co-op Integration Seminar 3

**Solutions and Reform**

How do we reinvent criminal justice institutions and their practice? The capstone experience is project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.

CRIM 4949	Senior Capstone Seminar	4
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**Criminal Justice Elective**

These courses round out our knowledge of crime and justice.

Complete one additional criminal justice elective from the 3000, 4000, or 5000 level. 4

**Philosophy Requirements**

Code	Title	Hours
<b>Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4

or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2303	Social and Political Philosophy	4
PHIL 2330	Modern Philosophy	4

**Intermediate/Advanced Electives**

Complete two of the following:

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3343	Existentialism
PHIL 3360	Scientific Approaches to Philosophy
PHIL 3435	Moral Philosophy
PHIL 3460	Philosophy and Literature
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy 4000/5000 Elective**

Complete one of the following not used to satisfy previous requirements: 4

PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy Electives**

Complete two additional PHIL courses. 8

**Integrative Requirement**

Code	Title	Hours
<b>Philosophy Integrative Course</b>		
PHIL 2301	Philosophical Problems of Law and Justice	4
<b>Criminal Justice Integrative Course</b>		
CRIM 1400	Human Trafficking	4

**Criminal Justice and Philosophy Major Credit Requirement**

Complete 80 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

##### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CRIM 1100	4 CRIM 1110	4 Elective	4 Vacation	
PHIL 1115	4 CRIM 1120	4 Elective	4	
ENGW 1111	4 PHIL 2325 or POLS 2325	4		
PHIL 1000	1 PHIL 2303	4		
Criminology thematic elective	4			
	17	16	8	0

##### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CRIM 3600	4 Criminology thematic elective	4 Vacation	Co-op	
EESH 2000	1 Elective	4		
PHIL 2330	4 Elective	4		
Criminology survey elective	4 Philosophy intermediate/ advanced elective	4		
Philosophy intermediate/ advanced elective	4			
	17	16	0	0

##### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	CRIM 3700	4 Elective	4 Co-op	
	CRIM 3000	1 Elective	4	
	Philosophy 4000/5000 elective	4		
	Criminology systemwide elective	4		
	Philosophy 4000/5000 elective	4		
	0	17	8	0

##### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Criminology elective	4 Vacation	Co-op	
	PHIL 2301	4		
	CRIM 1400	4		
	Philosophy elective	4		
	CRIM 4000	1		
	0	17	0	0

##### Year 5

Fall	Hours Spring	Hours
Co-op	Philosophy capstone	4
	CRIM 4949	4
	Philosophy intermediate/ advanced elective	4
	Elective	4
	0	16

Total Hours: 132

### Economics and Philosophy, BS

Both philosophy and economics are the disciplines of critical thinking—thinking in concrete and abstract terms to help put the world in perspective. The combined economics and philosophy major provides students with training to critically evaluate and assess policies and issues on both economic and ethical grounds, including issues such as globalization, immigration, environmental protections, the minimum wage, a fair and just tax, just working environments, and many more.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Overview and Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		
ECON 1000	Economics at Northeastern	1
or PHIL 1000	Philosophy at Northeastern	
<b>Supporting Courses</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	

### Economics Requirements

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4

ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
ECON 3520	History of Economic Thought	4

**Economics Electives**

Complete 2 Economics elective courses from the following ranges with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, ECON 3520 may not be used as an Economics Elective. 8

ECON 1200 to ECON 1999

ECON 3000 to ECON 4689

ECON 4900 to ECON 4999

ECON 5200 to ECON 5999

**Philosophy Requirements**

Code	Title	Hours
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**Philosophy Required Courses**

PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
PHIL 2330	Modern Philosophy	4

**Advanced Philosophy Elective**

Complete one of the following: 4

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Additional Electives**

Complete three additional electives in philosophy or religion. At least one must be numbered 2000 or above. 12

**Integrative Requirements**

Code	Title	Hours
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Complete PHIL 4550 and one of the other courses listed below that has not been used in above requirements: 8

PHIL 4550	Philosophy of Economics	
PHIL 3435	Moral Philosophy	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	

**Major GPA/Credit Requirement**

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 76 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	PHIL 1115	4	ECON elective 1	4	Elective	4
PHIL 1000 or ECON 1000	1	POLS 2325	4	Elective	4	Elective	4
ECON 1115	4	MATH 1231, 1241, 1245, 1251, 1340, or 1341	4				
Elective	4	ECON 1116	4				
Elective	4						
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 2330	4	PHIL Advanced Elective	4	PHIL Advanced Elective	4	Co-op	4
ECON 2315	4	ECON 2560	4	ENGW 3302, 3302, or 3315	4		
ECON 2350	4	PHIL Integrative Course	4				
ECON elective 2	4	ECON 2316	4				
		16		16		8	
						0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL Integrative Course		4 Elective	4	Co-op	4
		Computing and Social Issues Requirement		4 Elective	4		
		Elective		4			

ECON 2560	4			
0	16	8	0	
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	PHIL Intermediate/ Advanced Elective	4		
	PHIL Capstone	4		
	ECON 4692	4		
	ECON 3520	4		
0	16			

Total Hours: 129

## Physics and Philosophy, BS

The combined major in physics and philosophy provides a strong foundation in classical and modern physics, including studies of the various physical phenomena including electromagnetism, dynamics, building blocks of matter, energy, and radiation. It also provides students with an understanding of the methods and traditions of philosophical thought, as well as with opportunities to critically and collaboratively reflect on the nature of the world and the human situation in it. Students will be able to describe the method by which physical "law" is made manifest in the sciences, how this knowledge compares with other epistemological models studied in other contexts, and philosophical views on the status and source of physical "law."

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<i>Physics 2</i>		
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	

PHYS 1155  
and PHYS 1156  
and PHYS 1157

Physics for Engineering 2  
and Lab for PHYS 1155  
and Interactive Learning Seminar for  
PHYS 1155

### Intermediate Physics

PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4

### Advanced Physics

PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

### Physics Elective

Complete one of the following:		4
MATH 4606	Mathematical and Computational Methods for Physics	
PHYS 5111	Astrophysics and Cosmology	
PHYS 5113	Particle Physics	
PHYS 5116	Complex Networks and Applications	
PHYS 5260	Introduction to Nanoscience and Nanotechnology	
PHYS 4621	Biological Physics 1	
PHYS 4623	Medical Physics	
PHYS 4651	Medical Physics Seminar 1	
PHYS 4652	Medical Physics Seminar 2	

### Philosophy Major Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 4500	Theory of Knowledge	4
or PHIL 3050	Information and Uncertainty	
<b>Philosophy Advanced Elective</b>		
Complete two of the following (not used to fulfill another requirement):		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	

PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	
<b>Additional Electives</b>		
Complete three PHIL courses.		12

### Physics/Philosophy Integrative Requirements

Code	Title	Hours
<b>Integrative Course Requirements</b>		
PHIL 4510	Philosophy of Science	4
PHYS 3601	Classical Dynamics	4

### Breadth Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

### Physics and Philosophy Major Credit Requirement

Complete 98 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

132 total semester hours required

### Plan of Study

#### Notes on Physics Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

See course offering schedule at the end of the plans of study.

Please contact your academic advisor for additional information and plans of study.

### Even-Numbered Year One

#### FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
PHYS 1000	1	PHYS 1165	4	Vacation	0
PHYS 1161	4	PHYS 1166	1		
PHYS 1162	1	PHYS 1167	0		
PHYS 1163	0	MATH 1342	4		
MATH 1341	4	PHIL 2325	4		
PHIL 1115	4	Elective	4		
ENGW 1111	4				
		18		17	
				0	
					0

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
PHYS 2303	4	MATH 2341	4	Vacation	0
				Co-op	0

PHYS 2371	3	PHIL elective	4		
PHYS 2372	1	PHIL elective	4		
MATH 2321	4	EESC 2000	1		
PHIL 2330	4	PHYS 3601	4		
		16		17	
				0	
					0

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	PHYS 4115	4	PHYS 3600	4
		PHYS elective	4	Elective	4
		PHIL 4500	4		
		PHIL elective	4		
		0		16	
				8	
					0

Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	PHYS 3602	4	Elective	4
		PHIL 4510	4	Elective	4
		PHIL elective	4		
		ENGW 3307	4		
		0		16	
				8	
					0

Year 5					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	PHYS 4305	4		
		PHIL advanced elective	4		
		Elective	4		
		Elective	4		
		0		16	

Total Hours: 132

### FOUR YEARS, TWO CO-OPS IN SUMMER 2/FALL

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
PHYS 1000	1	PHYS 1165	4	MATH 2321	4
PHYS 1161	4	PHYS 1166	1	Elective	4
PHYS 1162	1	PHYS 1167	0		
PHYS 1163	0	MATH 1342	4		
MATH 1341	4	PHIL 2325	4		
PHIL 1115	4	PHIL 2330	4		
ENGW 1111	4				
		18		17	
				8	
					8

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
PHYS 2303	4	PHYS 3601	4	PHYS 3600	4
PHYS 2371	3	PHYS 3602	4	Elective	4
PHYS 2372	1	PHIL elective	4		
PHIL elective	4	PHIL elective	4		
PHIL elective	4	EESC 2000	1		
		16		17	
				8	
					0

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	PHYS 4115	4	ENGW 3307	4
				Co-op	0

PHYS elective	4	Elective	4
PHIL 4500	4		
PHIL 4510	4		
0	16	8	0
<b>Year 4</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
Co-op	0	PHYS 4305	4
		PHIL advanced elective	4
		Elective	4
		Elective	4
0	16		

Total Hours: 132

**OFFERING SCHEDULE (SUBJECT TO CHANGES)**

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

**Political Science and Philosophy, BS**

The combined major in political science and philosophy enables students to develop an integrated understanding of politics, political theory, ethical theory, and theories of justice. Students who complete the major will have the training to critically evaluate and assess public policies and social issues on both political and ethical grounds, including issues such as tax policy, immigration, environmental protection, trade policy, healthcare, education, defense policy, and much more.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Political Science Requirements**

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
POLS 2399	Research Methods in Political Science	4
<b>Political Thought</b>		
Complete two of the following:		8
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Electives**

Complete four courses in the following range:	16
POLS 2000 to POLS 5999	

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 1152)
- Campaigns and Elections (p. 1152)
- Comparative Politics (p. 1152)
- Identity, Culture, and Politics (p. 1152)
- International Relations and Diplomacy (p. 1152)
- Law and Legal Studies (p. 1152)
- Public Policy (p. 1153)
- Security Studies (p. 1153)

**Philosophy Requirements**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2303	Social and Political Philosophy	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Philosophy Restricted Electives</b>		
Complete two courses from the following with one course at the 4000 or 5000 level:		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	



PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Additional Electives**

Complete three additional electives in philosophy or religion. 12

**Integrative Requirement**

Code	Title	Hours
Complete one of the following:		
PHIL 5001	Global Justice	4
or PHIL 5002	Ethics and Public Policy	

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	

POLS 3418	Nationalism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3487	Politics of Developing Nations

**Regional Requirements**

Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

**Experiential/Practicum Requirement**

Complete one of the following: 4		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following: 12		
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	

POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 3408	International Security	16
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1000	1	POLS 1150	4	PHIL 2325 or POLS 2325	4
POLS 1155	4	MATH 1215	4	PHIL Restricted Elective	4
ENGW 1111	4	POLS 1160	4		
PHIL 1115	4	Elective	4		
POLS elective	4				
		17			8
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS Thought	4	Co-op	4	Co-op	4
POLS 2399	4				
PHIL 2330	4				
Elective	4				
		16			0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS elective	4	Co-op	4	Co-op	4	POLS elective	4
PHIL 5001	4					PHIL Restricted Elective	4
POLS 2400	4						
POLS elective	4						
		16			0	0	

Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS elective	4	Co-op	4	Co-op	4
POLS elective	4				
POLS Thought course	4				
PHIL Elective	4				
		16			0

Year 5			
Fall	Hours	Spring	Hours
PHIL Elective	4	Elective	4
PHIL Elective	4	Elective	4
POLS Elective	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 129

**Politics, Philosophy, and Economics, BS**

Website (<https://www.northeastern.edu/cssh/ppe/>)

617.373.3636  
617.373.4359 (fax)

The PPE major at Northeastern University brings together three of the most important approaches to understanding the world around us: political science, philosophy, and economics. The PPE major is an interdisciplinary degree that not only provides students with the analytic tools from three different disciplines but also teaches students to make connections across disciplines and to keep multiple perspectives in mind when analyzing complex social phenomena. This interdisciplinary perspective and set of skills are indispensable in our increasingly interconnected world and are essential in addressing the kinds of complex global problems future leaders will need to tackle.

There are a number of varieties of the PPE major that students may choose from in accordance with their own backgrounds and interests. These include:

- environment and energy policy
- international political economy

- law and justice
- logic and game theory
- political philosophy
- public and economic policy

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Politics, Philosophy, and Economics Major Requirements

Code	Title	Hours
<b>Foundation Course</b>		
PHIL 1160	Introduction to Economic Justice	4
<b>Core Courses</b>		
<i>Philosophy</i>		
PHIL 2303 or PHIL 3822	Social and Political Philosophy Philosophy of Race and Racism	4
PHIL 1115	Introduction to Logic	4
PHIL 3435 or PHIL 2325	Moral Philosophy Ancient Philosophy and Political Thought	4
<i>Political Science</i>		
POLS 1160	International Relations	4
POLS 3405	International Political Economy	4
POLS 1150 or POLS 1155	American Government Comparative Politics	4
<i>Economics</i>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315 or ECON 2316	Macroeconomic Theory Microeconomic Theory	4
<b>Methods Course</b>		
PHIL 3000	Interdisciplinary Methods for Politics, Philosophy, and Economics	4
<b>Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
PHIL 4550	Philosophy of Economics	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

### Major Electives

Code	Title	Hours
Complete two of the following:		8
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		
PHIL 2000 to PHIL 5999		
POLS 2000 to POLS 5999		

### Concentration

Complete one of the following concentrations:

- Environment and Energy Policy (p. )
- International Political Economy (p. )
- Law and Justice (p. )
- Logic and Game Theory (p. )
- Political Philosophy (p. )
- Public and Economic Policy (p. )

### Supporting Courses

Code	Title	Hours
<b>Racial or Gender Justice</b>		
Complete one of the following:		4
AFAM 1101	Introduction to African American and Africana Studies	
AFAM 2339	Analysis of American Racism	
AFAM 2355	Race, Identity, Social Change, and Empowerment	
AFAM 2360	Politics of Poverty	
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
CRIM 3110	Gender, Crime, and Justice	
ECON 3412	Women's Labor and the Economy	
HIST 1225	Gender, Race, and Medicine	
HIST 2000	Native American Resistance: Past and Present	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 3500	Sexuality, Gender, and the Law	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
SOCL/WMNS 1260	Gender in a Changing Society	
SOCL 3270	Race and Ethnic Relations	
SOCL 4520	Race, Class, and Gender	
WMNS 1101	Sex, Gender, and Popular Culture	
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	
WMNS 1441	Topics in Women's, Gender, and Sexuality Studies	
WMNS 2304	Communication and Gender	
WMNS/HIST 2373	Gender and Sexuality in World History	
WMNS/INTL 2480	Women and World Politics	
WMNS 2505	Digital Feminisms	
WMNS/HUSV 2800	Sexual Orientation and Gender Expression	

WMNS 3100	Gender, Social Justice, and Transnational Activism	
WMNS/COMM 3304	Communication and Inclusion	
WMNS 3500	Sexuality, Gender, and the Law	

**Statistics and Mathematics**

MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	
or MATH 2280	Statistics and Software	

**Experiential Learning Requirement**

Complete one co-op, study abroad, qualifying Dialogue of Civilizations, or one of the following:		4
ECON 4991	Research	
ECON 4994	Internship	
ECON 4996	Experiential Education Directed Study	
POLS 4970	Junior/Senior Honors Project 1	
POLS 4971	Junior/Senior Honors Project 2	
POLS 4942	Internship in Politics	
POLS 4996	Experiential Education Directed Study	

**Major GPA/Credit Requirement**

Complete 68 semester hours in the major with a 3.000 GPA.

Code	Title	Hours
<b>Economics GPA Requirement:</b>		
Grades in the following courses must average to a minimum of C (2.000):		
ECON 2315	Macroeconomic Theory	
or ECON 2316	Microeconomic Theory	
ECON 2350	Statistics	
or POLS 2400	Quantitative Techniques	
or MATH 2280	Statistics and Software	

**Course Distribution Requirement**

Complete at least four courses in each of the following subject areas: ECON, PHIL, and POLS.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Concentrations****CONCENTRATION IN ENVIRONMENT AND ENERGY POLICY**

Code	Title	Hours
Complete two of the following:		
ECON 1711	Economics of Sustainability	8

ECON 3423	Environmental Economics	
or ECON 3425	Energy Economics	
PHIL 1180	Environmental Ethics	
or PHIL 1185	The Ethics of Food	
POLS 2395	Environmental Politics and Policy	
Complete one of the following:		4
ECON 3423	Environmental Economics	
ECON 3425	Energy Economics	
PHIL 1180	Environmental Ethics	
PHIL 1185	The Ethics of Food	

**CONCENTRATION IN INTERNATIONAL POLITICAL ECONOMY**

Code	Title	Hours
Complete two of the following:		
ECON 1291	Development Economics	
ECON 2316	Microeconomic Theory	
ECON 3290	History of the Global Economy	
ECON 3404	International Food Policy	
ECON 4635	International Economics	
ECON 5200	Topics in Applied Economics	
PHIL 1185	The Ethics of Food	
PHIL 1170	Business, Ethics, and Human Rights	
POLS 3406	International Law	
POLS 3487	Politics of Developing Nations	
Complete one of the following:		4
ECON 1292	Economic History of the Middle East	
HIST 2360	History of Capitalism in East Asia	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
HIST 2011	Capitalism and Business: A Global History	

**CONCENTRATION IN LAW AND JUSTICE**

Code	Title	Hours
Complete three of the following, only two of which may be POLS courses:		
ECON 3424	Law and Economics	
ECON 1240	Economics of Crime	
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2155	Human Rights	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 3500	Sexuality, Gender, and the Law	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	
WMNS 3500	Sexuality, Gender, and the Law	
HIST 2280	Hitler, Germany, and the Holocaust	

HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 3335	History of Modern Terrorism

**CONCENTRATION IN LOGIC AND GAME THEORY**

Code	Title	Hours
Complete three courses from the following:		12
ECON 2316	Microeconomic Theory	
ECON 3416	Behavioral Economics	
ECON 4680	Competition Policy and Regulation	
ECON 4681	Information Economics and Game Theory	
ECON 5105	Math and Statistics for Economists	
ECON 5110	Microeconomic Theory	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 3050	Information and Uncertainty	
PHIL 4500	Theory of Knowledge	
PHIL 4515	Advanced Logic	
PHIL 4550	Philosophy of Economics	

**CONCENTRATION IN POLITICAL PHILOSOPHY**

Code	Title	Hours
<b>Economics Course</b>		
ECON 3490	Public Choice Economics	4
<b>Politics Courses</b>		
Complete two of the following:		8
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Philosophy Course</b>		
Complete one of the following:		4
PHIL 2155	Human Rights	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 3435	Moral Philosophy	
PHIL 3500	Sexuality, Gender, and the Law	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	

**CONCENTRATION IN PUBLIC AND ECONOMIC POLICY**

Code	Title	Hours
<b>Required Course</b>		
POLS 3307	Public Policy and Administration	4
<b>Elective Courses</b>		
Complete two of the following:		8
ECON 1240	Economics of Crime	
ECON 1281	Economics of the Creative Industries	
ECON 2315	Macroeconomic Theory	
ECON 3410	Labor Economics	
ECON 3413	Health Economics and Healthcare Policy	
ECON 3414	Economics of Human Capital	
ECON 3420	Urban Economic Issues	

ECON 3422	Economics of Transportation
ECON 3423	Environmental Economics
ECON 3425	Energy Economics
ECON 3440	Public Finance
ECON 3462	Bubbles, Busts, and Bailouts: Market and Regulatory Failures in the Financial Crisis
ECON 3490	Public Choice Economics
ECON 4680	Competition Policy and Regulation
HIST 2331	The Civil War and Reconstruction
HIST 2339	America's Gilded Age, 1865-1896
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
POLS 2340	Business and Government
POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 2335	Budgeting and Taxation
POLS 2357	Growth and Decline of Cities and Suburbs
POLS 3425	U.S. Foreign Policy

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops Summer 2/ Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 1160	4	ENGW 1111	4	Elective	4	Vacation	
PHIL 1000	1	ECON 1116	4	Elective	4		
MATH 1231, 1241, 1245, 1251, 1340, or 1341	4	PHIL 1115	4				
POLS 1160	4	PHIL 2303	4				
General Elective							
General Elective	4						
	17		16		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115	4	Statistics and Mathematics Requirement	4	Elective	4	Co-op	
POLS 1150 or 1155	4	ECON 2315 or 2316	4	Elective	4		
PHIL 3435 or 2325	4	Major Elective	4				
Supporting Course in Race or Gender Justice	4	Concentration Course	4				
	16		16		8		0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHIL 3000	4 General Elective	4 Co-op	
	General Elective	4 General Elective	4	
	Major Elective	4		
	Concentration Course	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
Co-op	Concentration Course	4 General Elective	4
	Capstone Requirement	4 General Elective	4
	General Elective	4	
	General Elective	4	
	0	16	8

Total Hours: 129

**Information Ethics, Minor**

This minor aims to help students: (1) develop in-depth knowledge of issues and topics in computing, data, and AI ethics; (2) build robust skills in ethical analysis, reasoning and evaluation. The minor is open to students from all majors.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

A minimum of three of the courses to fulfill the minor must carry the PHIL prefix. At least two courses must be at or above the 2000-level.

Code	Title	Hours
<b>Foundational Course</b>		
Complete one of the following:		4
PHIL 1145	Technology and Human Values	
PHIL 1300	Knowledge in a Digital World	
<b>Information Ethics Electives</b>		
Complete two courses from the following, not used above, one of which must be at or above the 4000 level:		8
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
PHIL 1145	Technology and Human Values	
PHIL 1300	Knowledge in a Digital World	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	
<b>Ethics Electives</b>		

Complete one of the following courses not used above. 4

CHME 5185	Design of Experiments and Ethical Research (DOEER)
PHIL 1102	Introduction to Contemporary Moral Issues
PHIL 1112	Debating Ethical Controversies
PHIL 1130	Ethics: East and West
PHIL 1145	Technology and Human Values
PHIL 1160	Introduction to Economic Justice
PHIL 1162	Ethics and Philosophy through Sport
PHIL 1165	Moral and Social Problems in Healthcare
PHIL 1170	Business, Ethics, and Human Rights
PHIL 1180	Environmental Ethics
PHIL 1185	The Ethics of Food
PHIL 1195	Research Ethics
PHIL 1300	Knowledge in a Digital World
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2001	Ethics and Evolutionary Games
PHIL 2016	The Philosophy and Ethics of Lying and Deception
PHIL 2155	Human Rights
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2303	Social and Political Philosophy
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 3435	Moral Philosophy
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy, Minor**

Philosophy addresses questions and theories related to morality, society, religion, and the natural and social sciences. Course work in philosophy provides students with an understanding of the methods and traditions of philosophical thought, as well as opportunities to critically and collaboratively reflect on the nature of the world and the human situation in it. Through readings, discussion, and writing, students examine questions concerning the validity of moral judgments, political ideas, and scientific theories, as well as questions about values and social policy in such areas as law, medicine, and technology.

Course work in philosophy significantly strengthens study in other areas. Many students find that their studies in their major can be beneficially supplemented by pursuing studies in philosophy. Declaring a minor in philosophy will allow you to continue your philosophical studies throughout your time at Northeastern University.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Elective Courses**

Code	Title	Hours
Complete three courses in philosophy and religion.		12

**GPA Requirement**

2.000 GPA required in the minor

**Religious Studies, Minor**

The religious studies minor provides a short form of the religious studies major that can be tailored to the needs of the student.

The minor in religious studies offers the opportunity to acquire an understanding of religion within various contexts through comparative approaches and an engagement with religion in everyday life. Through the minor, a student will enhance their ability to think critically about a range of religious traditions through diverse methodological approaches.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated.

**Required Course**

Code	Title	Hours
PHIL 1110	Introduction to Religious Studies	4

**Electives**

Code	Title	Hours
Complete three of the following; at least one must be 2000-level or higher.		12

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1111	Introduction to World Religions	
PHIL 1133	Selling Spirituality	
PHIL 1120	Understanding the Bible	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1285	Jewish Religion and Culture	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1666	The Problem of Evil in Film	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 2395	Japanese Buddhism	

PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4903	Seminar in Religion

**GPA Requirement**

2.000 GPA required in the minor

**Ethics, Minor**

The Department of Philosophy and Religion offers a minor in ethics for students who are interested in exploring the ethical dimensions of contemporary issues. From medicine and the environment to business and religion, the minor provides a range of courses that speak to issues you care about and provides you with the tools to explore them. The minor includes courses in ethical theory (e.g., moral philosophy, social and political philosophy, and philosophical problems of law and justice); applied ethics (e.g., environmental ethics, business ethics, moral and social problems in healthcare, and technology and human values); and religious ethics (e.g., ethics east and west and cults and sects). It emphasizes developing critical analytical and evaluative skills.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
Complete four courses from the following list, two of which must be at or above the 2000 level:		16
PHIL 1102	Introduction to Contemporary Moral Issues	
PHIL 1106	Ethics and Politics of Work	
PHIL 1111	Introduction to World Religions	
PHIL 1112	Debating Ethical Controversies	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1145	Technology and Human Values	
PHIL 1160	Introduction to Economic Justice	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1170	Business, Ethics, and Human Rights	
PHIL 1180	Environmental Ethics	
PHIL 1185	The Ethics of Food	
PHIL 1195	Research Ethics	
PHIL 1220	The Meaning of Death	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1300	Knowledge in a Digital World	

PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2001	Ethics and Evolutionary Games
PHIL 2016	The Philosophy and Ethics of Lying and Deception
PHIL 2143	Philosophy for Children
PHIL 2155	Human Rights
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2303	Social and Political Philosophy
PHIL 2305	Philosophy of Emotions
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 2390	Cults and Sects
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3435	Moral Philosophy
PHIL 4550	Philosophy of Economics
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

## GPA Requirement

2.000 GPA required in the minor

## Political Science

Website (<http://www.northeastern.edu/polisci/>)

### Costas Panagopoulos, PhD

Professor and Chair

960A Renaissance Park  
617.373.2796  
617.373.5311 (fax)

Political science teaches the art and science of politics in the United States and throughout the world. Study leadership with a former U.S. presidential candidate. Spend seven weeks visiting the United Nations and other organizations in Geneva, Switzerland. Apply for the White House internship program or to the British Parliament. Develop aid programs in a Saharan village in Niger. Write opinion pieces for an outstanding student political journal. Compete to represent an Arab country as part of one of the top Model Arab League teams in the United States. Political science is a discipline and a subject of study that has worldwide applications and exciting and experiential job opportunities. Politics matter wherever there are groups of people trying to get things done.

Political science majors start their journey with core courses on American government, comparative politics, international relations, and research methods. After that, students choose from a wealth of courses on specific topics from international security to legal studies to public policy.

Political science co-ops include responsible positions in local, state, and federal government agencies; law firms; nonprofit institutions; and corporations. Many students complete either a co-op position or an internship with a congressional representative, a senator, a governor

or other elected public officials, or at an international organization or nonprofit.

Political science students are among the most active on campus through extracurricular programs designed to expand their leadership ability, including the Political Science Student Association, International Relations Council, Pi Sigma Alpha honor society, Model United Nations, Model Arab League, Model NATO, student government, College Democrats and Republicans, and other student groups. Students also may qualify for the University Honors Program. With these experiences on their resumés, students are prepared to succeed in law school, graduate school, careers in government and the nonprofit sector, as well as in teaching, journalism, legislative or lobbying positions, public relations activities, and work in international corporations and nongovernmental organizations (NGOs).

## Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 27)."

## PlusOne Program (MA) in Political Science

Political science majors at the end of their sophomore year or the beginning of their junior year may qualify for application to the PlusOne program that combines the BA with the master's degree in political science. Students interested in this option should consult with the departmental graduate coordinator.

## Programs

### Bachelor of Arts (BA)

- Political Science (p. 1160)
- Africana Studies and Political Science (p. 815)
- English and Political Science (p. 954)
- Environmental Studies and Political Science (p. 725)
- History and Political Science (p. 989)
- Journalism and Political Science (p. 191)
- Media and Screen Studies and Political Science (p. 157)
- Political Science and Communication Studies (p. 164)
- Political Science and Economics (p. 910)
- Political Science and Human Services (p. 1014)
- Political Science and International Affairs (p. 1079)
- Political Science and Philosophy (p. 1127)
- Sociology and Political Science (p. 1196)

### Bachelor of Science (BS)

- Political Science (p. 1198)
- Biology and Political Science (p. 653)
- Computer Science and Political Science (p. 381)
- Criminal Justice and Political Science (p. 857)
- Mathematics and Political Science (p. 748)
- Political Science and Business Administration (p. 287)
- Political Science and Communication Studies (p. 179)
- Political Science and Economics (p. 929)
- Political Science and Human Services (p. 1029)
- Political Science and Philosophy (p. 1151)
- Politics, Philosophy, and Economics (p. 821)



## Minors

- Political Science (p. 1226)
- American Political Institutions (p. 1226)
- International Security Studies (p. 1226)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Political Science, BA

The Bachelor of Arts in Political Science provides a set of introductory courses to the discipline, followed by methodology courses, electives, and a capstone course. Students explore and analyze the many facets of American government, comparative politics, international relations, and political philosophy. With elective courses, students may choose from among a number of concentrations or follow their own curricular path. At the college level the Bachelor of Arts includes a foreign language requirement.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Introduction to College

Complete "Introduction to College" for your major.

## Political Science Major Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2330	American Political Thought	
POLS 2328	Modern Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Capstone</b>		
Complete one of the following:		4

POLS 4701 Political Science Senior Capstone

POLS 4703 Senior Thesis

## Political Science Experiential Learning Requirement

Complete one course or experience from the following options. *Note:* Up to two credit-bearing courses count toward political science electives.

Code	Title	Hours
<b>Courses</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4942	Internship in Politics	
<b>Co-op or Study Abroad</b>		
Complete one cooperative education experience or one study-abroad experience.		4

## Political Science Electives

*Note:* You may use four courses from the elective area to fulfill a concentration.

Code	Title	Hours
Complete six political science electives with a minimum of four numbered 2000 or above.		24

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 1160).

- American Political Institutions (p. 1160)
- Campaigns and Elections (p. 1161)
- Comparative Politics (p. 1161)
- Identity, Culture, and Politics (p. 1161)
- International Relations and Diplomacy (p. 1161)
- Law and Legal Studies (p. 1161)
- Public Policy (p. 1161)
- Security Studies (p. 1161)

## Political Science Major Credit Requirement

Complete 52 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

## Concentrations

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	

POLS 3307	Public Policy and Administration
POLS 3310	Public Opinion, Voting, and Elections
POLS 3160	Campaign Strategy

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	

POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
POLS 3324	Law and Society

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
<b>Complete four of the following:</b>		
		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
<b>Complete four of the following:</b>		
		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	

POLS 3425	U.S. Foreign Policy
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1155	4 POLS 1150	4 Elective	4 Vacation	0
Elective	4 MATH 1215	4 Elective	4	
Foreign language core course	4 POLS 1160	4		
POLS 1000	1 Foreign language core course	4		
ENGW 1111	4			
	17	16	8	0

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 2399	4 POLS 2400	4 Elective	4 Co-op	0
Elective	4 Political Theory course	4 Elective	4	
Elective	4 Elective	4		
Foreign language core course	4 Elective	4		
EESH 2000	1			
	17	16	8	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ENGW 3315	4 Elective	4 Co-op	0
	ENVR 3300	4 Elective	4	
	ENVR 3301	1		
	Elective	4		
	Elective	4		
	0	17	8	0

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours
Co-op	0 Capstone (POLS4701 or POLS4703)	4 Elective	4
	Elective	4 Elective	4
	Experiential Learning (Model or Internship)	4	
	Elective	4	
	0	16	8

Total Hours: 131

## Africana Studies and Political Science, BA

The combined major in Africana studies and political science offers students the opportunity to integrate their studies of both disciplines and explore the historical, practical, and theoretical relationships between the two disciplines. In addition to considering the significant points of contention, students explore the ways in which insights from Africana studies can be brought to bear on the disciplinary issues and questions of political science. Within the combined major, students may also choose to concentrate their studies on a range of topics related to political behaviors and institutional developments in the United States, the Americas, Europe, Africa, and across the global African diaspora.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Africana Studies Requirements

Code	Title	Hours
<b>Foundational</b>		
Complete one of the following:		4
AFRS 1101	Introduction to African Studies	
AFAM 1101	Introduction to African American and Africana Studies	
<b>Introductory</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFRS 1185	Gender and Sexuality in the African Diaspora	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following:		8
AFAM 2296	Early African-American Literature	
AFRS 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
AFAM 2455	American Women Writers	
AFAM 2690	Boston in Literature	
AFRS 3900	Gender and Black World Literatures	
<b>Social Sciences</b>		

Complete two of the following: 8

AFRS 2307	Africa Today	
AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 2464	Natural Resources and Sustainable Development	

#### African American/African Studies Electives

Complete one AFAM/AFRS course at the 2000 level or above. 4

Complete one AFAM/AFRS course at the 3000 level or above. 4

### Political Science Requirements

Code	Title	Hours
<b>Core Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4

#### Political Theory

Complete one of the following: 4

POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

#### Political Science Electives

Complete three POLS courses at the 2000 level and above. 12

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 816)
- Campaigns and Elections (p. 816)
- Comparative Politics (p. 817)
- Identity, Culture, and Politics (p. 817)
- International Relations and Diplomacy (p. 817)
- Law and Legal Studies (p. 817)
- Public Policy (p. 817)
- Security Studies (p. 817)

### Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
Complete one course from each discipline.		
<i>Africana/African American Studies</i> 4		
AFAM 2360	Politics of Poverty	
AFAM 2549	Public Policy and Black America	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFAM 5001	Special Topics in Race and the Law	
<i>Political Science</i>		4

POLS 3487	Politics of Developing Nations	
POLS 2385	U.S. Health and Welfare Policy	
POLS 3324	Law and Society	
POLS 3418	Nationalism	
POLS 3487	Politics of Developing Nations	

#### Capstone Requirement

Complete one of the following: 4

AFAM 4700	Capstone	
AFRS 4700	Capstone	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

### Major Credit Requirement

Complete 80 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	

POLS 3430	Revolution, Civil War, and Insurrection
POLS 3487	Politics of Developing Nations

**Regional Requirements**

Complete two of the following: 8

POLS 3435	Politics and Governance of Europe and the European Union
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict

**Experiential/Practicum Requirement**

Complete one of the following: 4

POLS 4915	Model Arab League
POLS 4918	Model NATO
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
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**Core Course**

POLS 3418	Nationalism	4
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**Electives**

Complete three of the following: 12

POLS 2368	Music and Politics in America and Abroad
POLS 2370	Religion and Politics
POLS 2375	Gender and Politics
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
POLS 3324	Law and Society

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
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**Experiential/Practicum Requirement**

Complete one of the following: 4

POLS 4910	Model United Nations
POLS 4915	Model Arab League
POLS 4938	Dialogue of Civilizations: International Politics Abroad

**Core Courses**

Complete three of the following: 12

POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3408	International Security
POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
------	-------	-------

Complete four of the following: 16

POLS 2330	American Political Thought
POLS 3300	The U.S. Congress
POLS 3302	Judicial Process and Behavior
POLS 3324	Law and Society
POLS 3406	International Law
POLS 3409	Global Governance

POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
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**Core Requirement**

POLS 3307	Public Policy and Administration	4
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**Electives**

Complete three of the following: 12

POLS 2335	Budgeting and Taxation
POLS 2340	Business and Government
POLS 2345	Urban Policies and Politics
POLS 2350	State and Local Politics
POLS 2357	Growth and Decline of Cities and Suburbs
POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 3425	U.S. Foreign Policy

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
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Complete four of the following: 16

POLS 3408	International Security
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3425	U.S. Foreign Policy
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AFRS 1101 or AFAM 1101	4	MATH 1215	4	Foreign language course	4	POLS 3406	4
AFAM 1113	4	POLS 1160	4	AFAM 2360	4	Advanced Writing in the Discipline elective	4
POLS 1150	4	POLS 1155	4				
CLTR 1000 or POLS 1000	1	Foreign language course	4				
ENGW 1111	4						
	17		16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AFAM 2296	4	AFRS 3424	4	Elective	4	Co-op	0
AFRS 2307	4	AFAM 2690	4	Elective	4		
POLS 2400	4	POLS 2399	4				

Foreign language course	4	POLS 2325	4		
	16		16	8	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	AFAM 3270	4	AFAM 2339	4	Co-op	
		POLS 3418	4	AFAM 3664	4		
		AFRS 2464	4				
		PSYC 1101 (ND NUPath)	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	AFRS 3460	4
		POLS 3487	4
		POLS 2370	4
		AFAM 4700 (or AFRS 4700)	4
	0		16

Total Hours: 129

## English and Political Science, BA

The Department of English and the Department of Political Science offer an interdisciplinary combined major in English and political science. Students in the combined major in English and political science integrate the study of literature and writing with the study of political issues and problems.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### English Requirements

Code	Title	Hours
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	

### English Electives

Two of the courses chosen from the lists below must be at the 3000 or 4000 level.

Code	Title	Hours
<b>Diversity</b>		

Complete one of the following. You may reuse this course to fulfil an additional English requirement below: 4

ENGL 2150 Literature and Digital Diversity

ENGL 2296 Early African-American Literature

ENGL 2451 Postcolonial Women Writers

ENGL 2455 American Women Writers

ENGL 2760 Writing in Global Contexts

ENGL 2470 Asian-American Literature

ENGL 3663 The African American Novel

ENGL 3678 Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

ENGL 3685 Modern and Contemporary Jewish Literature

### Pre-19th-Century Literature

Complete one of the following: 4

ENGL 1600 Introduction to Shakespeare

ENGL 1700 Global Literatures 1

ENGL 2296 Early African-American Literature

ENGL 3101 Early Literatures

ENGL 3120 17th- and 18th-Century Literatures

ENGL 3618 Milton

ENGL 3678 Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

or JWSS 3678 Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

### 19th-, 20th-, 21st-Century Literature

Complete one of the following: 4

#### 19th Century

ENGL 2330 The American Renaissance

#### 20th/21st Century

ENGL 2301 The Graphic Novel

ENGL 2440 The Modern Bestseller

ENGL 2600 Irish Literary Culture (Abroad)

ENGL 2610 Contemporary Israeli Literature and Art (Abroad)

ENGL 3140 19th-Century Literatures

ENGL 3619 Emerson and Thoreau

ENGL 3685 Modern and Contemporary Jewish Literature

or JWSS 3685 Modern and Contemporary Jewish Literature

ENGL 3720 19th-Century Major Figure

ENGL 3730 20th- and 21st-Century Major Figure

### Theories and Methods

Complete one of the following: 4

ENGL 1140 Grammar: The Architecture of English

ENGL 1160 Introduction to Rhetoric

ENGL 1410 Introduction to Research on Writing

ENGL 2150	Literature and Digital Diversity
ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3700	Narrative Medicine
ENGL 4410	Research in Rhetoric and Writing
LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

**Comparative Literature Course**

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
ENGL 1500	British Literature to 1800
ENGL 1502	American Literature to 1865
ENGL 2150	Literature and Digital Diversity
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3487	Film and Text (Abroad)
ENGL 3663	The African American Novel

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**English Electives**

Complete two English courses not used above. 8

**Political Science Requirements**

Code	Title	Hours
<b>Foundational Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4

**Political Thought**

Complete one of the following: 4

POLS 2325	Ancient Philosophy and Political Thought
POLS 2328	Modern Political Thought
POLS 2330	American Political Thought
POLS 2332	Contemporary Political Thought

**Political Science Electives**

Complete three courses in the following range: 12

POLS 2300 and above that are not fulfilling other POLS requirements

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 956)
- Campaigns and Elections (p. 956)
- Comparative Politics (p. 956)
- Identity, Culture, and Politics (p. 956)
- International Relations and Diplomacy (p. 957)
- Law and Legal Studies (p. 957)
- Public Policy (p. 957)
- Security Studies (p. 957)

**Supporting Courses for Political Science**

Code	Title	Hours
Complete one of the following to fulfill the prerequisite for POLS2400: 4		
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

**Integrative Requirements**

Code	Title	Hours
<b>English Integrative Requirement</b>		
Complete one of the following: 4		
ENGL 2740	Writing and Community Engagement	
ENGL 3426	British and American Literature and Politics	

**Political Science Integrative Requirement**

Complete one of the following: 4

POLS 2368	Music and Politics in America and Abroad
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POLS 3320	Politics and Mass Media	
<b>Capstone</b>		
Complete one of the following:		4
ENGL 4710	Capstone Seminar	
POLS 4701	Political Science Senior Capstone	
or POLS 4703	Senior Thesis	

## Major Credit Requirement

88 semester hours required in the major

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8

POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

### CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	



**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Sample Five Years, Two Co-ops in Summer 2/Fall

Year 1					
Fall	Hours	Spring	Hours	SummerHours 1	SummerHours 2
ENGL 1000	1	ENGL 1160 or 1410	4	Vacation	Vacation
ENGL 1100	4	POLS 1100	4		
POLS 1150	4	POLS 2400	4		
		prerequisite			
POLS 1100	4	English elective	4		
Elective	4				
17		16		0	0

Year 2					
Fall	Hours	Spring	Hours	SummerHours 1	SummerHours 2
ENGL pre-19th-century requirement	4	ENGL 19th-, 20th-, 21st-century requirement	4	Vacation	Co-op
ENGL elective	4	ENGL theories and method requirem	4		

POLS elective	4	Elective	4		
POLS thought course	4	POLS 2400	4		
16		16		0	0

Year 3					
Fall	Hours	Spring	Hours	SummerHours 1	SummerHours 2
Co-op		ENGL comparative literature requirement	4	Vacation	Co-op
		ENGL diversity requirem	4		
		Elective	4		
		POLS 2400	4		
0		16		0	0

Year 4					
Fall	Hours	Spring	Hours	SummerHours Full Semester Vacation	
Co-op		ENGL elective	4		
		POLS elective	4		
		Elective	4		
		Elective	4		
0		16		0	

Year 5					
Fall	Hours	Spring	Hours		
Capstone	4	Integrative course	4		
Elective	4	English writing requirem	4		
POLS elective	4	Elective	4		
POLS integrat course	4	Elective	4		
16		16			

Total Hours: 129

**Environmental Studies and Political Science, BA**

In this combined major, successful undergraduates will develop an awareness of the scientific, cultural, societal, and political aspects of the world's environmental problems through the lens of geopolitical decisions, public policy, and environmental regulations. Due to overlap in course content, students majoring in Environmental Studies or any Environmental Studies combined majors may not complete a minor in Environmental and Sustainability Sciences.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses

where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Environmental Studies Requirements

Code	Title	Hours
<b>Introductory Courses</b>		
<i>Choose one introductory science course:</i>		4-5
ENVR 1101	Environmental Science	
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	
<i>Choose one introductory social science course:</i>		4
ANTH 1101	Peoples and Cultures	
ENVR 2401	Food Justice and Community Development	
PHIL 1180	Environmental Ethics	
SOCL 1246	Environment and Society	
<b>Scientific Foundations of Environmental Systems (choose one):</b>		4
ENVR 1110	Global Climate Change	
ENVR 3150	Food Security and Sustainability	
ENVR 3200	Water Resources	
<b>Human Foundations of Environmental Systems (choose one):</b>		4
ENVR 2515	Sustainable Development	
PHTH 2414	Environmental Health	
SOCL 4522	Environmental Justice	
<b>Skills Course:</b>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
<b>Electives (select 4, at least 3 at 3000 level or higher):</b>		16
ARTG 5110	Information Design History	
BUSN 1110	Fundamentals of Business	
BUSN 3110	The Consulting Environment	
CIVE 5280	Remote Sensing of the Environment	
COMM 3500	Environmental Issues, Communication, and the Media	
EEMB 3466	Disease Ecology	
ENTR 3520	Impact Investing and Social Finance	
ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia	
ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine	

ENVR 3701	Energy in the Desert Ecosystem
ENVR 4504	Environmental Pollution
ENVR 5563	Advanced Spatial Analysis
FINA 2720	Sustainability in the Business Environment
JRNL 3650	Science Writing
PHIL 1180	Environmental Ethics
PHTH 1270	Introduction to Global Health
PHTH 4202	Principles of Epidemiology in Medicine and Public Health
PPUA 5268	International Environmental Policy
SOCL 2485	Environment, Technology, and Society

## Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete four POLS Electives 2000 level or above		16

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 726)
- Campaigns and Elections (p. 726)
- Comparative Politics (p. 726)
- Identity, Culture, and Politics (p. 726)
- International Relations and Diplomacy (p. 726)
- Law and Legal Studies (p. 727)
- Public Policy (p. 727)
- Security Studies (p. 727)

## Integrative Courses

Code	Title	Hours
<b>Political Science Integrative Course (choose one):</b>		
POLS 2395	Environmental Politics and Policy	4
POLS 2390	Science, Technology, and Public Policy	
<b>Environmental Science Integrative Course (choose one):</b>		
ENVR 5220	Ecosystem-Based Management	4
ENVR 5210	Environmental Planning	
ENVR 4504	Environmental Pollution	
<b>Capstone Requirement</b>		
Complete one of the following:		1-4

ENVR 4900	Earth and Environmental Science Capstone
ENVR 4997	Senior Thesis
POLS 4701	Political Science Senior Capstone
ENVR 4050	Solving Emerging Environmental Challenges through Capstone

## Environmental Studies and Political Science Combined Major Credit Requirement

Complete 84 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

#### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

#### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

#### Regional Requirements

Complete two of the following: 8

POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

#### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

#### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following: 12		
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

#### CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following: 16		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study****Four Years, Two Co-ops in Summer 2/Fall****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 POLS 1155	4 Foreign Language course	4 Elective	4
ENVR 1101	4 Foreign language course	4 ENVR elective 1 of 4	4 Elective	4
POLS 1150	4 ENVR 2515	4		
SOCL 1246	4 ENVR 3150	4		
	16	16	8	8

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1160	4 POLS 2400	4 Elective	4 Co-op	0
ENVR elective; 2 of 4	4 ENVR elective, 3 of 4	4 Elective	4	
ENVR 3300 and ENVR 3301	5 Political thought course	4		
Foreign language course	4 Foreign language course	4		
	17	16	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3315 or 3308	4 Elective	4 Co-op	0
	POLS undergrad elective	4 POLS elective	4	
	Quantitative methods course	4-5		
	Integrative course #1	4		
	0	16-17	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	0 Capstone <sup>1</sup>	4
	Integrative course #2	4
	POLS undergrad elective	4
	ENVR elective, 4 of 4	4
	0	16

Total Hours: 129-130

<sup>1</sup> Earth and Environmental Science Capstone (ENVR 4900 (<https://northeastern-test.courseleaf.com/search/?P=ENVR%204900>)) is also an option to fulfill the capstone requirement of this program. Students who completes 1 SH ENVR 4900 must still complete a minimum of 128 SH to meet degree requirements.

**History and Political Science, BA**

The Department of History and the Department of Political Science offer an interdisciplinary combined major in history and political science. Students interested in the combined major integrate the study of political systems and theories with the study and analysis of human history.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**History Major Requirements**

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level Course</b>		
Complete one course from HIST 1000 levels, excluding HIST 1200 and HIST 1201		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
<b>Intermediate/Advanced History Cluster</b>		
Complete three HIST courses numbered 2000 or above, excluding HIST 2301 and HIST 2302.		12
<b>Advanced History</b>		
Complete one HIST course numbered 3000 or above.		4

**Political Science Major Requirements**

Code	Title	Hours
<b>Political Science Foundation Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete three POLS courses numbered 2000 or above.		12

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 990).

- American Political Institutions (p. 990)
- Campaigns and Elections (p. 990)
- Comparative Politics (p. 991)
- Identity, Culture, and Politics (p. 991)

- International Relations and Diplomacy (p. 991)
- Law and Legal Studies (p. 991)
- Public Policy (p. 991)
- Security Studies (p. 991)

**Supporting Courses**

Code	Title	Hours
Complete one of the following:		
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
Complete one of the following:		4
HIST 1130	Introduction to the History of the United States	
HIST 2211	The World Since 1945	
HIST 2282	The Holocaust and Comparative Genocide	

**Capstone**

Complete one of the following. (Public History concentrations take HIST 4903 & HIST 4904)		4
HIST 4701	Capstone Seminar	
HIST 4903	Fieldwork in History 1	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**History and Political Science Major Credit Requirement**

Complete 78 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirements**

128 total semester hours required

**Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	

POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

## Plan of Study

### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 POLS 1160	4 Elective	4 Elective	4
POLS 1155	4 POLS Supporting course	4 Elective	4 Elective	4
POLS 1150	4 HIST 1200	1		
HIST elective 1	4 HIST 1201	4		
	HIST elective 2	4		
	16	17	8	8

### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS Thought	4 Co-op	Co-op	Foreign Language	4
POLS 2399	4		HIST elective 4	4
Foreign Lanuage	4			
HIST elective 3	4			
	16	0	0	8

### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS elective	4 Co-op	Co-op	Advanced Writing	4
PHIL 5001	4		HIST elective 5	4
POLS 2400	4			
HIST 2302	1			
HIST 2301	4			
	17	0	0	8

### Year 4

Fall	Hours Spring	Hours
POLS elective	4 HIST or POLS capstone	4
POLS elective	4 Elective	4
HIST elective 6	4 Elective	4
Integrative course	4 Elective	4
	16	16

Total Hours: 130

## Journalism and Political Science, BA

This interdisciplinary combined major offers students an opportunity to integrate the study and practice of journalism and political science. Successful students will gain a deep understanding of both disciplines,

allowing them to seek out areas such as political writing, campaigns, and law school.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Creative Expression/Innovation (CI), Interpreting Culture (IC), Understanding Societies and Institutions (SI), Analyzing and Using Data (AD), Engaging Difference and Diversity (DD), and Employing Ethical Reasoning (ER) are met through the major requirements. All other Nupath requirements must be met through electives.

## Journalism Major Requirements

Code	Title	Hours
<b>Journalism Introductory Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundations</b>		
Must receive a C or better in the following:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Ethics</b>		
JRNL 4650	Ethics and Issues in Journalism	4
<b>Journalism Electives</b>		
Take three JRNL courses.		12

## Political Science Requirements

Code	Title	Hours
<b>Political Science Foundation Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	

POLS 2332	Contemporary Political Thought	
<b>Political Science Capstone or Thesis</b>		
Complete one of the following:		4
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	
<b>Political Science Electives</b>		
Complete three POLS electives or complete a concentration from the following list:		12
POLS 2000 to POLS 5999		

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 192)
- Campaigns and Elections (p. 192)
- Comparative Politics (p. 192)
- Identity, Culture, and Politics (p. 192)
- International Relations and Diplomacy (p. 193)
- Law and Legal Studies (p. 193)
- Public Policy (p. 193)
- Security Studies (p. 193)

### Integrative Requirement

Code	Title	Hours
JRNL 3550	The First Amendment and the Media	4
COMM 3320	Political Communication	4
or POLS 3320	Politics and Mass Media	

### Journalism and Political Science Combined Major Credit Requirement

Complete 84 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

129 total semester hours required

#### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

#### Campaigns and Elections Electives

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

#### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

#### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

#### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	



Core Courses	
Complete three of the following: 12	
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3408	International Security
POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4

Electives	
Complete three of the following: 12	
POLS 2335	Budgeting and Taxation
POLS 2340	Business and Government
POLS 2345	Urban Policies and Politics
POLS 2350	State and Local Politics
POLS 2357	Growth and Decline of Cities and Suburbs
POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 3425	U.S. Foreign Policy

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Sample 4 Years, 2 Co-ops**

**Summer 2/Fall**

Year 1	Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
	JRNL 1000	1 JRNL 1101	4 Foreign language	4 Foreign language	4

JRNL 1150	4	JRNL 1102	1 Elective	4 Elective	4
POLS 1150	4	POLS 1155	4		
ENGW 1111	4	POLS 1160	4		
Elective	4	Foreign language	4		
	17	17	8	8	

Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
JRNL 2201	4	JRNL 2301	4 Elective	4 Co-op	0
Journalism elective 1	4	Journalism elective 2	4 Elective	4	
POLS 2399	4	POLS 2400	4		
Political science elective 1	4	Political science elective 2	4		
		EEAM 2000 or EESH 2000	1		
	16	17	8	0	

Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	0	JRNL 3610	4 Elective	4 Co-op	0
		Journalism elective 3	4 Elective	4	
		Political thought requirement	4		
		Political science elective 3	4		
	0	16	8	0	

Year 4					
Fall	Hours Spring	Hours	Summer 2	Hours	
Co-op	0	JRNL 3550	4		
		JRNL 4650	4		
		POLS 4701 or 4703	4		
		POLS 3320 or COMM 3320	4		
	0	16		0	

Total Hours: 131

**Political Science and Communication Studies, BA**

The combined major in political science and communication studies offers students the opportunity to integrate the study of politics and government with different forms and mediums of communication. Students complete the core courses in political science along with core courses in communication studies that cover public speaking and persuasion. This combined major highlights the important role played by different forms of communication in shaping politics and government.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Methodology</b>		
POLS 2399	Research Methods in Political Science	4
or COMM 2301	Communication Research Methods	
<b>Political Science Upper-Division Electives</b>		
Complete two courses in the following range:		8
POLS 3300 to POLS 5999		
<b>Political Science Electives</b>		
Complete two courses in the following range:		8
POLS 2000 to POLS 5999		

### Political Science Concentration (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 165).

- American Political Institutions (p. 165)
- Campaigns and Elections (p. 165)
- Comparative Politics (p. 165)
- Identity, Culture, and Politics (p. 165)
- International Relations and Diplomacy (p. 165)
- Law and Legal Studies (p. 166)
- Public Policy (p. 166)
- Security Studies (p. 166)

### Communication Studies Requirements

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

### Communication Studies Electives

Code	Title	Hours
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	

### Communication Studies Electives

Complete three additional communication studies courses.	12
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### Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3320	Politics and Mass Media	4
or COMM 3320	Political Communication	
<b>Capstone Requirement</b>		
Complete one of the following. This course also counts toward the political science or communication studies elective requirement:		4
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	

COMM 4533	Consultation Skills
COMM 4602	Contemporary Rhetorical Theory
COMM 4608	Strategic Communication Capstone
COMM 4625	Online Communities
COMM 4755	Production Capstone
POLS 4701	Political Science Senior Capstone
POLS 4703	Senior Thesis

## Political Science and Communication Studies Combined Major Credit Requirement

Complete 84 semester hours in the major.

## Communication Studies Major Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Concentrations

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4

POLS 2370	Religion and Politics
POLS 3418	Nationalism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3487	Politics of Developing Nations

### Regional Requirements

Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

### Experiential/Practicum Requirement

Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

## CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

## CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

## CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	

POLS 3406	International Law
POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

Communication Studies Elective	4			
Foreign Language Culture Course	4			
EESH 2000 or EEAM 2000	1			
	17	0	0	8

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

Year 3	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
<b>Fall</b>				
Political Thought Course	4 Co-op	Co-op	Communication Studies Writing Intensive	4
POLS 2399 or COMM 2301	4		Political Science Elective	4
Communication Studies Elective	4			
POLS Upper-Division Elective 1	4			
	16	0	0	8

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

Year 4	Hours Spring	Hours
<b>Fall</b>		
POLS Upper-Division Elective 2	4 Capstone	4
Political Science Elective	4 Elective	4
Integrative Course	4 Elective	4
Elective	4 Elective	4
	16	16

**Plan of Study**

**Sample Four Years, Two Co-ops**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1000 or COMM 1000	1	POLS 1155	4	Communication Studies Foundation Course
POLS 1150	4	COMM 1112 or 2301	4	Communication Studies Elective
COMM 1101	4	Foreign Language 2	4	
ENGW 1111	4	Elective	4	
Foreign Language 1	4			
	17	16	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1160	4	Co-op	Co-op	Communication Studies Writing Intensive
POLS 2400	4		Elective	4

Total Hours: 130

**Media and Screen Studies and Political Science, BA**

The Media and Screen Studies Program and the Department of Political Science offer a combined major in media and screen studies and political science. The combined major integrates the analysis, research, and production of traditional and emerging media along with courses on American government, comparative politics, international relations, and research methods.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI) and Difference and Diversity (DD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

## Media Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3392	Gender and Film	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3600	Film Theory	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

## Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following (NUpath capstone recommendation: Complete MSCR 4623 as one of your MSCR electives if a political science capstone is not taken for a political science elective):		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	

COMM 2655	Television Studio Production
COMM 3655	Digital Editing for TV
COMM 3750	Special Effects and Postproduction for Television
COMM 4755	Production Capstone

## Political Science Requirements

Code	Title	Hours
<b>Required Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Politics in Media/Art</b>		
Complete two courses. Consult academic adviser for additional courses.		8
POLS 2368	Music and Politics in America and Abroad	

## Elective Courses

Complete two POLS courses or complete a concentration.	8
NUpath capstone recommendation: Complete a POLS capstone course as one of your POLS electives if MSCR 4623 is not taken for a MSCR elective.	

## Political Science Concentration (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 159)
- Campaigns and Elections (p. 159)
- Comparative Politics (p. 159)
- Identity, Culture, and Politics (p. 159)
- International Relations and Diplomacy (p. 159)
- Law and Legal Studies (p. 159)
- Public Policy (p. 159)
- Security Studies (p. 160)

## Integrative Requirements

Code	Title	Hours
<b>Required Courses</b>		
MSCR 3437	Media and Identity	4
or COMM 3320	Political Communication	
POLS 3320	Politics and Mass Media	4

## Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Concentrations

#### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

#### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	

POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	
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#### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

#### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

#### CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following:		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

#### CONCENTRATION IN PUBLIC POLICY

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	

POLS 2357	Growth and Decline of Cities and Suburbs
POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 3425	U.S. Foreign Policy

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Sample Four Years, Two Co-ops**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4
MSCR 1220	4	POLS 1155	4	Elective	4
POLS 1150	4	MSCR foundation	4		
ENGW 1111	4	Foreign Language	4		
Foreign Language	4				
		17	16		8

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1160	4	Co-op		Co-op	4
POLS 2400	4			Elective	4
MSCR diversity/globalization	4				
MSCR elective	4				
EEAM 2000	1				
		17	0		0

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Political thought elective	4	MSCR writing-intensive	4	Elective	4
MSCR writing-intensive	4	Politics in media/art elective	4	Elective	4
MSCR elective	4	MSCR elective	4		
POLS 3320	4	POLS elective	4		
		16	16		8

Year 4		
Fall	Hours	Spring
Co-op	Politics in media/art elective	4
	POLS elective	4
	Elective	4
	MSCR 3437 or COMM 3320	4
		0
		16

Total Hours: 130

**Political Science and Economics, BA**

The combined major in political science and economics offers students the opportunity to integrate the study of politics and government with the study of economics. Students complete the core courses in political science along with core courses in economics that cover both macroeconomic and microeconomic perspectives. This combined major highlights the important role that the economy plays in shaping politics and government.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 46).

**Political Science Requirements**

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		
Complete one of the following: 4		
POLS 2330	American Political Thought	
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete four courses POLS2000 to POLS5999		16

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below.

- American Political Institutions (p. 911)
- Campaigns and Elections (p. 911)
- Comparative Politics (p. 911)
- Identity, Culture, and Politics (p. 911)
- International Relations and Diplomacy (p. 912)
- Law and Legal Studies (p. 912)
- Public Policy (p. 912)
- Security Studies (p. 912)

## Economics Requirements for BA

Code	Title	Hours
<b>Breadth Courses</b>		
MATH 1231 or MATH 1241 or MATH 1245 or MATH 1251 or MATH 1340 or MATH 1341	Calculus for Business and Economics Calculus 1 Calculus with Applications Calculus and Differential Equations for Biology 1 Intensive Calculus for Engineers Calculus 1 for Science and Engineering	4
CS 1100 or DS 2000 and DS 2001 or MISM 2510	Computer Science and Its Applications Programming with Data and Data Science Programming Practicum Fundamentals of Information Analytics	4

### Required Economics Courses

ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 3520	History of Economic Thought	4

### Economics Electives

Complete 3 Economics elective courses that are found in the following ranges, with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, ECON 3520 may not be used as an Economics elective:

ECON 1200 to ECON 1999
ECON 3000 to ECON 4689
ECON 4900 to ECON 4999
ECON 5200 to ECON 5999

## Supporting Courses

Complete either of the statistics and departmental elective combinations listed below:

### COMBINATION A

Code	Title	Hours
<b>Statistics</b>		
POLS 2400	Quantitative Techniques	4
<b>Economics</b>		
Complete one course within the following ranges, excluding ECON 3520. This course may not also be used as an Economics elective:		4
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		

ECON 4900 to ECON 4999

ECON 5200 to ECON 5999

### COMBINATION B

Code	Title	Hours
<b>Statistics</b>		
ECON 2350	Statistics	4
<b>Political Science</b>		
Complete one course in the following range:		4
POLS 2401 to POLS 5999		

## Integrative Requirements

Code	Title	Hours
<b>Senior Seminar/Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

## Combined Major GPA/Credit Requirement

Grades in the following required Economics courses and in Quantitative Techniques (POLS 2400) or Statistics (ECON 2350) must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or POLS 2400		Quantitative Techniques

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Concentrations

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		



If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:	8
POLS 2345 Urban Policies and Politics	
POLS 2350 State and Local Politics	
POLS 2355 Intergovernmental Relations	
POLS 3310 Public Opinion, Voting, and Elections	
POLS 3320 Politics and Mass Media	
POLS 3304 Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370 Religion and Politics		
POLS 3418 Nationalism		
POLS 3430 Revolution, Civil War, and Insurrection		
POLS 3487 Politics of Developing Nations		

#### Regional Requirements

Complete two of the following:	8
POLS 3435 Politics and Governance of Europe and the European Union	
POLS 3465 Government and Politics in the Middle East	
POLS 3470 Arab-Israeli Conflict	

#### Experiential/Practicum Requirement

Complete one of the following:	4
POLS 4915 Model Arab League	
POLS 4918 Model NATO	
POLS 4937 Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418 Nationalism		4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368 Music and Politics in America and Abroad		
POLS 2370 Religion and Politics		
POLS 2375 Gender and Politics		
POLS 3309 Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy		
POLS 3324 Law and Society		

### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910 Model United Nations		
POLS 4915 Model Arab League		
POLS 4938 Dialogue of Civilizations: International Politics Abroad		

#### Core Courses

Complete three of the following: 12

POLS 3405 International Political Economy	
POLS 3406 International Law	
POLS 3408 International Security	
POLS 3435 Politics and Governance of Europe and the European Union	
POLS 3470 Arab-Israeli Conflict	

### CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 2330 American Political Thought		
POLS 3300 The U.S. Congress		
POLS 3302 Judicial Process and Behavior		
POLS 3324 Law and Society		
POLS 3406 International Law		
POLS 3409 Global Governance		
POLS 4500 U.S. Constitutional Law		
POLS 4505 U.S. Civil Liberties		

### CONCENTRATION IN PUBLIC POLICY

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307 Public Policy and Administration		4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335 Budgeting and Taxation		
POLS 2340 Business and Government		
POLS 2345 Urban Policies and Politics		
POLS 2350 State and Local Politics		
POLS 2357 Growth and Decline of Cities and Suburbs		
POLS 2390 Science, Technology, and Public Policy		
POLS 2395 Environmental Politics and Policy		
POLS 3425 U.S. Foreign Policy		

### CONCENTRATION IN SECURITY STUDIES

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 3408 International Security		
POLS 3420 U.S. National Security Policy		
POLS 3423 Terrorism and Counterterrorism		
POLS 3425 U.S. Foreign Policy		
POLS 3430 Revolution, Civil War, and Insurrection		
POLS 3470 Arab-Israeli Conflict		
POLS 3487 Politics of Developing Nations		

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	MATH 1231, 1241, 1245, 1251, 1340, or 1341	4	Elective	4	Elective	4

POLS 1155	4	POLS 1150	4	Elective	4	Elective	4
ECON 1115	4	CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4				
Elective	4	ECON 1116	4				
	16		16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	POLS 2400 or ECON 2350	4	Elective	4	Co-op	0
POLS elective	4	POLS elective	4	Political Theory Course	4		
ECON 2315	4	ECON 2316	4				
		Elective	4				
ECON elective 1	4						
	16		16		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	ECON elective 3	4	Co-op	0
		POLS elective	4	ENGW 3315	4		
		ECON elective 2	4				
		ECON 3520	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op		POLS 4701, 4703, or ECON 4692	4
		Elective	4
		ECON or POLS elective (See Supporting Courses, Combinations A and B.)	4
		Elective	4
	0		16

Total Hours: 128

## Political Science and Human Services, BA

The combined degree is designed to prepare students with skills and tools to advocate for social issues at all levels of society. Human services program students prepare for fields in the social change arena (nongovernment organizations [NGOs], counseling, and political advocacy). Political science students prepare to change and shape the domestic and international political landscape in American politics, comparative politics, international relations, and public policy. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op,

internship, and study-abroad opportunities. Upon completion of the degree, successful students apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Successful students are positioned to pursue law school, graduate school, careers in government and the nonprofit sector, as well as in teaching, journalism, legislative or lobbying positions, public relations activities, and work in international corporations and NGOs.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete three courses in the following range:		12
POLS 2000 to POLS 5999		

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 1015)
- Campaigns and Elections (p. 1015)
- Comparative Politics (p. 1016)
- Identity, Culture, and Politics (p. 1016)
- International Relations and Diplomacy (p. 1016)
- Law and Legal Studies (p. 1016)
- Public Policy (p. 1016)
- Security Studies (p. 1016)

**Supporting Course for Political Science**

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following to fulfill the prerequisite for POLS 2400:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

**Human Services Requirements**

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	

**Human Services Electives**

Complete three HUSV courses.	12
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**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3307	Public Policy and Administration	4
HUSV 3900	Social Policy	4
<b>Research Methods</b>		
Complete one of the following:		4
POLS 2399	Research Methods in Political Science	
HUSV 2970	Research Methods for Human Services	

**Capstone and Elective**

Complete one of the following options:	8
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*Option A*

Complete POLS 4701 or POLS 4703 and complete one additional human services course that has not been used in previous requirements:

POLS 4701 Political Science Senior Capstone  
or POLS 4703 Senior Thesis

HUSV 2000 to HUSV 5999

*Option B*

Complete HUSV 4700 and complete one additional political science course numbered 2300 or higher that has not been used in previous requirements:

HUSV 4700 Senior Seminar in Human Services

POLS 2300 to POLS 5999

**Political Science and Human Services Combined Major Credit Requirement**

Complete 86 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

**Regional Requirements**

Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

Experiential/Practicum Requirement		Hours
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

### CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

### CONCENTRATION IN PUBLIC POLICY

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12

POLS 2335	Budgeting and Taxation
POLS 2340	Business and Government
POLS 2345	Urban Policies and Politics
POLS 2350	State and Local Politics
POLS 2357	Growth and Decline of Cities and Suburbs
POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 3425	U.S. Foreign Policy

### CONCENTRATION IN SECURITY STUDIES

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

### Plan of Study

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1155	4	POLS 1150	4		
ENGW 1111	4	POLS 1160	4		
HUSV 1000 or POLS 1000	1	HUSV 2300	4		
HUSV 1101	4	Foreign Language	4		
HUSV elective	4				
		17	16	0	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
EESH 2000	1	Co-op		Co-op	
POLS thought	4			POLS 2400 supporting course	4
HS Diverse Populations Course	4				
Research Methods course	4				
HUSV elective	4				
		17	0	0	8
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 2400	4	Co-op		Co-op	
Foreign Language	4				
				POLS elective	4
				HUSV elective	4

POLS 3307	4			
HUSV 3900	4			
	16	0	0	8

**Year 4**

Fall	Hours	Spring	Hours
Capstone and Elective	8	POLS elective	4
HUSV4700 + 1 POLS course (Option A) or POLS4701 (Or POLS4703 and 1 HUSV course (Option B))			
POLS elective	4	HUSV 3570	4
Foreign language	4	Elective	4
		Elective	4
	16		16

**Year 5**

Fall	Hours
HUSV 4994	6
Elective	4
Elective	4
	14

Total Hours: 128

## Political Science and International Affairs, BA

Through this combined major, successful undergraduates will develop an awareness of global affairs and international relations since the early 20th century. The combined major addresses diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; political processes, institutions, and actors; and state-society relations (democracy, authoritarianism, inequalities, citizenship).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

### Political Science Electives/Concentration for BA

Complete four upper-division political science electives, or complete one of the following concentrations. If you are working toward a concentration, declare it with your adviser in order for it to be added to your record.

Code	Title	Hours
<b>Political Science Electives</b>		
Complete four political science courses at or above POLS 2000.		16
<ul style="list-style-type: none"> <li>American Political Institutions (p. 1082)</li> <li>Campaigns and Elections (p. 1082)</li> <li>Comparative Politics (p. 1082)</li> <li>Identity, Culture, and Politics (p. 1082)</li> <li>International Relations and Diplomacy (p. 1082)</li> <li>Law and Legal Studies (p. 1083)</li> <li>Public Policy (p. 1083)</li> <li>Security Studies (p. 1083)</li> </ul>		

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

### International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

**International Relations Elective**

Code	Title	Hours
Complete one of the following courses:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

**Global Dynamics Requirement**

Code	Title	Hours
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3520	Global Political Economy	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 3060	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	

HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	
POLS 2282	The Holocaust and Comparative Genocide	
POLS 3408	International Security	
POLS 3418	Nationalism	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 4918	Model NATO	
<i>Globalization</i>		
AFAM 2600	Issues in Race, Science, and Technology	
ANTH 2305	Global Markets and Local Culture	
ANTH 2315	Religion and Modernity	
ECON 3290	History of the Global Economy	
ECON 4635	International Economics	
HIST 2211	The World Since 1945	
HIST 2311	Colonialism/Imperialism	
INTB 3310	Cultural Aspects of International Business	
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 3520	Global Political Economy	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
SOCL 3465	Globalization and the Evolution of Human Societies	
<i>Population, Migration, and Diaspora</i>		
AFRS 1270	Introduction to Global Health	
or PHTH 1270	Introduction to Global Health	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
ANTH 1101	Peoples and Cultures	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
INTL 2240	Global Population and Development	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	

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INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Regional Analysis Requirement**

Code	Title	Hours
Complete three of the following, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:		12

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		

ANTH 4350	Ethnography of Southeast Asia
ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

<i>Europe</i>	
CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

<i>Latin America</i>	
ANTH 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

<i>Middle East</i>	
CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies

INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 3250	Democracy and Development in North Africa and the Mediterranean
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<i>Russia</i>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union

### International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

### Integrative Requirements

Code	Title	Hours
<b>Research Methods</b>		
POLS 2399	Research Methods in Political Science	4
or INTL 2718	Research Methods in International Affairs	
<b>Capstone</b>		
Complete one of the following:		4
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	
INTL 4700	Senior Capstone Seminar in International Affairs	

### Political Science and International Affairs Combined Major Credit Requirement

Complete 76 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	



**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	

POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study  
Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	HIST 2211	4	Vacation	0	Vacation	0
MATH 1215	4	POLS 1150	4				
POLS 1155	4	Foreign language core course	4				
INTL 1101	4	POLS 1160	4				
POLS 1000	1						
		17		16		0	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 3290	4	INTL undergraduate elective	4	Vacation	0	Co-op	0
POLS undergraduate elective	4	POLS 2400	4				
POLS Thought course	4	POLS undergraduate elective	4				
Foreign language core course	4	Foreign language core course	4				
		16		16		0	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL 3400	4	INTL undergraduate elective	4	Co-op	0
		POLS undergraduate elective	4	POLS undergraduate elective	4		
		INTL undergraduate elective	4				
		ENGW 3315	4				
		0		16		8	0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL undergraduate elective	4	Elective	4	Co-op	0
		INTL undergraduate elective	4	Elective	4		
		POLS undergraduate elective	4				
		Elective	4				
		0		16		8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 INTL 4700	4
	Elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1****Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 HIST 2211	4 Vacation	0 Vacation	0
MATH 1215	4 Foreign language core course	4		
POLS 1155	4 POLS 1150	4		
INTL 1101	4 POLS 1160	4		
POLS 1000	1			
	17	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ECON 3290	4 Co-op	0 Co-op	0 POLS undergraduate elective	4
Foreign language core course	4		INTL undergraduate elective	4
POLS Thought course	4			
POLS undergraduate elective	4			
	16	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL undergraduate elective	4 Co-op	0 Co-op	0 INTL undergraduate elective	4
POLS 2400	4		POLS undergraduate elective	4
POLS undergraduate elective	4			
Foreign language core course	4			
	16	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 3400	4 Co-op	0 Co-op	0 Vacation	0
POLS undergraduate elective	4			

INTL undergraduate elective	4			
ENGW 3315	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
INTL undergraduate elective	4 INTL 4700	4
POLS undergraduate elective	4 Elective	4
Elective	4 Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 129

**Political Science and Philosophy, BA**

The combined major in political science and philosophy enables students to develop an integrated understanding of politics, political theory, ethical theory, and theories of justice. Successful students who complete the major will have the training to critically evaluate and assess public policies and social issues on both political and ethical grounds, including issues such as tax policy, immigration, environmental protection, trade policy, healthcare, education, defense policy, and much more.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Political Science Requirements**

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
POLS 2399	Research Methods in Political Science	4

**Political Thought**

Complete two of the following:		8
POLS 2325	Ancient Philosophy and Political Thought	

POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Electives**

Complete four courses in the following range: 16  
POLS 2000 to POLS 5999

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record. Requirements for the concentrations are listed below (p. ).

- American Political Institutions (p. 1128)
- Campaigns and Elections (p. 1128)
- Comparative Politics (p. 1128)
- Identity, Culture, and Politics (p. 1128)
- International Relations and Diplomacy (p. 1128)
- Law and Legal Studies (p. 1129)
- Public Policy (p. 1129)
- Security Studies (p. 1129)

**Philosophy Requirements**

Code	Title	Hours
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**Philosophy Required Courses**

PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	

PHIL 2330	Modern Philosophy	4
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PHIL 2303	Social and Political Philosophy	4
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**Philosophy Restricted Electives**

Complete two of the following (not used to fulfill another requirement): 8

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4901	Topics in Philosophy Seminar	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Additional Electives**

Complete three additional electives in philosophy or religion. 12

**Integrative Requirement**

Code	Title	Hours
Complete one of the following:		
PHIL 5001	Global Justice	4
or PHIL 5002	Ethics and Public Policy	

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

**Regional Requirements**

Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	

POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		

Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study  
Five Years, Three Co-ops in Spring/Summer 1**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1000	1	POLS 1150	4	PHIL 2325 or POLS 2325	4
POLS 1155	4	POLS 1160	4	PHIL Restricted Elective	4
ENGW 1111	4	Foreign Language		4	
PHIL 1115	4	MATH 1215	4		
POLS elective	4				
		17			8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS Thought	4	Co-op		Co-op		Foreign Language	4
POLS 2399	4					Elective	4
Foreign Language	4						
PHIL 2330	4						
		16			0	0	

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
		Co-op		Co-op	
PHIL 2303	4				
PHIL 5001	4				
POLS 2400	4				

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PHIL Restricted Elective	4		
	16	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
POLS elective	4 Co-op	Co-op	
POLS elective	4		
POLS Thought course	4		
PHIL Elective	4		
	16	0	0

**Year 5**

Fall	Hours Spring	Hours
PHIL Elective	4 Elective	4
PHIL Elective	4 Elective	4
POLS Elective	4 Elective	4
Elective	4 PHIL Elective	4
	16	16

Total Hours: 129

**Sociology and Political Science, BA**

The combined major in sociology and political science offers students the opportunity to integrate the study of politics and government with an analysis of social systems. Students complete core courses in political science along with core courses in sociology that include social theory and an introduction to social systems. This combined major highlights the important intersection between social norms and organizations with the evolution of politics and government.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 46).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Sociology Requirements**

Code	Title	Hours
<b>Sociology Required Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2268		4
SOCL 3300	Social Theory	4
SOCL 3450	Class, Power, and Social Change	4
<b>Sociology Introductory Electives</b>		
Complete two courses in the following range:		8
SOCL 1200 to SOCL 1999		
<b>Sociology Intermediate Elective</b>		
Complete one course in the following range:		4
SOCL 2000 to SOCL 3999		
<b>Sociology Advanced Elective</b>		
Complete one course in the following range:		4
SOCL 4000 to SOCL 5999		
<b>Statistics and Methods</b>		
Complete one of the following sets:		8
SOCL 2320 and SOCL 2321	Statistical Analysis in Sociology and Research Methods in Sociology	
POLS 2400 and POLS 2399	Quantitative Techniques and Research Methods in Political Science	

**Political Science Requirements**

Code	Title	Hours
<b>Political Science Required Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete five courses in the following range:		20
POLS 2000 to POLS 5999		

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 1197)
- Campaigns and Elections (p. 1197)
- Comparative Politics (p. 1197)
- Identity, Culture, and Politics (p. 1197)
- International Relations and Diplomacy (p. 1197)
- Law and Legal Studies (p. 1198)

- Public Policy (p. 1198)
- Security Studies (p. 1198)

### Capstone Requirement

Code	Title	Hours
Complete one of the following:		4
SOCL 4600	Senior Seminar	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

### Integrative Requirement

Code	Title	Hours
SOCL 4514		4
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 3320	Politics and Mass Media	
POLS 3324	Law and Society	
POLS 3418	Nationalism	

### Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### Program Requirement

128 total semester hours required

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Political Science, BS**

The Bachelor of Science in Political Science provides a set of introductory courses to the discipline, followed by methodology courses, electives, and a capstone course. Students explore and analyze the many facets of American government, comparative politics, international relations, and political philosophy. With elective courses, students may choose from among a number of concentrations or follow their own curricular path.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Introduction to College**

Complete "Introduction to College" for your major.

**Political Science Major Requirements**

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2330	American Political Thought	
POLS 2328	Modern Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Capstone</b>		
POLS 4701 or POLS 4703	Political Science Senior Capstone Senior Thesis	4

**Political Science Experiential Learning Requirement**

Code	Title	Hours
Note: Up to two credit-bearing courses count toward political science electives.		
Complete one course or experience from the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4942	Internship in Politics	
<b>Co-op or Study Abroad</b>		
Complete one cooperative education experience or one study-abroad experience.		4

**Political Science Electives**

Note: You may use four courses from the elective area to fulfill a concentration.

Code	Title	Hours
Complete eight political science electives with a minimum of six numbered 2000 or above.		32

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record. Requirements for the concentrations are listed below (p. 1199).

- American Political Institutions (p. 1199)
- Campaigns and Elections (p. 1199)

- Comparative Politics (p. 1199)
- Identity, Culture, and Politics (p. 1199)
- International Relations and Diplomacy (p. 1199)
- Law and Legal Studies (p. 1199)
- Public Policy (p. 1200)
- Security Studies (p. 1200)

## Political Science Major Credit Requirement

Complete 60 semester hours in the major.

## Upper-Division Electives

Code	Title	Hours
Note: Courses used as upper-division electives do not count toward the major or the NU Core.		
Complete three general electives numbered 3000 or above.		12

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirements

128 total semester hours required

## Concentrations

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		
POLS 2350	State and Local Politics	16
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4

POLS 2370	Religion and Politics
POLS 3418	Nationalism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3487	Politics of Developing Nations

### Regional Requirements

Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

### Experiential/Practicum Requirement

Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

## CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

## CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

## CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following:		
POLS 2330	American Political Thought	16
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	



1200 Political Science, BS

POLS 3406	International Law
POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1155	4 POLS 1150	4 Vacation	0 Vacation	0
POLS 1156	0 POLS 1151	0		
Elective	4 MATH 1215	4		
Elective	4 Elective	4		
POLS 1000	1 POLS 1160	4		
ENGW 1111	4			
	17	16	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 2399	4 POLS 2400	4 Vacation	0 Co-op	0
POLS intermediate/advanced undergraduate elective	4 Elective	4		

Elective	4 POLS intermediate/advanced undergraduate elective	4		
Elective	4 Elective	4		
EESH 2000	1 EESH 2000	1		
	17	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Political theory course	4 POLS intermediate/advanced undergraduate elective	4 Co-op	0
	POLS intermediate/advanced undergraduate elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3315	4 Upper-division elective	4 Co-op	0
	POLS intermediate/advanced undergraduate elective	4 POLS intermediate/advanced undergraduate elective	4	
	Upper-division elective	4		
	Elective	4		
	0	16	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	0 POLS 4701 (or POLS 4703 Senior Thesis)	4
	POLS intermediate/advanced undergraduate elective	4
	Upper-division elective	4
	Elective	4
	0	16

Total Hours: 131

## Five Years, Three Co-ops in Spring/Summer 1

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
POLS 1155	4	POLS 1150	4	Vacation	0
POLS 1156	0	POLS 1151	0		
Elective	4	MATH 1215	4		
Elective	4	Elective	4		
POLS 1000	1	POLS 1160	4		
ENGW 1111	4				
	17	16	0	0	

Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
POLS 2399	4	Co-op	0	Co-op	0
Elective	4		Elective	4	
POLS intermediate/advanced undergraduate elective	4				
POLS intermediate/advanced undergraduate elective	4				
EESH 2000	1				
	17	0	0	8	

Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Political theory course	4	Co-op	0	Co-op	0
Elective	4		POLS intermediate/advanced undergraduate elective	4	
Elective	4		Elective	4	
POLS 2400	4				
	16	0	0	8	

Year 4					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ENGW 3315	4	Co-op	0	Co-op	0
POLS intermediate/advanced undergraduate elective	4				
Upper-division elective	4				
Elective	4				
	16	0	0	0	

Year 5			
Fall	Hours Spring	Hours	
POLS intermediate/advanced undergraduate elective	4	POLS 4701 (or POLS 4703 Senior Thesis)	4

POLS intermediate/advanced undergraduate elective	4	POLS intermediate/advanced undergraduate elective	4
Upper-division elective	4	Upper-division elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

## Biology and Political Science, BS

In the BS, combined biology and political science degree program, science courses lay the groundwork for strong basic training in mathematics, chemistry, and physics that are relevant to biology. In biology courses, students broadly explore the organization and processes of life—from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. In political science courses, students pursue core concepts of American government, comparative politics, international relations and political thought. Coursework in quantitative techniques is also required. Students choose from a range of advanced subject electives. An appreciation of the intersection of biology and political science is provided through advanced courses in science, technology and public policy, and in environmental politics and policy.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Biology Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000	Biology at Northeastern	1
or POLS 1000	Political Science at Northeastern	
<b>Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<i>Biochemistry</i>		

BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
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**Intermediate/Advanced Biology**

Complete one of the following:	4-5
BIOL 2327 to BIOL 3999	
BIOL 4705 to BIOL 5999	

**Organismal and Population Biology Elective**

Complete one of the following:	4-5	
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	

**Mathematics**

MATH 1251	Calculus and Differential Equations for Biology 1	4
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**Chemistry***General Chemistry*

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
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*Organic Chemistry*

CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5

**Physics**

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	5

**Political Science Requirements**

Code	Title	Hours
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**Core Courses in Political Science**

POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4

**Statistics**

Complete one of the following:	4-5	
POLS 2400	Quantitative Techniques	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	

**Political Thought**

Complete one of the following:	4	
POLS 2328	Modern Political Thought	
POLS 2325	Ancient Philosophy and Political Thought	

POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Elective**

Complete five POLS courses 2000 and above.	20
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**Political Science Concentration (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 655)
- Campaigns and Elections (p. 655)
- Comparative Politics (p. 655)
- Identity, Culture, and Politics (p. 655)
- International Relations and Diplomacy (p. 655)
- Law and Legal Studies (p. 655)
- Public Policy (p. 655)
- Security Studies (p. 656)

**Integrative Requirement and Capstone**

*Note:* Science, Technology, and Public Policy (POLS 2390) and Environmental Politics and Policy (POLS 2395) cannot be used both as an integrative course and as an elective above.

Code	Title	Hours
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**Integrative Requirement**

POLS 2390 or POLS 2395	Science, Technology, and Public Policy Environmental Politics and Policy	4
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**Capstone**

Complete one of the following to fulfill capstone requirement:	1-4	
BIOL 4701	Biology Capstone	
BIOL 4900	Biology Research Capstone (concurrent with BIOL 4991, which may be used toward Intermediate/Advanced Biology)	
BIOL 4971	Junior/Senior Honors Project 2	
POLS 4701	Political Science Senior Capstone	

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

136 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
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Complete four of the following:	16	
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	

POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

## Computer Science and Political Science, BS

The computer science and political science combined major offers both a strong computer science foundation and a deep understanding of global and societal needs. You will become an engaged citizen of the world, participating in interdisciplinary scholarship and translational research to address regional and global issues.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
IS 2000	Principles of Information Science	4
<b>Khoury Elective Courses</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 12 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges:		12
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

### Political Science Courses

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Capstone</b>		
POLS 4701	Political Science Senior Capstone	4
<b>Political Science Electives</b>		
Complete four courses in the following range:		16
POLS 2000 to POLS 5999		

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 383)
- Campaigns and Elections (p. 383)
- Comparative Politics (p. 383)
- Identity, Culture, and Politics (p. 383)
- International Relations and Diplomacy (p. 383)
- Law and Legal Studies (p. 383)
- Public Policy (p. 384)
- Security Studies (p. 384)

### Integrative Requirement

Code	Title	Hours
<b>Integrative Requirement</b>		
Complete one of the following:		4
POLS 2390	Science, Technology, and Public Policy	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	

### Supporting Courses

Code	Title	Hours
<b>Supporting Courses</b>		
Complete one of the following:		4
AFAM 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	

IS 1300	Knowledge in a Digital World
or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2485	Environment, Technology, and Society
SOCL 4528	Computers and Society

### Computer Science Writing Requirement

Code	Title	Hours
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#### College Writing

ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

#### Advanced Writing in the Disciplines

Complete one of the following: 4

ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3311	Advanced Writing for Prelaw	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 28 credits of general electives.		28

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Computer Science and Political Science Major Credit Requirement

100 semester hours required in the major

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Writing-Intensive in the Major
- Advanced Writing in the Disciplines
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

133 total semester hours required

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

#### Campaigns and Elections Electives

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Code	Title	Hours
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

#### Regional Requirements

Code	Title	Hours
Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

#### Experiential/Practicum Requirement

Code	Title	Hours
Complete one of the following: 4		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		

POLS 2368	Music and Politics in America and Abroad
POLS 2370	Religion and Politics
POLS 2375	Gender and Politics
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
POLS 3324	Law and Society

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Sample Patterns:**

**Four Year, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	CS 3200	4	Vacation	
CS 2500 and CS 2501	5	IS 2000	4	CS 3500 and CS 3501	5		
CS 1200	1	ENGW 1111	4				
POLS 1150 and POLS 1151	4	POLS 1160	4				
POLS 1155 and POLS 1156	4						
		19		17		9 0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	CS 1210	1	ENGW 3302, 3308, 3311, or 3315	4	Co-op	
POLS 2399	4	Khoury elective 1	4	Elective	4		
POLS theory elective	4	POLS 2400	4				
Elective	4	POLS elective 1	4				
		Elective	4				
		16		17		8 0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury elective 2	4	Elective	4	Co-op	
		POLS elective 2	4	Elective	4		
		POLS elective 3	4				
		Computing and social issues requirement	4				
		0		16		8 0	

Year 4			
Fall	Hours Spring	Hours Summer 1	Hours
Co-op	Khoury elective 3	4	
	POLS 4701	4 Elective	4
	POLS elective 4	4 Elective	4
	POLS integrative requirement	4	
	0	16	8

Total Hours: 134

### Five Year, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	Vacation	
CS 2500 and CS 2501	5 IS 2000	4		
CS 1200	1 ENGW 1111	4		
POLS 1150 and POLS 1151	4 POLS 1160	4		
POLS 1155 and POLS 1156	4			
	19	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3000	4 CS 1210	1 Vacation	Co-op	
CS 3500 and CS 3501	5 CS 3200	4		
POLS 2399	4 POLS 2400	4		
POLS theory elective	4 POLS elective 1	4		
	Elective	4		
	17	17	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Khoury elective 1	4 ENGW 3302, 3308, 3311, or 3315	4 Co-op	
	POLS elective 2	4 Elective	4	
	Computing and social issues requirement	4		
	Elective	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Khoury elective 2	4 Elective	4 Co-op	
	POLS elective 3	4 Elective	4	

	POLS integrative requirement	4		
	Elective	4		
	0	16	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	Khoury elective 3	4
	POLS 4701	4
	POLS elective 4	4
	Elective	4
	0	16

Total Hours: 134

## Criminal Justice and Political Science, BS

This combined major educates students in criminal justice and political science and in the interface between the two disciplines. The scope and sequence of political science courses provide students with a foundation in topics such as American government, comparative politics, international relations, and security and resilience. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should be able to understand the relationships between the fields as they relate to understanding and addressing criminal behavior.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
	What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.	
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
	These courses introduce students to topical issues related to crime and justice.	
	Complete one of the following:	4



CRIM 1300	The Death Penalty
CRIM 1400	Human Trafficking
CRIM 1500	Corruption, Integrity, and Accountability
CRIM 1700	Crime, Media, and Politics

**Understanding and Experiencing Criminal Justice Institutions and Systems**

How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.

Complete one of the following: 4

CRIM 2310	Courts: The Third Branch of Government
CRIM 2320	Youth Crime and Justice
CRIM 2330	Punishment in the Age of Mass Incarceration
CRIM 2340	Corporate Security: Securing the Private Sector
CRIM 2350	Policing a Democratic Society

**Crime Problems**

The following courses provide students a deeper look at a range of crime problems.

Complete one of the following: 4

CRIM 3010	Criminal Violence
CRIM 3030	Global Criminology
CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3060	Political Crime and Terrorism
CRIM 3070	Corporate and White-Collar Crime
CRIM 3540	Addiction and Recovery

**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 3110	Gender, Crime, and Justice
CRIM 3120	Race, Crime, and Justice

**Digital Skills**

Successful students develop digital skills and master digital tools useful for careers related to crime and justice. Students choose one of two courses (each has a required lab). The computer science course introduces students to spreadsheets and databases. The data science course introduces students to programming with data.

Complete one of the following (and the appropriate lab): 4 or 5

CS 1100 and CS 1101	Computer Science and Its Applications and Lab for CS 1100
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum ((Social Science Practicum section))

**Political Science Requirements**

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4

POLS 1160	International Relations	4
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**Political Theory**

Complete one of the following: 4

POLS 2325	Ancient Philosophy and Political Thought
POLS 2328	Modern Political Thought
POLS 2330	American Political Thought
POLS 2332	Contemporary Political Thought

**Research Methods and Electives**

Complete Option A, Option B, or Option C, below. *Note:* These options enable the student to take research methods courses (including statistics/quantitative techniques) as either CRIM courses or as POLS courses.

**OPTION A**

Code	Title	Hours
<i>Research Methods</i>		
CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

*Criminal Justice Electives*

Complete two additional courses in the following range: 8

CRIM 3001 to CRIM 5999

*Political Science Electives*

Complete five courses in the following range: 20

POLS 2000 to POLS 5999

**OPTION B**

Code	Title	Hours
<i>Research Methods</i>		
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4

*Criminal Justice Electives*

Complete three additional courses in the following range: 12

CRIM 3001 to CRIM 5999

*Political Science Electives*

Complete four courses in the following range: 20

POLS 2000 to POLS 5999

**OPTION C**

Code	Title	Hours
<i>Research Methods</i>		
Complete one of the following sequences: 8		
CRIM 3600 and POLS 2400	Criminal Justice Research Methods and Quantitative Techniques	
CRIM 3700 and POLS 2399	Analyzing and Using Data on Crime and Justice and Research Methods in Political Science	

*Criminal Justice Electives*

Complete two additional courses in the following range: 8

CRIM 3001 to CRIM 5999

*Political Science Electives*

Complete four courses in the following range: 20

POLS 2000 to POLS 5999

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 859).

- American Political Institutions (p. 859)
- Campaigns and Elections (p. 859)
- Comparative Politics (p. 859)
- Identity, Culture, and Politics (p. 859)
- International Relations and Diplomacy (p. 860)
- Law and Legal Studies (p. 860)
- Public Policy (p. 860)
- Security Studies (p. 860)

## Integrative Requirement

Code	Title	Hours
<b>Senior Capstone Requirement</b>		
CRIM 4949	Senior Capstone Seminar	4
or POLS 4701	Political Science Senior Capstone	
<b>Due Process</b>		
CRIM 1110	Criminal Due Process	4
<b>Integrative Elective Courses</b>		
Complete two of the following:		8
CRIM 1700	Crime, Media, and Politics	
CRIM 2310	Courts: The Third Branch of Government	
CRIM 4120	Courts and Sentencing	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

## Combined Major Credit Requirement

Complete 84 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Political Science Concentrations (Optional)

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	

POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Mathematics and Political Science, BS****Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Mathematics Requirements**

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Math Electives</b>		
Complete two courses in the following range that are not required in the requirements above:		8
MATH 30001 to MATH 5999		

**Political Science Requirements**

Code	Title	Hours
<b>Political Science Required Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
POLS 2325	Ancient Philosophy and Political Thought	4
POLS 2328	Modern Political Thought	4
POLS 2330	American Political Thought	4
POLS 2332	Contemporary Political Thought	4
<b>Political Science Electives</b>		
Complete three POLS courses numbered 2000 and above.		12

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below.

- American Political Institutions (p. 749)
- Campaigns and Elections (p. 749)
- Comparative Politics (p. 749)
- Identity, Culture, and Politics (p. 750)
- International Relations and Diplomacy (p. 750)
- Law and Legal Studies (p. 750)
- Public Policy (p. 750)
- Security Studies (p. 750)

## Integrative Requirement

Code	Title	Hours
POLS 3402		

## Mathematics and Political Science Combined-Major Credit Requirement

Complete 68 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Optional Political Science Concentrations

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	

POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Political Science and Business Administration, BS**

The combined major in political science and business administration offers students the opportunity to integrate the study of politics and government with an analysis of business practices and organizations. Students complete core courses in political science along with core courses in business administration that cover accounting, finance, marketing, and organizational behavior. This combined major highlights the important intersection between business practices and the evolution of politics and government.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Political Science Requirements**

Code	Title	Hours
<b>Introduction to College</b>		
POLS 1000	Political Science at Northeastern	1
or BUSN 1102	Personal Skill Development for Business	

**Political Science Requirements**

POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4

**Political Theory**

Complete one of the following:		4
POLS 2330	American Political Thought	
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2332	Contemporary Political Thought	

**Statistics**

POLS 2400	Quantitative Techniques	4
or MGSC 2301	Business Statistics	

**Political Science Electives**

Complete four courses in the following range, or complete a political science concentration as outlined below:		16
POLS 2000 to POLS 5999		

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record:

- American Political Institutions (p. 288)
- Campaigns and Elections (p. 288)
- Comparative Politics (p. 288)
- Identity, Culture, and Politics (p. 288)
- International Relations and Diplomacy (p. 289)
- Law and Legal Studies (p. 289)
- Public Policy (p. 289)
- Security Studies (p. 289)

**Business Requirements**

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4

**Organizational Behavior**

ORGB 3201	Organizational Behavior	4
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**Business Concentration**

Complete one of the following business concentrations:

- Accounting (p. 290)
- Brand Management (p. 290)
- Business Analytics (p. 291)
- Corporate Innovation and Venture (p. 291)
- Entrepreneurial Startups (p. 291)
- Family Business (p. 292)
- Finance (p. 292)
- Fintech (p. 293)
- Healthcare Management and Consulting (p. 293)
- International Business (p. 294) (available only as a second concentration)
- Management (p. 294)
- Management Information Systems (p. 295)
- Marketing (p. 295)
- Marketing Analytics (p. 296)
- Social Innovation and Entrepreneurship (p. 296)
- Supply Chain Management (p. 297)

**Supporting Courses**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
<b>Computer Science</b>		
CS 1100	Computer Science and Its Applications	4
<b>Co-op Preparation</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EESH 2000	Professional Development for Co-op	

**Integrative Requirement**

Code	Title	Hours
<b>Senior Capstone</b>		
POLS 4701	Political Science Senior Capstone (or POLS 4703 Senior Thesis)	4
or STRT 4501	Strategy in Action	

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Political Science GPA Requirement**

Minimum 2.000 GPA required in all political science courses

**Business GPA Requirement**

Minimum 2.000 GPA required in business courses

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Political Science Concentrations (Optional)****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	

POLS 4937	Dialogue of Civilizations: Government and Politics Abroad
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**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	

POLS 2357	Growth and Decline of Cities and Suburbs
POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 3425	U.S. Foreign Policy

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
<b>Core Course</b>		
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1000 or BUSN 1102	1	POLS 1150	4	DD NUpath	4
POLS 1155	4	POLS 1160	4	Open elective	4
ENGW 1111	4	MGSC 2301 or POLS 2400	4		
ACCT 1201	4	ECON 1115 or 1116	4		
MATH 1231	4				
		17		8	

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS thought	4	Co-op		Co-op	
POLS elective	4			FINA 2201	4
MKTG 2201	4			ACCT 2301	4
CS 1100	4				
CS 1101	1				
BUSN 1103 or EESH 2000	1				
		18		8	

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS elective	4	Co-op		Co-op	
POLS elective	4			POLS elective	4
ORGB 3201	4			ND NUpath	4
Concentration class 1	4				
		16		8	

**Year 4**

Fall	Hours	Spring	Hours
Concentration class 2	4	POLS 4701 or STRT 4501	4
ENGW 3304, 3315, or 3307	4	Concentration class 4	4
Concentration class 3	4	IC NUpath	4
EI NUpath	4	ER NUpath	4
	16		16

Total Hours: 131

## Political Science and Communication Studies, BS

The combined major in political science and communication studies offers students the opportunity to integrate the study of politics and government with different forms and mediums of communication. Students complete core courses in political science along with core courses in communication studies that cover public speaking and persuasion. This combined major highlights the important role played by different forms of communication in shaping politics and government.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Methodology</b>		
POLS 2399 or COMM 2301	Research Methods in Political Science or Communication Research Methods	4
<b>Political Science Upper-Division Electives</b>		
Complete two courses in the following range:		8

POLS 3300 to POLS 5999

### Political Science Electives

Complete two courses in the following range: 8  
POLS 2000 to POLS 5999

### Political Science Concentration (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 180).

- American Political Institutions (p. 180)
- Campaigns and Elections (p. 180)
- Comparative Politics (p. 180)
- Identity, Culture, and Politics (p. 180)
- International Relations and Diplomacy (p. 181)
- Law and Legal Studies (p. 181)
- Public Policy (p. 181)
- Security Studies (p. 181)

### Communication Studies Requirements

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking or Communication Research Methods	4

### Communication Studies Electives

Code	Title	Hours
<b>Foundation course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing Intensive</b>		
Complete two writing intensive courses in communication studies.		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	



COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	

**Communication Studies Electives**

Complete three additional Communication Studies courses. 12

**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3320	Politics and Mass Media	4
or COMM 3320	Political Communication	

**Capstone Requirement**

Complete one of the following. This course also counts toward the political science or communication studies elective requirement: 4

COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4533	Consultation Skills	
COMM 4602	Contemporary Rhetorical Theory	
COMM 4608	Strategic Communication Capstone	
COMM 4625	Online Communities	
COMM 4755	Production Capstone	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**Political Science and Communication Studies Combined Major Credit Requirement**

Complete 84 semester hours in the major.

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	

POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study**

Sample Four Years, Two Co-ops

<b>Year 1</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1000 or COMM 1000	1	POLS 1155	4	Communication Studies Foundation Course	4	Communication Studies Cluster Course	4
POLS 1150	4	COMM 1112 or 2301	4	Communication Studies Elective	4	Elective	4
COMM 1101	4	Elective	4				
ENGW 1111	4	Elective	4				
Elective	4						
		17		16		8	
<b>Year 2</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	Co-op		Co-op		Communication Studies Writing Intensive	4
POLS 2400	4					Elective	4
Communication Studies Elective	4						
Elective	4						
EESH 2000 or EEAM 2000	1						
		17		0		0	
<b>Year 3</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Political Thought Course	4	Co-op		Co-op		Communication Studies Writing Intensive	4
POLS 2399 or COMM 2301	4					Political Science Elective	4
Communication Studies Elective	4						
POLS Upper-Division Elective 1	4						
		16		0		0	
<b>Year 4</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS Upper-Division Elective 2	4	Capstone	4				
Political Science Elective	4	Elective	4				

Integrative Course	4 Elective	4
Elective	4 Elective	4
		16
		16

Total Hours: 130

## Political Science and Economics, BS

The combined major in political science and economics offers students the opportunity to integrate the study of politics and government with the study of economics. Students complete the core courses in political science along with core courses in economics that cover both macroeconomic and microeconomic perspectives. This combined major highlights the important role that the economy plays in shaping politics and government.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete four courses from the following range, or complete a concentration as outlined below:		16
POLS 2000 to POLS 5999		

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. ).

- American Political Institutions (p. 930)
- Campaigns and Elections (p. 930)
- Comparative Politics (p. 931)
- Identity, Culture, and Politics (p. 931)
- International Relations and Diplomacy (p. 931)

- Law and Legal Studies (p. 931)
- Public Policy (p. 931)
- Security Studies (p. 931)

### Economics Requirements for BS

Code	Title	Hours
<b>Breadth Courses</b>		
CS 1100	Computer Science and Its Applications	4
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
or MISM 2510	Fundamentals of Information Analytics	
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
or MATH 1245	Calculus with Applications	
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1340	Intensive Calculus for Engineers	
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
<b>Economics Electives</b>		
Complete 3 Economics elective courses found in the following ranges, with no more than 1 in the ECON 1200 to ECON 1999 range:		12
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Supporting Courses

Complete either of the statistics and departmental elective combinations listed below:

#### COMBINATION A

Code	Title	Hours
<b>Statistics</b>		
POLS 2400	Quantitative Techniques	4
<b>Economics</b>		
Complete one course from the following ranges. This course may not also be used as an Economics elective:		4
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

#### COMBINATION B

Code	Title	Hours
<b>Statistics</b>		
ECON 2350	Statistics	4
<b>Political Science</b>		
Complete one course in the following range:		4
POLS 2401 to POLS 5999		

**Integrative Requirements**

Code	Title	Hours
<b>Senior Seminar/Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**Combined Major GPA/Credit Requirement:**

Grades in the following required Economics courses and in Quantitative Techniques (POLS 2400) or Statistics (ECON 2350) must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	
ECON 2560	Applied Econometrics	4

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required.

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 1111	4 MATH 1231, 1241, 1245, 1251, 1340, or 1341	4 Elective	4 Elective	4
POLS 1155	4 POLS 1150	4 Elective	4 Elective	4
ECON 1115	4 CS 1100, DS 2000 <i>and</i> DS 2001, or MISM 2510	4		
Elective	4 ECON 1116	4		
	16	16	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1160	4 POLS 2400 or ECON 2350	4 Elective	4 Co-op	0
POLS undergraduate elective	4 POLS undergraduate elective	4 Political Theory Course	4	
ECON 2315	4 ECON 2316	4		
ECON elective 1	4 ECON elective 2	4		
	16	16	8	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Elective	4 Elective	4 Co-op	0
	POLS undergraduate elective	4 ECON elective or POLS elective <sup>See</sup> Supporting Courses, Combinations A and B.	4	
	ECON elective 3	4		
	ECON 2560	4		
	0	16	8	0

Year 4		
Fall	Hours Spring	Hours
Co-op	POLS 4701, 4703, or ECON 4692	4
	Elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 128

**Political Science and Human Services, BS**

The combined degree seeks to prepare students with skills and tools to advocate for social issues at all levels of society. Human services program students are well positioned to pursue fields in the social change arena (nongovernment organizations, or NGOs; counseling; and political advocacy). Political science students are also well positioned to change and shape the domestic and international political landscape in American politics, comparative politics, international relations, and public policy. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, internship, and study-abroad opportunities. Upon completion of the degree, students can apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Successful students are poised to pursue law school, graduate school, careers in government and the nonprofit sector, as well as in teaching, journalism, legislative or lobbying positions, public relations activities, and work in international corporations and NGOs.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete three courses in the following range:		12
POLS 2000 to POLS 5999		

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record:

- American Political Institutions (p. 1030)
- Campaigns and Elections (p. 1030)
- Comparative Politics (p. 1030)
- Identity, Culture, and Politics (p. 1030)
- International Relations and Diplomacy (p. 1031)
- Law and Legal Studies (p. 1031)
- Public Policy (p. 1031)
- Security Studies (p. 1031)

## Supporting Course for Political Science

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following to fulfill the prerequisite for POLS 2400:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

## Human Services Requirements

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	
<b>Human Services Electives</b>		
Complete three HUSV courses.		12

## Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3307	Public Policy and Administration	4
HUSV 3900	Social Policy	4
<b>Research Methods</b>		
Complete one of the following:		4
POLS 2399	Research Methods in Political Science	
HUSV 2970	Research Methods for Human Services	
<b>Capstone and Elective</b>		
Complete one of the following options:		8
<i>Option A</i>		
Complete POLS 4701 or POLS 4703 and complete one additional human services course that has not been used in previous requirements:		
POLS 4701	Political Science Senior Capstone	
or POLS 4703	Senior Thesis	
HUSV 1100 to HUSV 5999		
<i>Option B</i>		
Complete HUSV 4700 and complete one additional political science course numbered 2000 or higher that has not been used in previous requirements:		
HUSV 4700	Senior Seminar in Human Services	
POLS 2000 to POLS 5999		

## Political Science and Human Services Combined Major Credit Requirement

Complete 86 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

**Regional Requirements**

Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

**Experiential/Practicum Requirement**

Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12

POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Year 1**

Fall	Hours	Spring	Hours
HUSV 1000 or POLS 1000	1	POLS 1150	4
POLS 1155	4	POLS 1160	4
ENGW 1111	4	HUSV 2300	4
HUSV 1101	4	HUSV elective	4
Elective	4		
17		16	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EESH 2000	1	Co-op		Co-op		POLS 2400 supporting course	4
POLS thought	4					HUSV elective	4
HUSV diverse population course	4						
HUSV 3570	4						
Research methods course	4						
17		0		0		8	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS elective	4	Co-op		Co-op		POLS elective	4
POLS 2400	4					HUSV elective	4
POLS 3307	4						
HUSV 3900	4						
16		0		0		8	

**Year 4**

Fall	Hours	Spring	Hours
POLS elective	4	Elective	4
Capstone and elective	8	Elective	4

HUSV 4700 and one POLS course (Option A) or POLS 4701 (or POLS 4703) and one HUSV course (Option B)

Elective	4	Elective	4
16		16	

**Year 5**

Fall	Hours
HUSV 4994	6
Elective	4
Elective	4
14	

Total Hours: 128

**Political Science and Philosophy, BS**

The combined major in political science and philosophy enables students to develop an integrated understanding of politics, political theory, ethical theory, and theories of justice. Students who complete the major will have the training to critically evaluate and assess public policies and social issues on both political and ethical grounds, including issues such as tax policy, immigration, environmental protection, trade policy, healthcare, education, defense policy, and much more.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Political Science Requirements**

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
POLS 2399	Research Methods in Political Science	4

**Political Thought**

Complete two of the following:	8
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POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Electives**

Complete four courses in the following range: 16  
POLS 2000 to POLS 5999

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 1152)
- Campaigns and Elections (p. 1152)
- Comparative Politics (p. 1152)
- Identity, Culture, and Politics (p. 1152)
- International Relations and Diplomacy (p. 1152)
- Law and Legal Studies (p. 1152)
- Public Policy (p. 1153)
- Security Studies (p. 1153)

**Philosophy Requirements**

Code	Title	Hours
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**Philosophy Required Courses**

PHIL 1115	Introduction to Logic	4
PHIL 2303	Social and Political Philosophy	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Philosophy Restricted Electives**

Complete two courses from the following with one course at the 4000 or 5000 level: 8

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Additional Electives**

Complete three additional electives in philosophy or religion. 12

**Integrative Requirement**

Code	Title	Hours
Complete one of the following:		
PHIL 5001	Global Justice	4
or PHIL 5002	Ethics and Public Policy	

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

**Regional Requirements**

Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	

POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		

Complete three of the following:		12
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2390	Science, Technology, and Public Policy	
POLS 2395	Environmental Politics and Policy	
POLS 3425	U.S. Foreign Policy	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours		
POLS 1000	1	POLS 1150	4	PHIL 2325 or POLS 2325	4		
POLS 1155	4	MATH 1215	4	PHIL Restricted Elective	4		
ENGW 1111	4	POLS 1160	4				
PHIL 1115	4	Elective	4				
POLS elective	4						
		17			8		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours		
POLS Thought	4	Co-op		Co-op			
POLS 2399	4						
PHIL 2330	4						
Elective	4						
		16			0		
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS elective	4	Co-op		Co-op		POLS elective	4
PHIL 5001	4					PHIL Restricted Elective	4
POLS 2400	4						
POLS elective	4						
		16			0	0	
						8	

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**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
POLS elective	4 Co-op	Co-op	
POLS elective	4		
POLS Thought course	4		
PHIL Elective	4		
	16	0	0

**Year 5**

Fall	Hours Spring	Hours
PHIL Elective	4 Elective	4
PHIL Elective	4 Elective	4
POLS Elective	4 Elective	4
Elective	4 Elective	4
	16	16

Total Hours: 129

**Political Science, Minor**

The political science minor introduces students to key concepts, practices, and perspectives in the study of politics and government. Students complete at least two of the three introductory courses—American government, comparative politics, and international relations—as well as three other courses in political science.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
Complete two of the following:		8
POLS 1150	American Government	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	

**Elective Courses**

Code	Title	Hours
Complete three political science courses.		12

**GPA Requirement**

2.000 GPA required in the minor

**American Political Institutions, Minor**

The American political institutions minor introduces students to key concepts, practices, and perspectives in the study of American politics and government. Students complete the introductory American government course as well as four other courses that focus on various

aspects of American politics and government at the national, state, and local levels.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* This minor is restricted to students who are not enrolled in the political science major or in any political science combined major.

**Required Course**

Code	Title	Hours
POLS 1150	American Government	4

**Electives**

Code	Title	Hours
Complete four of the following:		16
POLS 2340	Business and Government	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**GPA Requirement**

2.000 GPA required in the minor

**International Security Studies, Minor**

The international security studies minor introduces students to key concepts, practices, and perspectives in the study of international security. Students complete the introductory course in international relations as well as four other courses in political science that focus on various aspects of international security, including international law, international organizations, and U.S. security policy.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* Political science majors and combined majors may not pursue the minor in international security studies.

**Required Core Courses**

Code	Title	Hours
POLS 1160	International Relations	4
POLS 3408	International Security	4
POLS 3420	U.S. National Security Policy	4

**Elective Courses**

Code	Title	Hours
Students may not count any of the courses toward more than one requirement.		
Complete two of the following:		8

ARMY 3503	American Military History
POLS 3406	International Law
POLS 3408	International Security
POLS 3420	U.S. National Security Policy
POLS 3425	U.S. Foreign Policy
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations
POLS 4910	Model United Nations

## GPA Requirement

2.000 GPA required in the minor

## Sociology and Anthropology

Website (<http://www.northeastern.edu/socant/>)

### Liza Weinstein, PhD

Associate Professor of Sociology and Chair

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### Department Information

900 Renaissance Park

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617.373.2688 (fax)

Sociology and cultural anthropology provide the critical perspective needed for studying the social and cultural arrangements in which people live, for understanding how societies function, for investigating the conditions under which people change their institutions, and for describing the modes and conditions of cooperation that make social life possible.

Courses in the program examine such areas as urbanization, the environment, health, globalization and human rights, gender and sexuality, social movements, the cultural underpinnings of science and technology, new media, and the comparative analysis of advanced capitalist societies. Many courses are directly relevant to majors in other fields, including economics, political science, philosophy, literature, criminal justice, and business.

The major in sociology or cultural anthropology seeks to prepare students for careers in public or private service, including such fields as law, teaching, social work, administration or management, and research.

Sociology and cultural anthropology both participate in a number of combined majors, which can be found listed under the Programs tab on this page.

## Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 27)."

## Programs

### Bachelor of Arts (BA)

- Sociology (p. 1227)
- Cultural Anthropology (p. 1229)
- Communication Studies and Sociology (p. 135)
- Cultural Anthropology and Philosophy (p. 1108)
- Cultural Anthropology and Religious Studies (p. 1109)
- Cultural Anthropology and Theatre (p. 244)

- English and Cultural Anthropology (p. 948)
- History and Cultural Anthropology (p. 982)
- Human Services and Sociology (p. 1017)
- International Affairs and Cultural Anthropology (p. 1061)
- Media and Screen Studies and Sociology (p. 160)
- Sociology and Cultural Anthropology (p. 1247)
- Sociology and Environmental Studies (p. 727)
- Sociology and International Affairs (p. 1084)
- Sociology and Philosophy (p. 1131)
- Sociology and Political Science (p. 1196)
- Sociology and Religious Studies (p. 1133)

## Bachelor of Science (BS)

- Sociology (p. 1259)
- Cultural Anthropology (p. 1261)
- Computer Science and Sociology (p. 385)
- Criminal Justice and Sociology (p. 861)
- Health Science and Sociology (p. 553)
- Human Services and Sociology (p. 1027)
- Linguistics and Cultural Anthropology (p. 679)
- Mathematics and Cultural Anthropology (p. 746)
- Mathematics and Sociology (p. 752)
- Sociology and Cultural Anthropology (p. 1274)

## Minors

- Cultural Anthropology (p. 1275)
- Science and Technology Studies (p. 1276)
- Sociology (p. 1276)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Sociology, BA

Sociology is the scientific study of society. It begins with the premise that individuals are deeply affected by the social structures, institutions, and cultural milieus surrounding them. Sociology provides students with the conceptual tools to understand how various features of society, including inequalities based on race, class, or gender, affect its members. In so doing, sociology also provides conceptual tools that can be used to foster social change and the empowerment of historically marginalized groups.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Sociology Major Requirements

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
<b>Cultural Anthropology</b>		
ANTH 2305	Global Markets and Local Culture	4
<b>Advanced Methods Requirement</b>		
Complete one of the following:		4
ANTH 3410	Ethnographic Field Experience	
DA 5030	Introduction to Data Mining/Machine Learning	
DS 3000	Foundations of Data Science	
DS 4400	Machine Learning and Data Mining 1	
HINF 5301	Evaluating Health Technologies	
POLS 2400	Quantitative Techniques	
SOCL 3487	Applied Sociology: Practice and Theory	
<b>Senior Seminar</b>		
SOCL 4600	Senior Seminar	4

### Required Sociology Electives

Code	Title	Hours
<b>Sociology Electives</b>		
Students must complete seven elective courses in the major, at least four of which must be at the 3000 level or higher.		28
<b>Social Science Electives</b>		
Complete three social science courses in the following subject areas: AFRS, AFAM, ANTH, CRIM, ECON, HUSV, HIST, INTL, LING, LPSC, POLS, or PSYC.		12

### Sociology Experiential Learning Requirement

Code	Title	Hours
Complete one of the following courses or a study abroad or a co-op:		4
SOCL 3487	Applied Sociology: Practice and Theory	
SOCL 4971	Junior/Senior Honors Project 2	

### Sociology Major Grade Requirement

A GPA of 2.000 across all major courses is required.

### Sociology Major Credit Requirement

Complete 68 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 1000	1	SOCL 1000+ level elective	4	General elective	4	General elective	4
SOCL 1101	4	Social science elective	4	General elective	4	General elective	4
ENGW 1111	4	SOCL 2321	4				
Foreign language BA course	4	Foreign language BA course	4				
SOCL 1000+ level elective	4						
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 1000+ level elective	4	Co-op	4	Co-op	4	General elective	4
SOCL 2320	4					General elective	4
ANTH 2305	4						
Foreign language BA course	4						
EESH 2000	1						
		17		0		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 3000+ level elective	4	Co-op	4	Co-op	4	General elective	4
ENGW 3315 or 3305	4					General elective	4
SOCL 3300	4						
Advanced methods requirement	4						
		16		0		0	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Social science elective	4	SOCL 3000+ level elective	4				
SOCL 3000+ level elective	4	SOCL 4600	4				
SOCL 3000+ level elective	4	General elective	4				
Social science elective	4	General elective	4				
		16		16			

Total Hours: 130

## Cultural Anthropology, BA

Anthropology is the holistic, cross-cultural study of humanity that explores the multiple ways humans live and create meaning in the world. At Northeastern University, the sociology and anthropology department specializes in **cultural anthropology** and **social anthropology**—the relationship of culture to the institutions, relationships, and practices of everyday life that make up social structures.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Cultural Anthropology Major Requirements

Code	Title	Hours
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 4600	Senior Seminar	4
SOCL 1101	Introduction to Sociology	4

#### Advanced Area Courses

Additional courses taken in this section may be used as electives.

Complete two of the following:	8	
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

#### Anthropology Electives

Complete six ANTH courses. Two study-abroad courses may count toward this requirement with prior permission from the department. 24

#### Social Science Electives

Complete three social science courses from the following subject areas. Social science electives may not include music or art: AFRS, AFAM, CRIM, ECON, HUSV, HIST, INTL, LING, LPSC, POLS, PSYC, or SOCL. 12

<sup>1</sup> Students must choose between a one-semester senior project, which they would complete in the context of Senior Seminar (ANTH 4600), or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

### Cultural Anthropology Major Grade Requirement

A GPA of 2.000 across all major courses is required.

### Cultural Anthropology Major Credit Requirement

Complete 68 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 1000	1	SOCL 1101	4	Vacation	0	Vacation	0
ANTH 1101	4	Anthropology elective	4				
Social science elective	4	ENGW 1111	4				
Elective	4	MATH 1215	4				
Elective	4						
		17		16		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2300	4	Social science elective	4	Vacation	0	Co-op	0
Foreign language core course	4	Foreign language core course	4				
Social science elective	4	Elective	4				
Elective	4	Anthropology elective	4				
		EESH 2000	1				
		16		17		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Advanced area ANTH 4500–ANTH 4515	4	ANTH 2305	4	Co-op	0
		Anthropology elective	4	Elective	4		
		ENGW 3315	4				

	Foreign language core course	4			
		0	16	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
Co-op	0 Advanced area ANTH 4500-ANTH 4515	4 Elective	4 Co-op	0	
	Anthropology elective	4 Elective	4		
	Elective	4			
	Elective	4			
		0	16	8	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>			
Co-op	0 ANTH 4600	4			
	Elective	4			
	Anthropology elective	4			
	Elective	4			
		0			
		16			

Total Hours: 130

### Five Years, Three Co-ops in Spring/Summer 1

<b>Year 1</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
ANTH 1000	1 SOCL 1101	4 Vacation	0 Vacation	0	
	4 Anthropology elective	4			
Social science elective	4 ENGW 1111	4			
Elective	4 MATH 1215	4			
Elective	4				
		17	16	0	0
<b>Year 2</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
ANTH 2300	4 Co-op	0 Co-op	0 Foreign language core course	4	
	4		Elective	4	
Foreign language core course					
Social science elective	4				
	4				
Anthropology elective					
EESH 2000	1				
		17	0	0	8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>	
ANTH 2305	4 Co-op	0 Co-op	0 Elective	4	

Foreign language core course	4		Elective	4
ENGW 3315	4			
Anthropology elective	4			
		16	0	0
				8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Advanced area ANTH 4500-ANTH 4515	4 Co-op	0 Co-op	0 Vacation	0
	4			
Anthropology elective				
Social science elective	4			
Elective	4			
		16	0	0
				0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Advanced area ANTH 4500-ANTH 4515	4 ANTH 4600	4		
	4 Elective	4		
Anthropology elective	4 Elective	4		
Elective	4 Elective	4		
Anthropology elective	4 Elective	4		
		16	16	

Total Hours: 130

## Communication Studies and Sociology, BA

The communication studies department and the sociology department offer an interdisciplinary combined major in communication studies and sociology. The combined major integrates the study of communication skills and processes with the study of social behaviors.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Societies and Institutions (SI) and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Difference and Diversity (DD), and Analyzing and Using Data (AD) may be met through electives in the major.

## Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1000	Communication Studies at Northeastern	1
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Courses</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	
<b>Communication Studies Electives</b>		
Complete three COMM courses.		12

## Sociology Requirements

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4

SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
<b>Introductory Electives</b>		
Complete two of the following:		8
SOCL 1228	Social Problems	
SOCL 1245	Sociology of Poverty	
SOCL 1255	Sociology of the Family	
SOCL 1260	Gender in a Changing Society	
SOCL 1295	Drugs and Society	
<b>Intermediate-Level Elective</b>		
Complete one of the following:		4
SOCL 2358	Current Issues in Cities and Suburbs	
SOCL 3440	Sociology of Human Service Organizations	
SOCL 3450	Class, Power, and Social Change	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 3487	Applied Sociology: Practice and Theory	
<b>Advanced-Level Elective</b>		
Complete one of the following:		4
SOCL 4518	Law and Society in a Digital World	
SOCL 4520	Race, Class, and Gender	
SOCL 4528	Computers and Society	
SOCL 4580	Special Topics in Sociology	
SOCL 4992	Directed Study	

## Capstone and Integrative Requirements

Code	Title	Hours
<b>Integrative Course</b>		
Complete one of the following:		4
COMM 3320	Political Communication	
COMM 3532	Theories of Conflict and Negotiation	
SOCL 1246	Environment and Society	
<b>Capstone/Senior Seminar Option</b>		
Complete one of the following two options:		8
<i>Communications Capstone Option</i>		
Complete one COMM course and one SOCL course from the following list:		
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4625	Online Communities	
SOCL 3000 to SOCL 4999		
<i>Sociology Senior Seminar Option</i>		
Complete SOCL 4600 and one COMM course from the following list:		
SOCL 4600	Senior Seminar	
COMM 3000 to COMM 4999		

## Communication Studies Grade Requirement

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

## Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.



## Communication Studies and Sociology Combined Major Credit Requirement

Complete 80 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
COMM 1000	1 ENGW 1111	4 Communication Studies cluster course	4 Introductory Sociology elective	4
COMM 1101	4 Communicati Studies foundation course	4 Elective	4 Elective	4
COMM 1112 or 2301	4 SOCL 2320	4		
SOCL 1101	4 SOCL 2321	4		
SOCL 3300	4			
	17	16	8	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Communication Studies elective	4 CO-OP	CO-OP	0 Communication Studies elective	4
Elective	4		Communicati Studies writing-intensive	4
Introductory Sociology elective	4			
Elective	4			
EEAM 2000	1			
	17	0	0	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Communication Studies writing-intensive	4 CO-OP	CO-OP	Communication Studies elective	4
Intermediate Sociology elective	4		Elective	4
Advanced Writing in the Discipline	4			
Elective	4			
	16	0	0	8

Year 4		
Fall	Hours Spring	Hours
Elective	4 Communication Studies or Sociology capstone	4
Elective	4 Communicati Studies or Sociology capstone elective	4
Integrative course	4 Elective	4
Advanced Sociology elective	4 Elective	4
	16	16
Total Hours: 130		

## Cultural Anthropology and Philosophy, BA

The Department of Sociology and Anthropology and the Department of Philosophy and Religion offer an interdisciplinary combined major in sociology and philosophy. Students in the combined major integrate the study of culture and social structures with the study of social and political philosophy, ethics, and the philosophy of science. The combined major enables students to understand and appreciate cultural differences in human interaction, ways of knowing, and systems of logic and human classification.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Anthropology Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
<b>Area Courses</b>		
Additional area courses taken may count as anthropology electives. Complete two of the following:		8
ANTH 4350	Ethnography of Southeast Asia	

ANTH 4500	Latin American Society and Development
ANTH 4505	Native North Americans
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India

**Capstone**

Students are expected to complete the following course in spring of their senior year:

ANTH 4600	Senior Seminar	4
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**Electives**

Complete three 4-semester-hour courses in addition to the above requirements. One study-abroad course may also count toward this requirement with prior permission from the department. 12

**Philosophy Requirements**

Code	Title	Hours
<b>Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Foundational Philosophy of Science Elective**

Complete one of the following: 4

PHIL 1105	Science and Pseudoscience	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 3050	Information and Uncertainty	
PHIL 3360	Scientific Approaches to Philosophy	

**Intermediate/Advanced Electives**

Complete two of the following courses that are not used to satisfy another requirement: 8

PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Philosophy 4000/5000 Electives**

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	

PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy Electives**

Complete three additional courses from the philosophy department. 12

**Integrative Requirement**

**Code Title Hours**  
One integrative course is required from each discipline. Courses taken as electives above may not be used as integrative courses.

PHIL 4500	Theory of Knowledge	4
or PHIL 4510	Philosophy of Science	
or PHIL 4550	Philosophy of Economics	
SOCL 3450	Class, Power, and Social Change	4

**Anthropology and Philosophy Combined Major Credit Requirement**

Minimum 2.000 GPA required in anthropology and philosophy courses

88 semester hours required

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/ Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 1101	4 ANTH 2305	4 Elective	4 ANTH elective	4
PHIL 1115	4 PHIL 2325	4 Elective	4 Elective	4
ENGW 1111	4 PHIL elective	4		
PHIL elective	4 ANTH elective	4		
		16	16	8
				8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHIL 2330	4 PHIL advanced elective	4 Elective	4 Co-op	
ANTH elective	4 ANTH 3410	4 Elective	4	
ANTH area course	4 ANTH 3421	4		
Elective	4 PHIL elective	4		
		16	16	8
				0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Integrative course	4 Elective	4 Co-op	
	ANTH area course	4 Elective	4	
	ANTH elective	4		
	PHIL 4000/5000-level course	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours
Co-op	PHIL capstone	4
	ANTH capstone	4
	Integrative course	4
	Elective	4
	0	16

Total Hours: 128

**Cultural Anthropology and Religious Studies, BA**

The Department of Sociology and Anthropology and the Department of Philosophy and Religion offer an interdisciplinary combined major in anthropology and religious studies. Students in the combined major integrate the study of culture and social structures with the study of religious traditions and praxis.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Cultural Anthropology Requirements**

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
<b>Area Courses</b>		

Additional area courses taken may count as anthropology electives. Complete two of the following: 8

ANTH 4350	Ethnography of Southeast Asia
ANTH 4500	Latin American Society and Development
ANTH 4505	Native North Americans
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India

**Capstone**

Students are expected to complete the following course in spring of their senior year:

ANTH 4600	Senior Seminar	4
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**Electives**

Complete three 4-semester-hour courses in addition to the above requirements. One study-abroad course may also count toward this requirement with prior permission from the department. 12

**Religion Requirements**

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Electives</b>		
Complete one of the following courses that is not used to satisfy another requirement: 4		
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	

**Comparative Religion Elective**

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1220	The Meaning of Death
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

**Electives**

Complete five of the following courses that have not been used to satisfy another requirement in the combined major. At least one must be at the 2000 level or above and at least one must be at the 3000 level or above: 20

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1111	Introduction to World Religions	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1285	Jewish Religion and Culture	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1666	The Problem of Evil in Film	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 2395	Japanese Buddhism	
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
<b>Seminar</b>		
PHIL 4903	Seminar in Religion	4

### Integrative Requirements

Code	Title	Hours
One integrative course is required for each discipline. Courses taken as electives above may not be used as integrative courses.		
ANTH 2315	Religion and Modernity	4
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	

### Cultural Anthropology GPA Requirement

Minimum 2.000 GPA required in all anthropology courses

### Religion GPA Requirement

Minimum 2.000 GPA required in all religion courses

### Cultural Anthropology and Religion Major Credit Requirement

84 semester hours required in the major

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Summer 2/ Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 1101	4 ANTH 2305	4 Elective	4 Elective	4
PHIL 1110	4 Lived religion elective	4 Elective	4 Elective	4
PHIL elective	4 PHIL elective	4		
ANTH elective	4 ANTH elective	4		
16		16	8	8
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Comparative religion elective	4 ANTH 3410	4 Elective	4 Co-op	
ANTH elective	4 ANTH 3421	4 Elective	4	
ANTH area course	4 Elective	4		
PHIL elective	4 PHIL elective	4		
16		16	8	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	PHIL elective	4 Elective	4 Co-op	
	ANTH area course	4 Elective	4	
	Elective	4		
	Integrative course	4		
0		16	8	0
Year 4				
Fall	Hours Spring	Hours		
Co-op	PHIL seminar	4		
	ANTH capstone	4		
	Integrative course	4		
	Elective	4		
0		16		

Total Hours: 128

## Cultural Anthropology and Theatre, BA

This major is designed for students who want to combine a knowledge of the art of theatre, including performance, design, and production, with sociocultural theories and conceptual frameworks for understanding human behavior. It offers both classroom and experiential learning in the practice of making theatre and performance theories with cross-cultural approaches. Offers students the opportunity to develop an understanding of theatre's impact on past and present cultures, as well as a deeper awareness of the world in which they live.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Anthropology Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4
<b>Advanced Area Courses</b>		
Complete two of the following:		
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

### Anthropology Electives

Complete three courses in the following range. Two study-abroad courses may count toward this requirement with prior permission from the department: 12

ANTH 2300 to ANTH 4999

### Social Science Electives

Complete three social science courses from the following subject areas: 12

AFRS, AFAM, CRIM, ECON, HUSV, HIST, INTL, LING, LPSC, POLS, PSYC, SOCL

## Theatre Requirements

A minimum grade of C is required in all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete one of the following: 4		
THTR 1220	Race, Power, and Performance	

THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Intermediate or Advanced Technique</b>		
Complete two of the following: 8		
THTR 2310	History of Musical Theatre	
THTR 2330	Playwriting	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3450	Acting 3	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3400	Designing Combat for the Stage	
THTR 4345	Advanced Acting for the Camera	

## Integrative Requirements

Code	Title	Hours
THTR 4702	Capstone Rehearsal and Performance <sup>1</sup>	4
ANTH 2300	Reading Culture through Ethnography	4

<sup>1</sup> THTR 4702 is permitted to also count as an integrative course.

## Cultural Anthropology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Four Years, One Co-op

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
THTR 1000	1	THTR 1120	4	Elective	4
THTR 1100	1	THTR 1131	4	Elective	4
THTR 1101	4	ANTH 2305	4		

ANTH 1101	4 ANTH elective	4		
Social science elective	4			
ENGW 1111	4			
	18	16	8	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
THTR 2000	1 THTR text and context elective	4 Vacation	Vacation	
THTR 2325	4 THTR 1270	4		
ANTH 2300	4 Foreign language	4		
THTR elective	4 ANTH 3421	4		
ANTH elective	4			
	17	16	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH elective	4 Co-op	Co-op	Elective	4
THTR intermediate or advanced 1	4		Foreign language	4
Foreign language	4			
Social science elective	4			
EEAM 2000	1			
	17	0	0	8

**Year 4**

Fall	Hours Spring	Hours
ANTH advanced 1	4 Foreign language	4
THTR intermediate or advanced 2	4 Social science elective	4
Foreign language	4 ANTH advanced 2	4
ANTH 3410	4 THTR 4702	4
	16	16

Total Hours: 132

## English and Cultural Anthropology, BA

The English department and the sociology/anthropology department offer an interdisciplinary combined major in English and cultural anthropology. Broadly speaking, students in the combined major in English and cultural anthropology at Northeastern integrate the study of literature, language, and writing with the study of human culture and its

intersections with structures of inequality (e.g., race, class, and gender) and contemporary global issues.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### English Requirements

Code	Title	Hours
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#### English Course-Level Requirement

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

#### Introduction to College

ENGL 1000	English at Northeastern	1
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#### Foundational Courses

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	

#### Diversity

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below.

ENGL 2150	Literature and Digital Diversity	4
ENGL 2296	Early African-American Literature	
ENGL 2450		
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	
ENGL 2460		
ENGL 2760	Writing in Global Contexts	
ENGL 3663	The African American Novel	
ENGL 3676		
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	

#### Pre-Nineteenth-Century Literature

Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literatures 1	

ENGL 2240		
ENGL 2296	Early African-American Literature	
ENGL/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000		
ENGL 4020		
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040		
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Research on Writing	
ENGL 2150	Literature and Digital Diversity	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3700	Narrative Medicine	
ENGL 4400		
ENGL 4410	Research in Rhetoric and Writing	
LING 1150	Introduction to Language and Linguistics	
LING 2350	Linguistic Analysis	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
<b>Comparative Literature</b>		
Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503		
ENGL 2150	Literature and Digital Diversity	
ENGL 2380		
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450		
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers	

ENGL 2460		
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2620	What Is Nature?	
ENGL 2690	Boston in Literature	
ENGL 3487	Film and Text (Abroad)	
ENGL 3582		
ENGL 3663	The African American Novel	
ENGL 3676		

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Writing Seminar	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	

**Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

**English Electives**

Complete two additional ENGL electives.		8
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**Cultural Anthropology Requirements**

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
<b>Area Courses</b>		
Additional "area courses" taken may count as anthropology electives.		
Complete two of the following:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

**Capstone**

Students are expected to complete the following course in spring of their senior year.

ANTH 4600	Senior Seminar	4
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**Anthropology Electives**

Complete three 4-semester-hour courses in addition to the above requirements. One study-abroad course may also count toward this requirement with prior permission from the department. 12

**Integrative Requirements**

**Code Title Hours**  
One integrative course is required for each discipline. Courses taken as electives above may not be used as integrative courses.

**English Integrative Course**

ENGL 2450 4

**Cultural Anthropology Integrative Courses**

Complete one of the following: 4

ANTH 2300	Reading Culture through Ethnography
ANTH 3421	Foundations of Anthropological Theory

**Cultural Anthropology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**English and Cultural Anthropology Combined-Major Credit Requirement**

Complete 88 semester hours in the major.

**Program Requirement**

128 total semester hours required

**History and Cultural Anthropology, BA**

History and cultural anthropology offer an interdisciplinary combined major. Students interested in the combined major in history and cultural anthropology integrate the exploration of human history with the rigorous study of human cultures.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**History Requirements**

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4

**Introductory Level**

Complete one history course from the 1000 level. 4

**History Seminar and Historical Writing**

HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1

**Pre-1800 History Elective**

Complete one course from the following: 4

HIST 1187	Introduction to Latin American History
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
HIST 1252	Japanese Literature and Culture
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 1285	Introduction to Russian Civilization
HIST 2330	Colonial and Revolutionary America
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain

**Intermediate/Advanced History Cluster**

Complete three history courses numbered 2303 or above. 12

**Advanced History**

Complete one history course at the 3000 level or above. 4

**Cultural Anthropology Requirements**

Code	Title	Hours
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**Foundation Courses**

ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4

**Area Courses**

Complete two courses from the following: 8

ANTH 4350	Ethnography of Southeast Asia
ANTH 4500	Latin American Society and Development
ANTH 4505	Native North Americans
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India

**Anthropology Electives**

Complete three courses in the following range. One study-abroad course may count toward this requirement. 12

ANTH 2001 to ANTH 4599

**Capstone Requirements**

Code	Title	Hours
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Complete one of the following: 4

ANTH 4600	Senior Seminar
HIST 4701	Capstone Seminar

**Integrative Requirements**

ANTH courses below will double count as area courses.

Code	Title	Hours
ANTH 4350	Ethnography of Southeast Asia	4
ANTH 4510	Anthropology of Africa	4
HIST 2360	History of Capitalism in East Asia	4



Students taking Senior Seminar (ANTH 4600) must complete either a one-semester senior project, which they would do in the context of ANTH 4600, or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

### Anthropology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Five Years, Three Co-ops in Summer 2/Fall

##### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 1000	1 HIST elective or integrative 1	4 Vacation	Vacation	
HIST 1200	1 HIST elective or integrative 2	4		
HIST 1201	4 ANTH 2305	4		
ENGW 1111	4 Elective	4		
ANTH 1101	4			
Elective	4			
	18	16	0	0

##### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HIST 2301	4 HIST elective or integrative 3	4 Vacation	Co-op	
HIST 2302	1 HIST elective or integrative 4	4		
ANTH 3410	4 ANTH 3421	4		
ANTH area course 1	4 Elective	4		
Elective	4			
	17	16	0	0

##### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	HIST elective or integrative 5	4 Elective	4 Co-op	
	ANTH area course 2	4 Elective	4	
	ANTH elective 1	4		
	Elective	4		
	0	16	8	0

##### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	HIST elective or integrative 6	4 Elective	4 Co-op	
	ANTH elective 2	4 Elective	4	
	ANTH elective 3	4		
	Elective	4		
	0	16	8	0

##### Year 5

Fall	Hours Spring	Hours
Co-op	HIST capstone or HIST senior project or ANTH capstone	4
	HIST elective or integrative 7	4
	Elective	4
	Elective	4
	0	16

Total Hours: 131

## Human Services and Sociology, BA

Students pursuing a combined degree in human services and sociology will integrate the theoretical understandings of these two fields to better understand organizational and group behavior and their implications for individuals and communities utilizing human services. The human services major prepares students for careers in social change by providing students with the theoretical and skill-based background necessary for practice and research. The sociology major prepares students to rigorously analyze the social, political, and economic spheres of society at the local and global levels. Students will develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at the individual and structural levels. The combined major provides students with the conceptual and practical tools to understand how various features of society affect its members as well as how people create social change.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

## Human Services Requirements

Code	Title	Hours
<b>Required Human Services Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6

### Research Methods

Complete option A or option B: 4-8

#### Option A

Complete the following course:

HUSV 2970	Research Methods for Human Services
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#### Option B

Complete the following and one additional HUSV course:

SOCL 2321	Research Methods in Sociology
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### Human Services Elective

Complete three additional HUSV courses. 12

### Senior Capstone<sup>1</sup>

HUSV 4700	Senior Seminar in Human Services	4
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<sup>1</sup> With permission of human services, the student may complete sociology capstone Senior Seminar (SOCL 4600) and substitute one advanced human services elective for Senior Seminar in Human Services (HUSV 4700).

## Sociology Requirements

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4
<b>Introductory Electives</b>		
Complete two of the following:		8
ANTH 1101	Peoples and Cultures	
SOCL 1228	Social Problems	
SOCL 1245	Sociology of Poverty	
SOCL 1246	Environment and Society	
SOCL 1255	Sociology of the Family	
SOCL 1260	Gender in a Changing Society	
SOCL 1295	Drugs and Society	

### Intermediate-Level Elective

Complete two of the following: 8

ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective
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ANTH 2305	Global Markets and Local Culture
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SOCL 2358	Current Issues in Cities and Suburbs
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SOCL 3241	Violence and Society
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SOCL 3441	Sociology of Health and Illness
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SOCL 3270	Race and Ethnic Relations
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SOCL 3465	Globalization and the Evolution of Human Societies
SOCL 3468	Social Movements
SOCL 3487	Applied Sociology: Practice and Theory

### Advanced-Level Elective

Complete one of the following: 4

ANTH 4500	Latin American Society and Development
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ANTH 4505	Native North Americans
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ANTH 4510	Anthropology of Africa
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ANTH 4515	Culture and Politics in Modern India
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ANTH 4580	Special Topics in Anthropology
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SOCL 4518	Law and Society in a Digital World
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SOCL 4520	Race, Class, and Gender
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SOCL 4580	Special Topics in Sociology
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### Senior Seminar<sup>2</sup>

SOCL 4600	Senior Seminar	4
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<sup>2</sup> With permission of the sociology head adviser, the student may complete human services capstone Senior Seminar in Human Services (HUSV 4700) and substitute one advanced sociology elective for Senior Seminar (SOCL 4600).

## Human Services/Sociology Integrative Course

Code	Title	Hours
HUSV 2355	Race, Identity, Social Change, and Empowerment	4

## Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Human Services and Sociology Combined Major Credit Requirement

Complete a minimum of 78 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, No Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1101	4	MATH 1215	4	Vacation	0	Vacation	0
ENGW 1111	4	HUSV 2300	4				
SOCL 1101	4	SOCL	4				
		Introductory Elective 2					
SOCL	4	HSVC	4				
Introductory Elective 1		elective					
		16			16		
					0		
						0	

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Elective	4 AMSL 2102	4 Vacation	0 Vacation	0
Elective	4 DEAF 2700	4		
HUSV Elective	4 Elective	4		
HUSV Elective	4 Elective	4		
	16	16	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HUSV 2355	4 Research (choose one of the following)	4 Vacation	0 Vacation	0
HUSV 3570	4 HUSV 2971			
SOCL 2320 (elective)	4 SOCL 2321			
SOCL 3300	4 Elective	4		
	SOCL Intermediate-Level Elective	4		
	ENGW 3315	4		
	16	16	0	0

**Year 4**

Fall	Hours Spring	Hours
HUSV 3900	4 HUSV 4700	4
HUSV 4994	6 SOCL 4600	4
Elective	4 Elective	4
SOCL Advanced-Level Elective	4 Elective	4
	18	16

Total Hours: 130

## International Affairs and Cultural Anthropology, BA

This combined major offers undergraduates the opportunity to develop an awareness of contemporary cultures within their international, transnational, and global contexts since the early 20th century. The combined major addresses diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; and state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship).

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**International Affairs Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
ECON 1115	Principles of Macroeconomics	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	

**International Experiential Learning**

Complete at least one "international semester" via study abroad, international internship, international co-op, or two approved short-term programs abroad.

**International Affairs Elective**

Code	Title	Hours
Please complete one of the following:		4

Code	Title	Hours
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 2500	Race and Global Human Mobility	
INTL 3200	Cities in a Global Context	
INTL 3430	Revolution, Civil War, and Insurrection	
INTL 3450	Security, Culture, Power	
INTL 3520	Global Political Economy	
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons	
INTL 5100	Climate and Development	

**Global Dynamics**

Code	Title	Hours
Complete one of the following (courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements):		4

Code	Title	Hours
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
INTL 5268	International Environmental Policy	
or PPUA 5268	International Environmental Policy	

SOCL 1246	Environment and Society
<i>Law, Diplomacy, and Global Governance</i>	
COMM 2303	Global and Intercultural Communication
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3520	Global Political Economy
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations
<i>Human Rights and Social Justice</i>	
HIST 2373	Gender and Sexuality in World History
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 3060	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
INTL 3430	Revolution, Civil War, and Insurrection
INTL 3450	Security, Culture, Power
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
AFAM 2600	Issues in Race, Science, and Technology
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business

INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 3520	Global Political Economy
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 1270	Introduction to Global Health
or PHTH 1270	Introduction to Global Health
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2500	Race and Global Human Mobility
INTL 3200	Cities in a Global Context
INTL 4100	Forced Migration: Refugees, Exiles, and Displaced Persons
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 3520	Global Political Economy
INTL 5100	Climate and Development
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Regional Analysis Requirement**

Code	Title	Hours
Complete two regional analysis courses, both of which must be in one region, from the following lists. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty advisor. See department for additional courses:		8

Code	Title	Hours
<i>Africa</i>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<i>Asia</i>		
ANTH 4350	Ethnography of Southeast Asia	
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 2395	Japanese Buddhism	
<i>Europe</i>		
CLTR 1501	Introduction to French Culture	
CLTR 1503	Introduction to Italian Culture	
CLTR 1504	Cultural History of Spain	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2370	Renaissance to Enlightenment	

HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
HIST 2376	Britain and the British Empire	
HIST 4946	Independent Field Research Abroad: Central Europe	
POLS 3435	Politics and Governance of Europe and the European Union	
<i>Latin America</i>		
ANTH 4500	Latin American Society and Development	
CLTR 1240	Latin American Film	
CLTR 1261	Caribbean Literature and Culture	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3720	Literature, Arts, and Poverty in Latin America	
CLTR 4655	Latin American Literature	
HIST 2025	Latin American History through Film	
LACS 1220	Latino, Latin American, and Caribbean Studies	
<i>Middle East</i>		
CLTR 1502	Introduction to Arabic Culture	
ECON 1292	Economic History of the Middle East	
HIST 1185	Introduction to Middle Eastern History	
HIST 1290	Modern Middle East	
INTL 1150	The Mediterranean World: An Overview	
INTL 1160	Middle East Studies	
INTL 2100	Modern Israel	
INTL 2200	America and the Middle East	
INTL 3250	Democracy and Development in North Africa and the Mediterranean	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1285	Jewish Religion and Culture	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
POLS 4915	Model Arab League	
<i>Russia</i>		
HIST 1285	Introduction to Russian Civilization	
HIST 1286	History of the Soviet Union	

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Anthropology Major Requirements**

*Note:* At least nine anthropology courses must be taken to complete the international affairs and cultural anthropology program.

Code	Title	Hours
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 3421	Foundations of Anthropological Theory	4
<b>Anthropology Electives</b>		

Complete three courses in the following range, one of which must be numbered 4000 or above (one study-abroad course may also count toward this requirement with prior permission from the department):

ANTH 2300 to ANTH 4999		12
<b>Advanced Area Courses</b>		
Complete two of the following:		8
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

### Integrative Requirements

Note: If international affairs courses are taken in both the research methods and capstone areas, then an additional anthropology elective is required.

Code	Title	Hours
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
or ANTH 3410	Ethnographic Field Experience	
<b>Global Markets</b>		
ANTH 2305	Global Markets and Local Culture	4
<b>Capstone</b>		
ANTH 4600	Senior Seminar	4
or INTL 4700	Senior Capstone Seminar in International Affairs	

Students taking Senior Seminar (ANTH 4600) must complete either a one-semester senior project, which they would do in the context of ANTH 4600, or a two-semester senior thesis, which would require them to also enroll in a fall semester directed study.

### Anthropology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### International Affairs and Anthropology Combined Major Credit Requirement

Complete 76 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 POLS 1160	4 Vacation	Vacation	
INTL 1101	4 ECON 1115 or HIST 2211	4		
ENGW 1111	4 ANTH 2305	4		
ANTH 1101	4 Elective	4		

Foreign language core course	4			
	17	16	0	0
<b>Year 2</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
INTL 2718 or ANTH 3410	4 ANTH 3421	4 Vacation	Co-op	
Elective	4 Elective	4		
Elective	4 Elective	4		
Foreign language core course	4 Elective	4		
	16	16	0	0
<b>Year 3</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Co-op	INTL 3400	4 Elective	4 Co-op	
	ENGW 3315	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Co-op	Elective	4 Elective	4 Co-op	
	Elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>		
Co-op	INTL 4700 or ANTH 4600	4		
	Elective	4		
	Elective	4		
	Elective	4		
	0	16		

Total Hours: 129

#### Five Years, Three Co-ops in Spring/Summer 1

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
INTL 1000	1 POLS 1160	4 Vacation	Vacation	
INTL 1101	4 ECON 1115 or HIST 2211	4		
ENGW 1111	4 ANTH 2305	4		
ANTH 1101	4 Elective	4		
Foreign language core course	4			
	17	16	0	0
<b>Year 2</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
INTL 2718 or ANTH 3410	4 Co-op	Co-op	Vacation	

ANTH 3421	4				
Elective	4				
Foreign language core course	4				
	16	0	0	0	0
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
INTL 3400	4	Co-op		Co-op	
ENGW 3315	4				Elective
Elective	4				
Elective	4				
	16	0	0	0	8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Elective	4	Co-op		Co-op	
Elective	4				Elective
Elective	4				
Elective	4				
	16	0	0	0	8
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Elective	4	INTL 4700 or ANTH 4600	4		
Elective	4	Elective	4		
Elective	4	Elective	4		
Elective	4	Elective	4		
	16		16		

Total Hours: 129

## Media and Screen Studies and Sociology, BA

The Media and Screen Studies Program and the Department of Sociology and Anthropology offer a combined major in media and screen studies and sociology. The combined major integrates the analysis, research, and production of traditional and emerging media along with the critical perspective needed for studying the social and cultural arrangements in which people live, for understanding how societies function, for investigating the conditions under which people change their institutions, and for describing the modes and conditions of cooperation that make social life possible.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3392	Gender and Film	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3600	Film Theory	
MSCR 3700	Queer Media	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

## Sociology Requirements

Code	Title	Hours
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### Core Courses in Sociology

ANTH 1101	Peoples and Cultures	4
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
SOCL 4600	Senior Seminar	4

### Foundational Competency—Courses Numbered SOCL 1200 to SOCL 2900

Complete two of the following: 8

SOCL 1228	Social Problems	
SOCL 1245	Sociology of Poverty	
SOCL 1260	Gender in a Changing Society	
SOCL 1280	The Twenty-First-Century Workplace	

### Foundational Competency—Courses Numbered 3000 to 4999

Complete one of the following: 4

ANTH 3120	Consumer Cultures	
ANTH 4580	Special Topics in Anthropology	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 4518	Law and Society in a Digital World	
SOCL 4520	Race, Class, and Gender	
SOCL 4580	Special Topics in Sociology	

## Integrative Requirement

Code	Title	Hours
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### Integrative Courses

MSCR 3437	Media and Identity	4
SOCL 3450	Class, Power, and Social Change	4

## Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements

## Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign language core course	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Elective	4	Elective	4

SOCL 1101	4	Foreign language core course	4		
ANTH 1101	4	SOCL 3300	4		
ENGW 1111	4				
	17		16		8 8
<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours Summer 2</b> <b>Hours</b>
MSCR diversity/globalization	4	Co-op		Co-op	Elective 4
MSCR elective	4				Elective 4
Foreign language core course	4				
EEAM 2000	1				
SOCL 2320	4				
	17		0		0 8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours Summer 2</b> <b>Hours</b>
SOCL 2321	4	Co-op		Co-op	Elective 4
SOCL foundational competency elective 1	4				Elective 4
MSCR writing-intensive	4				
MSCR elective	4				
	16		0		0 8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
SOCL foundational competency elective 2	4	MSCR 3437	4		
MSCR elective	4	SOCL 4600	4		
MSCR writing-intensive	4	SOCL foundational competency elective	4		
SOCL 3450	4	Elective	4		
	16		16		

Total Hours: 130

## Sociology and Cultural Anthropology, BA

The sociology/anthropology department at Northeastern University offers a combined major in sociology and anthropology. Students learn the disciplinary histories, practices, and methods of sociology and sociocultural anthropology, identify foundational and contemporary debates within and across these two disciplines, and evaluate their contributions to our understanding of local and global societies and cultures. The combined major offers students various opportunities for



community engagement, experiential learning, and for gaining research skills using quantitative and qualitative methods.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Sociology Major Requirements

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
<b>Sociology Electives</b>		
<i>Introductory Electives</i>		
Complete two courses in the following range:		8
SOCL 1110 to SOCL 1999		
<i>Intermediate Elective</i>		
Complete one course in the following range:		4
SOCL 2000 to SOCL 3999		
<i>Advanced Elective</i>		
Complete one course in the following range:		4
SOCL 4000 to SOCL 4999		
<b>Experiential Learning</b>		
Complete one of the following courses, or complete a study abroad or a dialogue of civilizations:		4
SOCL 3487	Applied Sociology: Practice and Theory	
COOP 3945	Co-op Work Experience	
SOCL 4971	Junior/Senior Honors Project 2	

### Anthropology Major Requirements

Code	Title	Hours
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
<b>Advanced Area Courses</b>		
Complete two of the following:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	

ANTH 4515 Culture and Politics in Modern India

### Anthropology Electives

Complete four ANTH courses. One study-abroad course may also count toward this requirement with prior permission from the department. 16

### Integrative Requirement

Students must choose between a one-semester senior project, which they would complete in the context of Senior Seminar (ANTH 4600) or Senior Seminar (SOCL 4600), or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

Code	Title	Hours
<b>Required Course</b>		
ANTH 2305	Global Markets and Local Culture	4
<b>Capstone</b>		
SOCL 4600 or ANTH 4600	Senior Seminar	4

### Sociology and Cultural Anthropology Major Grade Requirement

A GPA of 2.000 across all major courses is required.

### Sociology and Cultural Anthropology Combined Major Credit Requirement

Complete 76 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

## Sociology and Environmental Studies, BA

This combined major will lead to undergraduates that have a broad awareness of the sociological and scientific foundations of environmental problem solving. They will have the opportunity to develop concrete skills in GIS and scientific communication that will facilitate student success. Due to overlap in course content, students majoring in environmental studies or any environmental studies combined majors may not complete a minor in environmental and sustainability sciences.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).



**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENVR 3300 and ENVR 3301	5 ENVR elective; 1 of 4	4 Vacation	0 Co-op	0
SOCL 3300	4 Elective	4		
Sociology elective	4 Sociology elective	4		
SOCL 2485	4 Sociology elective	4		
	17	16	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENVR elective; 2 of 4	4 Elective	4 Co-op	0
	ENVR elective; 3 of 4	4 Elective	4	
	ENVR elective; 4 of 4	4		
	Sociology elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Sociology elective	4 Sociology elective	4 Co-op	0
	Sociology elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 Integrative major requirement	4
	Integrative major requirement	4
	Sociology elective	4
	Capstone	4
	0	16

Total Hours: 130

**Sociology and International Affairs, BA**

Through this combined major, successful undergraduates develop an awareness of societies within their international, transnational, and global contexts since the early 20th century. The combined major addresses diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; and state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship).

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 49).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Sociology Requirements**

Code	Title	Hours
<b>Sociology Required Courses</b>		
ANTH 2305	Global Markets and Local Culture	4
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4
SOCL 2321	Research Methods in Sociology	4
or INTL 2718	Research Methods in International Affairs	
<b>Sociology Electives A</b>		
Complete two courses in the following range:		8
SOCL 1000 to SOCL 2999		
<b>Sociology Electives B</b>		
Complete two courses in the following range:		8
SOCL 3000 to SOCL 5999		
<b>Capstone Requirement</b>		
SOCL 4600	Senior Seminar	4
or INTL 4700	Senior Capstone Seminar in International Affairs	
<b>International Affairs Major Requirements</b>		
Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.		

Code	Title	Hours
<b>Required Courses</b>		
ECON 1115	Principles of Macroeconomics	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>International Affairs Elective</b>		
Complete one of the following courses:		4

INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5100	Climate and Development
INTL 5200	
<b>Global Dynamics</b>	
Complete one of the following courses: 4	
<i>Environment</i>	
ENVR 1110	Global Climate Change
ENVR 2515	Sustainable Development
INTL 5100	Climate and Development
SOCL 1246	Environment and Society
<i>Law, Diplomacy, and Global Governance</i>	
COMM 2303	Global and Intercultural Communication
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 5200	
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations
<i>Human Rights and Social Justice</i>	
HIST 2373	Gender and Sexuality in World History
INTL 2400	
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 4630	
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO

<i>Globalization</i>	
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	
INTL 3200	Cities in a Global Context
PHIL 1270	
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication

INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Senior Seminar/Experiential Learning**

INTL 4700	Senior Capstone Seminar in International Affairs	4
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**International Experiential Learning**

Complete at least one "international semester" via study abroad, international internship, international co-op, or two approved short-term programs abroad.

**Regional Analysis Requirement**

Code	Title	Hours	
Complete two of the following courses, both of which must be in one region, from the following lists. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.			
<b>Africa</b>			
AFRS 2307	Africa Today	8	
AFRS 2900	Swahili, Culture, and Politics in Kenya		
AFRS 3460	Contemporary Government and Politics in Africa		
AFRS 4939	Community Health, Culture, and Development in Kenya		
ANTH 4510	Anthropology of Africa		
ENTR 3308	Business Economic History of South Africa		
HIST 1180	African History		
HIST 2390			
INTL 2464	Natural Resources and Sustainable Development		
or AFRS 2464	Natural Resources and Sustainable Development		
INTL 2465	The Scope and Dynamics of Conflicts in Africa		
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa		
<b>Asia</b>			
ASNS 1150	East Asian Studies		
or HIST 1150	East Asian Studies		
INTL 4350			
or ANTH 4350	Ethnography of Southeast Asia		
CLTR 1500	Modern Chinese History and Culture		
CLTR 1506	Introduction to Chinese Popular Culture		
CLTR 1700	Introduction to Japanese Pop Culture		
HIST 1246	World War II in the Pacific		
HIST 1252	Japanese Literature and Culture		
HIST 1253	History of Vietnam Wars		
HIST 1500	Modern Chinese History and Culture		
HIST 2308	Law, Justice, and Society in Modern China		
HIST 2351	Modern Japan		

HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
or INTL 4500	
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 1240	Latin American Film
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	
INTL 2100	Modern Israel
INTL 2200	America and the Middle East
INTL 2400	
INTL 3250	Democracy and Development in North Africa and the Mediterranean
CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
PHIL 1270	
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture

POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Integrative Requirements**

Code	Title	Hours
SOCL 3465	Globalization and the Evolution of Human Societies	4

**Sociology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Sociology and International Affairs Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 1000	1 ANTH 1101	4 Vacation	Vacation	
SOCL 1101	4 ENGW 1111	4		
INTL 1101	4 POLS 1160	4		
HIST 2211 or ECON 1115	4 Elective	4		
Foreign Language Course	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 3300	4 POLS 1155	4 Vacation	Co-op	
SOCL 2320	4 POLS 1156	0		
Elective	4 SOCL 2321 or INTL 2718	4		
Foreign Language Course	4 ANTH 2305	4		
	Elective	4		
	16	16	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	SOCL 3465	4 Elective	4 Co-op	
	INTL 3400	4 Elective	4	

	ENGW 3315	4		
	Elective	4		
	0	16	8	0
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	Elective	4 Elective	4 Co-op	
	Elective	4 Elective	4	
	Elective	4		
	Elective	4		
	0	16	8	0
Year 5				
Fall	Hours Spring	Hours		
Co-op	SOCL 4600 or INTL 4700	4		
	Elective	4		
	Elective	4		
	Elective	4		
	0	16		

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 1000	1 ANTH 1101	4 Vacation	Vacation	
SOCL 1101	4 ENGW 1111	4		
INTL 1101	4 POLS 1160	4		
HIST 2211 or ECON 1115	4 Elective	4		
Foreign Language Course	4			
	17	16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 3300	4 Co-op	Co-op	Elective	4
SOCL 2320	4		Elective	4
Foreign Language Course	4			
	Elective	4		
	16	0	0	8
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
POLS 1155	4 Co-op	Co-op	Elective	4
POLS 1156	0		Elective	4
SOCL 2321 or INTL 2718	4			
ANTH 2305	4			
Elective	4			
	16	0	0	8
Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 3465	4 Co-op	Co-op	Vacation	

INTL 3400	4			
ENGW 3315	4			
Elective	4			
	16	0	0	0

**Year 5**

Fall	Hours	Spring	Hours
Elective	4	SOCL 4600 or INTL 4700	4
Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 129

## Sociology and Philosophy, BA

The Department of Sociology and Anthropology and the Department of Philosophy and Religion offer an interdisciplinary combined major in sociology and philosophy. Students in the combined major integrate the study of social structures and systems with the study of social and political philosophy, ethics, and the philosophy of science.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Sociology Requirements

Code	Title	Hours
<b>Sociology Required Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
SOCL 2320	Statistical Analysis in Sociology	4
ANTH 2305	Global Markets and Local Culture	4

#### Electives

One course can be taken at the 2000 level and three other courses at the 3000 level or higher. 16

#### Capstone

Students are expected to complete the following course in spring of their senior year. 4

SOCL 4600	Senior Seminar	
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### Philosophy Requirements

Code	Title	Hours
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#### Required Courses

PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

#### Foundational Philosophy of Science Elective

Complete one of the following: 4		
PHIL 1105	Science and Pseudoscience	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 3050	Information and Uncertainty	
PHIL 3360	Scientific Approaches to Philosophy	

#### Intermediate/Advanced Electives

Complete two of the following courses that are not used to satisfy another requirement: 8

PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

#### Philosophy 4000/5000 Electives

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

#### Philosophy Electives

Complete two additional courses from the philosophy department. 8

### Integrative Requirement

Code	Title	Hours
One integrative course is required for each discipline. Courses taken as electives above may not be used as integrative courses. 4		

PHIL 4500	Theory of Knowledge
or PHIL 4510	Philosophy of Science
or PHIL 4550	Philosophy of Economics
SOCL 3450	Class, Power, and Social Change

### Sociology GPA Requirement

Minimum 2.000 GPA required in all sociology courses

### Philosophy GPA Requirement

Minimum 2.000 GPA required in all philosophy courses

### Sociology and Philosophy Major Credit Requirement

80 semester hours required in the major

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/ Fall

Year 1					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
PHIL 1115	4 PHIL 2325 or POLS 2325	4 Elective	4 Elective	4	
SOCL 1101	4 PHIL 2330	4 Elective	4 Elective	4	
PHIL elective	4 PHIL elective	4			
SOCL elective	4 SOCL elective	4			
	16	16	8	8	
Year 2					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
ANTH 2305	4 SOCL 3300	4 Elective	4 Co-op		
SOCL 2320	4 SOCL 2321	4 Elective	4		
PHIL advanced elective	4 PHIL advanced elective	4			
SOCL 2000 elective	4 PHIL elective	4			
	16	16	8	0	
Year 3					
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours	
Co-op	Integrative course	4 Elective	4 Co-op		
	SOCL 4000 elective	4 Elective	4		
	SOCL 5000 elective	4			
	PHIL 4000/5000 elective	4			
	0	16	8	0	

Year 4		
Fall	Hours Spring	Hours
Co-op	PHIL capstone	4
	SOCL capstone	4
	Integrative course	4
	SOCL 5000 elective	4
	0	16

Total Hours: 128

### Sociology and Political Science, BA

The combined major in sociology and political science offers students the opportunity to integrate the study of politics and government with an analysis of social systems. Students complete core courses in political science along with core courses in sociology that include social theory and an introduction to social systems. This combined major highlights the important intersection between social norms and organizations with the evolution of politics and government.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Sociology Requirements

Code	Title	Hours
<b>Sociology Required Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2268		4
SOCL 3300	Social Theory	4
SOCL 3450	Class, Power, and Social Change	4
<b>Sociology Introductory Electives</b>		
Complete two courses in the following range:		8
SOCL 1200 to SOCL 1999		
<b>Sociology Intermediate Elective</b>		
Complete one course in the following range:		4



SOCL 2000 to SOCL 3999

**Sociology Advanced Elective**

Complete one course in the following range: 4

SOCL 4000 to SOCL 5999

**Statistics and Methods**

Complete one of the following sets: 8

SOCL 2320 Statistical Analysis in Sociology  
and SOCL 2321 and Research Methods in Sociology

POLS 2400 Quantitative Techniques  
and POLS 2399 and Research Methods in Political  
Science

**Political Science Requirements**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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**Political Science Required Courses**

POLS 1150	American Government	4
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POLS 1155	Comparative Politics	4
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POLS 1160	International Relations	4
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**Political Thought**

Complete one of the following: 4

POLS 2325 Ancient Philosophy and Political  
Thought

POLS 2328 Modern Political Thought

POLS 2330 American Political Thought

POLS 2332 Contemporary Political Thought

**Political Science Electives**

Complete five courses in the following range: 20

POLS 2000 to POLS 5999

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 1197)
- Campaigns and Elections (p. 1197)
- Comparative Politics (p. 1197)
- Identity, Culture, and Politics (p. 1197)
- International Relations and Diplomacy (p. 1197)
- Law and Legal Studies (p. 1198)
- Public Policy (p. 1198)
- Security Studies (p. 1198)

**Capstone Requirement**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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Complete one of the following: 4

SOCL 4600 Senior Seminar

POLS 4701 Political Science Senior Capstone

POLS 4703 Senior Thesis

**Integrative Requirement**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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SOCL 4514 4

Complete two of the following: 8

POLS 2345 Urban Policies and Politics

POLS 3320 Politics and Mass Media

POLS 3324 Law and Society

POLS 3418 Nationalism

**Sociology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Program Requirement**

128 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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Complete four of the following: 16

POLS 2350 State and Local Politics

POLS 3300 The U.S. Congress

POLS 3302 Judicial Process and Behavior

POLS 3307 Public Policy and Administration

POLS 3310 Public Opinion, Voting, and Elections

POLS 3160 Campaign Strategy

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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**Required Courses**

POLS 3160	Campaign Strategy	4
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POLS 3302	Judicial Process and Behavior	4
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**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following: 8

POLS 2345 Urban Policies and Politics

POLS 2350 State and Local Politics

POLS 2355 Intergovernmental Relations

POLS 3310 Public Opinion, Voting, and Elections

POLS 3320 Politics and Mass Media

POLS 3304 Presidential Nominating Process

**CONCENTRATION IN COMPARATIVE POLITICS**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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**Theoretical Requirement**

Complete one of the following: 4

POLS 2370 Religion and Politics

POLS 3418 Nationalism

POLS 3430 Revolution, Civil War, and Insurrection

POLS 3487 Politics of Developing Nations

**Regional Requirements**

Complete two of the following: 8

POLS 3435 Politics and Governance of Europe and  
the European Union

POLS 3465 Government and Politics in the Middle  
East

POLS 3470 Arab-Israeli Conflict

**Experiential/Practicum Requirement**

Complete one of the following: 4

POLS 4915 Model Arab League

POLS 4918 Model NATO

POLS 4937	Dialogue of Civilizations: Government and Politics Abroad
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POLS 2357	Growth and Decline of Cities and Suburbs
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POLS 2390	Science, Technology, and Public Policy
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POLS 2395	Environmental Politics and Policy
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POLS 3425	U.S. Foreign Policy
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### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
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#### Core Course

POLS 3418	Nationalism	4
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#### Electives

Complete three of the following:	12
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POLS 2368	Music and Politics in America and Abroad
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POLS 2370	Religion and Politics
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POLS 2375	Gender and Politics
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POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
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POLS 3324	Law and Society
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### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
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#### Experiential/Practicum Requirement

Complete one of the following:	4
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POLS 4910	Model United Nations
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POLS 4915	Model Arab League
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POLS 4938	Dialogue of Civilizations: International Politics Abroad
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#### Core Courses

Complete three of the following:	12
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POLS 3405	International Political Economy
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POLS 3406	International Law
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POLS 3408	International Security
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POLS 3435	Politics and Governance of Europe and the European Union
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POLS 3470	Arab-Israeli Conflict
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### CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
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Complete four of the following:	16
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POLS 2330	American Political Thought
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POLS 3300	The U.S. Congress
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POLS 3302	Judicial Process and Behavior
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POLS 3324	Law and Society
-----------	-----------------

POLS 3406	International Law
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POLS 3409	Global Governance
-----------	-------------------

POLS 4500	U.S. Constitutional Law
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POLS 4505	U.S. Civil Liberties
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### CONCENTRATION IN PUBLIC POLICY

Code	Title	Hours
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#### Core Requirement

POLS 3307	Public Policy and Administration	4
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#### Electives

Complete three of the following:	12
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POLS 2335	Budgeting and Taxation
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POLS 2340	Business and Government
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POLS 2345	Urban Policies and Politics
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POLS 2350	State and Local Politics
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### CONCENTRATION IN SECURITY STUDIES

Code	Title	Hours
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Complete four of the following:	16
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POLS 3408	International Security
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POLS 3420	U.S. National Security Policy
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POLS 3423	Terrorism and Counterterrorism
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POLS 3425	U.S. Foreign Policy
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POLS 3430	Revolution, Civil War, and Insurrection
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POLS 3470	Arab-Israeli Conflict
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POLS 3487	Politics of Developing Nations
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## Sociology and Religious Studies, BA

The Department of Sociology and Anthropology and the Department of Philosophy and Religion offer an interdisciplinary combined major in sociology and religious studies. Students in the combined major integrate the study of social structures and systems with the study of religious traditions and praxis.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 49).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

### Sociology Requirements

Code	Title	Hours
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#### Sociology Required Courses

ANTH 2305	Global Markets and Local Culture	4
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SOCL 1101	Introduction to Sociology	4
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SOCL 2320	Statistical Analysis in Sociology	4
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SOCL 2321	Research Methods in Sociology	4
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SOCL 3300	Social Theory	4
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#### Electives

One course can be taken at the 2000 level and three other courses at the 3000 level or higher.	16
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#### Capstone

Students are expected to complete the following course in spring of their senior year:

SOCL 4600	Senior Seminar	4
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**Religion Requirements**

Code	Title	Hours
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**Required Foundational Course**

PHIL 1110	Introduction to Religious Studies	4
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**Lived Religion Elective**

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	

**Comparative Religion Elective**

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2395	Japanese Buddhism	

**Electives**

Complete five of the following courses that have not been used to satisfy another requirement in the combined major. At least one must be at the 2000 level or above and at least one must be at the 3000 level or above: 20

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1111	Introduction to World Religions	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	

PHIL 1285	Jewish Religion and Culture	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1666	The Problem of Evil in Film	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2390	Cults and Sects	
PHIL 2395	Japanese Buddhism	
PHIL 2410	Possession, Sacrifice, and Divination in African Diasporic Religions	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 4903	Seminar in Religion	

**Seminar**

Complete the following course that is not used to satisfy another requirement:

PHIL 4903	Seminar in Religion	4
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**Integrative Requirements**

Code	Title	Hours
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One integrative course is required for each discipline. Courses taken as electives above may not be used as integrative courses.

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	4
ANTH 2315	Religion and Modernity	4

**Major Credit Requirement**

Complete 84 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/ Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours
PHIL 1110	4	SOCL 2320	4	Elective	4
SOCL 1101	4	PHIL elective	4	Elective	4
PHIL elective	4	SOCL elective	4		
SOCL elective	4	Lived religion elective	4		
		16			8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2305	4	SOCL 2321	4	Elective	4	Co-op	4
PHIL elective	4	PHIL elective	4	Elective	4		

Comparative religion elective	4 PHIL elective	4		
SOCL 2000 elective	4 Elective	4		
	16	16	8	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	SOCL 3300	4 Elective	4 Co-op	
	SOCL 5000 elective	4 Elective	4	
	Integrative course	4		
	SOCL 5000 elective	4		
	0	16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
Co-op	PHIL seminar	4 Elective	4
	SOCL capstone	4 Elective	4
	Integrative course	4	
	SOCL 5000 elective	4	
	0	16	8

Total Hours: 128

**Sociology, BS**

Sociology is the scientific study of society. It begins with the premise that individuals are affected by the social structures, institutions, and cultural milieus surrounding them. Sociology provides students with the conceptual tools to understand how various features of society affect its members as well as how people create and maintain those same features.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 46).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Sociology Major Requirements**

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Advanced Methods Requirement</b>		
Complete one of the following:		4
ANTH 3410	Ethnographic Field Experience	
DA 5030	Introduction to Data Mining/Machine Learning	
DS 4400	Machine Learning and Data Mining 1	
DS 3000	Foundations of Data Science	
HINF 5301	Evaluating Health Technologies	
POLS 2400	Quantitative Techniques	
SOCL 3487	Applied Sociology: Practice and Theory	
<b>Senior Seminar</b>		
SOCL 4600	Senior Seminar	4

**Required Sociology Electives**

Code	Title	Hours
<b>Students must complete nine elective courses in the SOCL major, at least five of which must be at the 3000-level or higher</b>		<b>36</b>
<b>Social Science Electives</b>		
Complete five social science courses in the following subject areas: AFRS, AFAM, ANTH, CRIM, ECON, HUSV, HIST, INTL, LING, LPSC, POLS, or PSYC.		20

**Sociology Experiential Learning Requirement**

Code	Title	Hours
Complete one of the following courses or a study abroad or a co-op:		4
SOCL 3487	Applied Sociology: Practice and Theory	
SOCL 4971	Junior/Senior Honors Project 2	

**Sociology Major Grade Requirement**

A GPA average of 2.000 across all major courses is required.

**Sociology Major Credit Requirement**

Complete 88 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study****Five Years, Three Co-ops in Summer 2/Fall**

Year 1	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Fall				
SOCL 1000	1 SOCL elective	4 Vacation	0 Vacation	0
SOCL 1101	4 SOCL elective	4		

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ENGW 1111	4 Elective	4		
MATH 1215	4 Elective	4		
ANTH 1101	4			
		17	16	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 2320	4 SOCL elective	4 Vacation	0 Co-op	0
SOCL 3300	4 SOCL 2321	4		
Elective	4 SOCL elective	4		
Elective	4 Elective	4		
		EESH 2000	1	
		16	17	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 ENGW 3315	4 Social science elective	4 Co-op	0
	SOCL elective	4 Social science elective	4	
	SOCL elective	4		
	Social science elective	4		
		0	16	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 SOCL elective	4 Social science elective	4 Co-op	0
	Social science elective	4 Elective	4	
	SOCL elective	4		
	SOCL elective	4		
		0	16	8

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 SOCL elective	4
	Elective	4
	Elective	4
	SOCL 4600	4
		0
		16

Total Hours: 130

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 1000	1 SOCL elective	4 Vacation	0 Vacation	0

SOCL 1101	4 SOCL elective	4		
ENGW 1111	4 Elective	4		
MATH 1215	4 Elective	4		
ANTH 1101	4			
		17	16	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL 2320	4 Co-op	0 Co-op	0 SOCL elective	4
SOCL 3300	4		SOCL elective	4
Social science elective	4			
Elective	4			
EESH 2000	1			
		17	0	0

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ENGW 3315	4 Co-op	0 Co-op	0 SOCL elective	4
SOCL 2321	4		Elective	4
SOCL elective	4			
Social science elective	4			
		16	0	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
SOCL elective	4 Co-op	0 Co-op	0 Vacation	0
Social science elective	4			
Elective	4			
SOCL elective	4			
		16	0	0

**Year 5**

Fall	Hours Spring	Hours
Elective	4 SOCL 4600	4
SOCL elective	4 Elective	4
Social science elective	4 Elective	4
Social science elective	4 SOCL elective	4
		16

Total Hours: 130

## Cultural Anthropology, BS

Anthropology is the holistic, cross-cultural study of humanity that explores the multiple ways humans live and create meaning in the world. The anthropology major at Northeastern exposes students to diverse cultural perspectives from past and present societies; fosters student engagement with key contemporary issues such as global inequality, development, urbanization, and cultural change; and provides greater appreciation for the complexities of the world in which they live.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Cultural Anthropology Major Requirements

Code	Title	Hours
<b>Cultural Anthropology</b>		
SOCL 1101	Introduction to Sociology	4
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 4600	Senior Seminar	4
<b>Advanced Area Courses</b>		
Complete two of the following. Additional courses taken in this section may be used as electives.		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

### Anthropology Electives

Complete eight ANTH courses. Two study-abroad courses may count toward this requirement with prior permission from the department. 32

### Social Science Electives

Complete three social science courses from the following subject areas. Social science electives may not include music or art: AFRS, AFAM, CRIM, ECON, HUSV, HIST, INTL, LING, LPSC, POLS, PSYC, or SOCL. 12

<sup>1</sup> Students must choose between a one-semester senior project, which they would complete in the context of Senior Seminar (ANTH 4600), or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

### Cultural Anthropology Major Grade Requirement

A cumulative GPA of 2.000 for all major courses is required.

### Cultural Anthropology Major Credit Requirement

Complete 76 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 1000	1 SOCL 1101	4 Vacation	0 Vacation	0
ANTH 1101	4 Anthropology elective	4		
Social science elective	4 MATH 1215	4		
Elective	4 ENGW 1111	4		
Elective	4			
17		16	0	0
Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 2300	4 ANTH 2305	4 Vacation	0 Co-op	0
Anthropology elective	4 Anthropology elective	4		
Social science elective	4 Elective	4		
Elective	4 Social science elective	4		
	EESH 2000	1		
16		17	0	0
Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Advanced area ANTH 4500-ANTH 4515	4 Social science elective	4 Co-op	0
	Anthropology elective	4 ENGW 3315	4	
	Social science elective	4		
	Anthropology elective	4		
0		16	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Anthropology elective	4 Social science elective	4 Co-op	0
	Anthropology elective	4 Elective	4	
	Advanced area ANTH 4500-ANTH 4515	4		
	Elective	4		
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 ANTH 4600	4
	Anthropology elective	4
	Elective	4
	Elective	4
	0	16

Total Hours: 130

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 1000	1 SOCL 1101	4 Vacation	0 Vacation	0
ANTH 1101	4 Anthropology elective	4		
Social science elective	4 ENGW 1111	4		
Elective	4 MATH 1215	4		
Elective	4			
	17	16	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 2300	4 Co-op	0 Co-op	0 Anthropology elective	4
Anthropology elective	4		Social science elective	4
Social science elective	4			
Elective	4			
	16	0	0	8

**Year 3**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 2305	4 Co-op	0 Co-op	0 Anthropology elective	4
Anthropology elective	4		ENGW 3315	4
Social science elective	4			
Elective	4			

EESH 2000	1			
	17	0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer 1</b>	<b>Hours Summer 2</b>	<b>Hours</b>
Anthropology elective	4 Co-op	0 Co-op	0 Vacation	0
Elective	4			
Advanced area ANTH 4500-ANTH 4515	4			
Elective	4			
	16	0	0	0

**Year 5**

Fall	Hours Spring	Hours
Advanced area ANTH 4500-ANTH 4515	4 ANTH 4600	4
Social science elective	4 Social science elective	4
Anthropology elective	4 Anthropology elective	4
Elective	4 Elective	4
	16	16

Total Hours: 130

**Computer Science and Sociology, BS**

The social aspects to computing continue to grow, primarily with respect to communication and the internet. The computer science and sociology combined major examines this significant impact on society and how people communicate and share culture. Students will have an opportunity to gain a solid programming foundation, as well as the practical and theoretical skills needed to address the complex social and cultural issues in a period of far-reaching social change.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

**Computer Science Fundamental Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
IS 2000	Principles of Information Science	4

**Computer Science Writing-Intensive Requirement**

Complete one of the following:		4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	
IS 3500	Information System Design and Development	
DS 4200	Information Presentation and Visualization (Take DS 3000 either as a prerequisite of or concurrently with DS 4200.)	

**Khoury Elective Courses**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 12 credits of upper-division CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Sociology Courses**

Code	Title	Hours
<b>Sociology Required Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Sociology Electives</b>		
Complete one sociology elective in each of the following ranges:		12
Introductory elective: SOCL 1000 to SOCL 1999		
Intermediate elective: SOCL 2000 to SOCL 3999		
Advanced elective: SOCL 4000 to SOCL 4999		
<b>Sociology Required Capstone</b>		
SOCL 4600	Senior Seminar	4

**Integrative Course Requirement**

Code	Title	Hours
Complete one of the following:		
SOCL 1280	The Twenty-First-Century Workplace	4
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4

**Advanced Writing in the Disciplines**

Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 32 credits of general electives.		32

**Khoury College GPA Requirements**

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

**Sociology GPA Requirements**

2.000 average GPA requirement across all sociology classes

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing-Intensive in the Major
- Writing in the First Year
- Advanced Writing in the Disciplines
- Interpreting Culture
- Understanding Societies and Institutions
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).



**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	CS 3200	4	Vacation	
CS 2500 and CS 2501	5	IS 2000	4	CS 3500 and CS 3501	5		
CS 1200	1	SOCL 2320	4				
ENGW 1111	4	ANTH 1101	4				
SOCL 1101	4						
		19	17		9		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Co-op		Co-op		ENGW 3302, 3308, or 3315	4
CS 1210	1					Elective	4
SOCL 2321	4						
ANTH 2305	4						
Elective	4						
		17	0		0		8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 1	4	Co-op		Co-op		Elective	4
SOCL 3300	4					Elective	4
Sociology introductory elective	4						
Elective	4						
		16	0		0		8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 2	4	SOCL 4600	4	Elective	4		
Sociology intermediate elective	4	CS writing-intensive requirement	4	Elective	4		
Elective	4	Sociology advanced elective	4				
Integrative requirement	4	Khoury elective 3	4				
		16	16		8		

Total Hours: 134

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation		Vacation	

CS 2500 and CS 2501	5	IS 2000	4		
CS 1200	1	SOCL 2320	4		
ENGW 1111	4	ANTH 1101	4		
SOCL 1101	4				
		19	17		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Co-op		Co-op		Vacation	
CS 3500 and CS 3501	5						
CS 1210	1						
SOCL 2321	4						
ANTH 2305	4						
		18	0		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3200	4	Co-op		Co-op		ENGW 3302, 3308, or 3315	4
Elective	4					Elective	4
SOCL 3300	4						
Sociology introductory elective	4						
		16	0		0		8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 1	4	Co-op		Co-op		Elective	4
Sociology intermediate elective	4					Elective	4
Elective	4						
Integrative requirement	4						
		16	0		0		8

Year 5			
Fall	Hours	Spring	Hours
Khoury elective 2	4	SOCL 4600	4
Sociology advanced elective	4	CS writing-intensive requirement	4
Elective	4	Khoury elective 3	4
Elective	4	Elective	4
		16	16

Total Hours: 134

**Criminal Justice and Sociology, BS**

This combined major educates students in criminal justice and sociology and in the interface between the two disciplines. The scope and sequence of sociology courses provide students with a foundation in social theory and social systems. Criminal justice courses provide

a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students successfully completing this program should be able to understand the ways that crime and the justice system are situated in larger social systems and structures.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

## Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1110	Criminal Due Process	4
CRIM 1120	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Understanding and Experiencing Criminal Justice Institutions and Systems</b>		
How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.		
Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 2320	Youth Crime and Justice	
CRIM 2330	Punishment in the Age of Mass Incarceration	
CRIM 2340	Corporate Security: Securing the Private Sector	
CRIM 2350	Policing a Democratic Society	
<b>Crime Problems</b>		
The following courses provide students with a deeper look at a range of crime problems.		

Complete one of the following:		4
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3060	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	
CRIM 3540	Addiction and Recovery	

## Criminal Justice Electives

These courses round out our knowledge of crime and justice.

Complete three additional criminal justice electives. Two must be from the 3000, 4000, or 5000 level. 12

## Sociology Requirements

Complete a minimum of nine courses in sociology from the requirements below.

Code	Title	Hours
<b>Sociology Requirements</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
<b>Sociology Introductory Electives</b>		
Complete two courses in the following range:		8
SOCL 1200 to SOCL 1999		
<b>Sociology Intermediate Electives</b>		
Complete two courses in the following range:		8
SOCL 2000 to SOCL 3999		
<b>Sociology Advanced Elective</b>		
Complete one course in the following range:		4
SOCL 4000 to SOCL 5999		

## Introduction, Methods, and Statistics

Code	Title	Hours
<b>Introduction</b>		
Complete one of the following:		1
CRIM 1000	Criminal Justice at Northeastern	
SOCL 1000	Sociology at Northeastern	
<b>Research Methods</b>		
SOCL 2321	Research Methods in Sociology	4
<b>Statistics</b>		
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

## Supporting Courses

Code	Title	Hours
<b>Digital Skills</b>		
Successful students develop digital skills and master digital tools useful for careers related to crime and justice. Students choose one of two courses (each has a required lab). The computer science course introduces students to spreadsheets and databases. The data science course introduces students to programming with data.		
Complete one of the following (and the appropriate lab):		4 or 5
CS 1100 and CS 1101	Computer Science and Its Applications and Lab for CS 1100	

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum ((Social Science Practicum section))
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<b>Co-op Integration Requirements</b>	
Complete before the first co-op:	1
EESH 2000	Professional Development for Co-op
Complete after the first co-op:	1
CRIM 3000	Co-op Integration Seminar 2
Complete after the second co-op:	1
CRIM 4000	Co-op Integration Seminar 3

**Integrative Requirement**

Code	Title	Hours
<b>Senior Capstone Requirement</b>		
CRIM 4949 or SOCL 4600	Senior Capstone Seminar Senior Seminar	4

<b>Integrative Elective Courses</b>		
Complete one of the following:		4
CRIM 3030	Global Criminology	
CRIM 3110	Gender, Crime, and Justice	
CRIM 3120	Race, Crime, and Justice	
Complete one of the following:		4
SOCL 1245	Sociology of Poverty	
SOCL 1228	Social Problems	

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1000 or SOCL 1000	1	SOCL 3300	4	Vacation	0	Elective	4
CRIM 1100	4	Criminology thematic elective	4			Elective	4
SOCL 1101	4	Sociology introductory elective	4				
CS 1100 or DS 2000	4	Elective	4				
MATH 1215	4						
		17		16		0	8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1110	4	Co-op		Co-op		Criminology survey elective	4

CRIM 1120	4			Sociology intermediate elective	4	
Sociology introductory elective	4					
Elective	4					
EESH 2000	1					
		17		0	0	8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 2321	4	Co-op		Co-op		Elective	4
CRIM 3700	4					Criminal justice elective	4
Elective	4						
Elective	4						
CRIM 3000	1						
		17		0		0	8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Criminology systemwide elective	4	CRIM 4949 or SOCL 4600	4	Elective	4		4
Sociology advanced elective	4	Integrative course 2	4				
Integrative course 1	4	Elective	4				
Criminal justice elective	4	Elective	4				
		16		16		4	

Total Hours: 127

**Health Science and Sociology, BS**

The combined Bachelor of Science in Health Science and Sociology integrates social scientific perspectives to the study of health, illness, and healthcare. Students explore basic sociological concepts relevant for the study of health and healthcare, such as social construction and medicalization. Students explore why, for instance, despite having the most expensive healthcare system, the United States ranks comparatively low in life expectancy and health and well-being outcomes. Provides students with an opportunity to explore the ways that societal factors such as race, class, and gender interplay with health, healthcare, and health disparities.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

## Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4
<b>Supporting Courses for Health Science</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<b>Sociology Requirements</b>		
Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
SOCL 2321	Research Methods in Sociology	4
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Social Change Selective</b>		
Complete one of the following:		4
SOCL 1260	Gender in a Changing Society	
SOCL 3468	Social Movements	
SOCL 3450	Class, Power, and Social Change	
<b>Social Inequality Selective</b>		
Complete one of the following:		4
SOCL 1245	Sociology of Poverty	
SOCL 2225	Sociology of Disability	
<b>Lower-Level Elective</b>		
Complete one of the following:		4
SOCL 1000 to SOCL 3999		
<b>Advanced Elective</b>		

Complete one of the following: 4  
SOCL 4000 to SOCL 4999

## Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		1
HSCI 1000	College: An Introduction	
SOCL 1000	Sociology at Northeastern	
<b>Writing in the First Year</b>		
ENGW 1111	First-Year Writing	4
<b>Statistics</b>		
Complete one of the following:		4
PHTH 2210	Foundations of Biostatistics	
SOCL 2320	Statistical Analysis in Sociology	
<b>Co-op Preparation (Based on Home College)</b>		
Complete one of the following:		1
HSCI 2000	Professional Development for Bouvé Co-op	
EESH 2000	Professional Development for Co-op	
<b>Advanced Writing in the Discipline</b>		
Complete one of the following:		4
ENGW 3306	Advanced Writing in the Health Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
<b>NUPath: Ethical Reasoning</b>		
PHIL 1165	Moral and Social Problems in Healthcare	4
<b>Capstone (Based on Home College)</b>		
Complete one of the following:		4
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700))	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	
SOCL 4600	Senior Seminar	
<b>Open Electives</b>		<b>24</b>

## Integrative Requirement

Code	Title	Hours
Choose one of the courses below:		4
SOCL 3441	Sociology of Health and Illness	
ANTH 3441	Medical Anthropology	

## Health Sciences GPA Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

133 total semester hours required

## Plan of Study Four Years, One Co-op Plan

Year 1		
Fall	Hours Spring	Hours
HSCI 1000 or SOCL 1000	1 BIOL 1113	4
PHTH 1260	4 BIOL 1114	1
BIOL 1111	4 ENGW 1111	4
BIOL 1112	1 Elective	4
PSYC 1101	4 CHEM 1161 and CHEM 1162 and CHEM 1163	5
SOCL 1101	4	
	18	18

Year 2			
Fall	Hours Spring	Hours Summer 1	Hours
Public health core	4 SOCL 3300	4 Public health core	4
ANTH 1101	4 SOCL 2321	4 PHIL 1165	4
PHTH 2210 or SOCL 2321	4 Social change or social inequality selective	4	
Lower-level sociology elective	4 Public health core	4	
	16	16	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
HSCI 2000 or EESH 2000	1 Co-op	Co-op	ENGW 3306 or 3308	4
ANTH 2305	4		PHTH 4540	4
Public health core	4			
Social inequality and social change selective	4			
Open electives	4			
	17	0	0	8

Year 4		
Fall	Hours Spring	Hours
Public health core	4 Capstone course	4
SOCL 3441	4 Open electives	12
Advanced sociology elective	4	

Open electives	4	
	16	16

Total Hours: 133

## Four Years, Two Co-ops Plan

Year 1			
Fall	Hours Spring	Hours Summer 1	Hours
HSCI 1000 or SOCL 1000	1 ANTH 1101	4 PHTH 2350	4
PHTH 1260	4 BIOL 1113	4 Open Elective	4
PSYC 1101	4 BIOL 1114	1	
BIOL 1111	4 ENGW 1111	4	
BIOL 1112	1 CHEM 1161 and CHEM 1162 and CHEM 1163	5	
SOCL 1101	4		
	18	18	8

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
PHTH 2210 or SOCL 2321	4 Co-op	Co-op	ENGW 3306	4
Public health core	4	Open elective	4 PHIL 1165	4
HSCI 2000 or EESH 2000	1			
SOCL 2321	4			
SOCL 3300	4			
	17	0	4	8

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
ANTH 2305	4 Co-op	Co-op	PHTH 4540	4
SOCL 3441	4	Open elective	4 Public health core	4
Lower-level sociology elective	4			
Public health core	4			
	16	0	4	8

Year 4		
Fall	Hours Spring	Hours
Social change or social inequality selective	4 Capstone course	4
Advanced sociology elective	4 Public health core	4

HSCI 4700 (if student will complete an HSCI capstone)	0 Social change or social inequality selective	4
Open electives	8 Open electives	4
		16
		16

Total Hours: 133

## Human Services and Sociology, BS

Students pursuing a combined degree in human services and sociology will integrate the theoretical understandings of these two fields to better understand organizational and group behavior and their implications for individuals and communities utilizing human services. The human services major prepares students for careers in social change by providing students with the theoretical and skill-based background necessary for practice and research. The sociology major prepares students to rigorously analyze the social, political, and economic spheres of society at the local and global levels. Students will develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at the individual and structural levels. The combined major provides students with the conceptual and practical tools to understand how various features of society affect its members as well as how people create social change.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Human Services Requirements

Code	Title	Hours
<b>Human Services Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Human Services Electives</b>		
Complete three additional HUSV courses.		12
<b>Research Methods</b>		
Complete option A or option B:		4-8
<i>Option A</i>		
HUSV 2970	Research Methods for Human Services	
<i>Option B</i>		
SOCL 2321	Research Methods in Sociology	

and

Complete an additional HUSV Elective

### Senior Capstone <sup>1</sup>

HUSV 4700	Senior Seminar in Human Services	4
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<sup>1</sup> With permission of human services, the student may complete sociology capstone Senior Seminar (SOCL 4600) and substitute one advanced human services elective for Senior Seminar in Human Services (HUSV 4700).

### Sociology Requirements

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4
<b>Introductory Electives</b>		
Complete two of the following:		8
SOCL 1228	Social Problems	
SOCL 1245	Sociology of Poverty	
SOCL 1246	Environment and Society	
SOCL 1255	Sociology of the Family	
SOCL 1260	Gender in a Changing Society	
SOCL 1295	Drugs and Society	
ANTH 1101	Peoples and Cultures	
<b>Intermediate-Level Elective</b>		
Complete two of the following:		8
SOCL 2358	Current Issues in Cities and Suburbs	
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
ANTH 2305	Global Markets and Local Culture	
ANTH 2315	Religion and Modernity	
SOCL 3241	Violence and Society	
SOCL 3270	Race and Ethnic Relations	
SOCL 3441	Sociology of Health and Illness	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 3468	Social Movements	
SOCL 3487	Applied Sociology: Practice and Theory	
<b>Advanced-Level Elective</b>		
Complete one of the following:		4
SOCL 4518	Law and Society in a Digital World	
SOCL 4520	Race, Class, and Gender	
SOCL 4580	Special Topics in Sociology	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	
ANTH 4580	Special Topics in Anthropology	
<b>Senior Seminar <sup>2</sup></b>		
SOCL 4600	Senior Seminar	4

1270 Linguistics and Cultural Anthropology, BS

<sup>2</sup> With permission of the sociology head adviser, the student may complete Senior Seminar in Human Services (HUSV 4700) and substitute one advanced sociology elective for Senior Seminar (SOCL 4600).

### Human Services/Sociology Integrative Course

Code	Title	Hours
HUSV 2355	Race, Identity, Social Change, and Empowerment	4

### Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### Human Services and Sociology Combined Major Credit Requirement

Complete 78 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, No Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1101	4	MATH 1215	4	Vacation	0	Vacation	0
ENGW 1111	4	HUSV 2300	4				
SOCL 1101	4	SOCL Introductory Elective 2	4				
SOCL Introductory Elective 1	4	HSVC elective	4				
		16	16		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV Elective	4	HUSV 2355	4	Vacation	0	Vacation	0
HUSV Elective	4	SOCL Intermediate Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		16	16		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 2320	4	HUSV 2970 or SOCL 2321	4	Vacation	0	Vacation	0
SOCL 3300	4	Elective	4				
Elective	4	SOCL Intermediate-Level Elective	4				
		16	16		0		0

HUSV 3570	4	ENGW 3315	4		
		16	16		0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
HUSV 3900	4	HUSV 4700	4		
HUSV 4994	6	SOCL 4600	4		
Elective	4	Elective	4		
SOCL Advanced-Level Elective	4	Elective	4		
		18	16		
Total Hours: 130					

### Linguistics and Cultural Anthropology, BS

The combined major in linguistics and cultural anthropology focuses on the relationship of culture to the institutions, interpersonal relations, and practices that make up their social structure while emphasizing the structure of human language and its involvement in social interaction and culture. Students examine how language both reflects and influences cultural phenomena and how it can be used as a tool to study those phenomena; and they apply their interests across a range of connected courses, co-op opportunities, and potential research projects.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Linguistics Major Language Requirement

Complete two courses in the same language with a grade of C or higher. Proficiency at elementary level 2 or higher is required.

### Linguistics Requirements

Note: A grade of C or higher is required for all courses in this section.

Code	Title	Hours
<b>Linguistics Requirements</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3442	Sociolinguistics	4
LING 3456	Language and Gender	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	

LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Elective</b>		
Complete one of the following (not counted elsewhere):		4
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	
PSYC 3464	Psychology of Language	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	

**Linguistics Research**

Complete one of the following:		4
LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	

**Anthropology Requirements**

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 4600	Senior Seminar	4
<b>Anthropology Advanced Area Courses</b>		
Complete three of the following:		12
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

**Anthropology Electives**

Complete three ANTH courses not already taken.	12
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**Linguistics/Anthropology Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
LING 3412	Language and Culture	4

**Anthropology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Linguistics/Anthropology Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study****Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation		Vacation	
ANTH 1101	4	ANTH 2305	4				
ENGW 1111	4	LING 3412	4				
MATH 1215	4	Foreign language course	4				
		16	16	0	0		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language course	4	LING 3442	4	Vacation		Co-op	
Linguistic structure course	4	Linguistic structure course	4				
Anthropology elective	4	Anthropology elective	4				
Elective	4	Elective	4				
		16	16	0	0		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		LING 3456	4	Elective	4	Co-op	
		Linguistic structure course	4	Elective	4		
		Anthropology elective	4				
		Elective	4				
		0	16	8	0		

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Linguistics elective	4	Elective	4	Co-op	
		Anthropology advanced area course	4	Elective	4		
		Anthropology advanced area course	4				
		ENGW 3315	4				
		0	16	8	0		

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ANTH 4600	4				



Anthropology advanced area course	4
Linguistics research	4
Elective	4
0	16

Total Hours: 128

**Four Years, No Co-op****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation		Vacation	
ANTH 1101	4	ANTH 2305	4				
ENGW 1111	4	LING 3412	4				
MATH 1215	4	Foreign language course	4				
	16		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language course	4	LING 3442	4	Vacation		Vacation	
Linguistic structure course	4	Linguistic structure course	4				
Anthropology elective	4	Anthropology elective	4				
Elective	4	Elective	4				
	16		16		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Anthropology elective	4	LING 3456	4	Vacation		Vacation	
Anthropology advanced area course	4	Linguistic structure elective	4				
Elective	4	Anthropology advanced area course	4				
ENGW 3315	4	Elective	4				
	16		16		0		0

**Year 4**

Fall	Hours	Spring	Hours
Linguistics research	4	ANTH 4600	4
Anthropology advanced area course	4	Linguistics elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 128

**Mathematics and Cultural Anthropology, BS**

In the BS combined mathematics and cultural anthropology degree program, anthropology and mathematics courses lay the groundwork for strong basic training that is designed to train the student to use mathematical models and methodologies for the study of problems in cultural anthropology.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 46).

**Mathematics Requirements**

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4

**Calculus**

MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4

**Intermediate and Advanced Mathematics**

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4

**Math Electives**

Complete two courses in the following range that are not required in the requirements above:	8
MATH 3001 to MATH 5999	

**Anthropology Requirements**

Code	Title	Hours
<b>Anthropology Required Courses</b>		

ANTH 1101	Peoples and Cultures	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 2305	Global Markets and Local Culture	4

**Anthropology Area Courses**

Complete two of the following. Additional area courses may count as anthropology electives:

ANTH 4350	Ethnography of Southeast Asia
ANTH 4500	Latin American Society and Development
ANTH 4505	Native North Americans
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India

### Anthropology Electives

Complete three 4-semester-hour courses in addition to the requirements stated above. One study-abroad course may count toward this requirement with prior permission from the department. 12

ANTH 2000 to ANTH 4990

### Capstone Requirement

ANTH 4600 Senior Seminar 4

### Integrative Requirement

**Code Title Hours**

Complete one of the following: 4

MATH 4025 Applied Mathematics Capstone

MATH 5131 Introduction to Mathematical Methods and Modeling

Complete the following: 4

ANTH 3120 Consumer Cultures

Total Hours 8

### Mathematics and Anthropology Combined Major Credit Requirement

Complete 80 semester hours in the major.

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Year 1

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 1341	4 MATH 1342	4 Vacation	Vacation	
MATH 1365	4 Foreign language course	4		
ANTH 1101	4 ANTH 2305	4		
ENGW 1111	4 Elective	4		
	16	16	0	0

#### Year 2

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
MATH 2321	4 ANTH elective	4 Vacation	Vacation	
ANTH 3410	4 MATH 2331	4		
MATH 2341	4 Foreign language course	4		
ANTH elective	4 MATH 3081	4		
	16	16	0	0

#### Year 3

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	MATH elective	4 Elective	4 Vacation	
	Elective	4 Elective	4	

	ANTH elective	4		
	ANTH advanced area course	4		
	0	16	8	0

#### Year 4

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	ANTH 3421	4 MATH elective	4 Vacation	
	MATH elective	4 Elective	4	
	ANTH advanced area course	4		
	ANTH advanced area course	4		
	0	16	8	0

#### Year 5

Fall	Hours Spring	Hours
Co-op	ANTH 4600	4
	ANTH advanced area course	4
	Elective	4
	Integrative course	4
	0	16

Total Hours: 128

### Mathematics and Sociology, BS

In the mathematics and sociology combined-major BS program, sociology and mathematics courses help lay the groundwork for strong basic training that seeks to prepare students toward developing sociological models using mathematics.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 46).

### Mathematics Requirements

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4

### Calculus

MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4

**Intermediate and Advanced Mathematics**

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4

**Math Electives**

Complete two courses in the following range that are not required in the requirements above: 8

MATH 30001 to MATH 5999

**Sociology Requirements**

Code	Title	Hours
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**Sociology Required Courses**

SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4

**Sociology Electives**

Complete one course from each course range:

*Introductory Elective* 4

SOCL 1101 to SOCL 1999

*Intermediate Elective* 4

SOCL 2000 to SOCL 3999

*Advanced Elective* 4

SOCL 4000 to SOCL 4999

**Capstone Requirement**

SOCL 4600	Senior Seminar	4
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**Integrative Requirement**

Code	Title	Hours
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Complete one of the following: 4

SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	

**Mathematics and Sociology Combined Major Credit Requirement**

Complete 68 semester hours in the major.

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1341	4	MATH 1342	4	Vacation		Vacation	
MATH 1365	4	SOCL 2320	4				
ANTH 1101	4	SOCL 3300	4				
ENGW 1111	4	Elective	4				
		16		16		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2321	4	MATH 2341	4	Vacation		Vacation	
ANTH 2305	4	Elective	4				
SOCL 2321	4	SOCL elective	4				
Elective	4	MATH elective	4				
		16		16		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2331	4	Co-op		Co-op		Vacation	
Elective	4						
SOCL elective	4						
MATH elective	4						
		16		0		0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 3081	4	Co-op		Co-op		Vacation	
SOCL elective	4						
Elective	4						
Elective	4						
		16		0		0	

**Year 5**

Fall	Hours	Spring	Hours
Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Capstone	4
Elective	4	Integrative course	4
		16	

Total Hours: 128

**Sociology and Cultural Anthropology, BS**

The sociology/anthropology department at Northeastern University offers a combined major in sociology and anthropology. Students learn the disciplinary histories, practices, and methods of sociology and sociocultural anthropology, identify foundational and contemporary debates within and across these two disciplines, and evaluate their contributions to our understanding of local and global societies and cultures. The combined major offers students various opportunities for

community engagement, experiential learning, and for gaining research skills using quantitative and qualitative methods.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 52).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 46).

## Sociology Major Requirements

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4

### Sociology Electives

#### Introductory Electives

Complete two courses in the following range: 8

SOCL 1110 to SOCL 1999

#### Intermediate Elective

Complete one course in the following range: 4

SOCL 2000 to SOCL 3999

#### Advanced Elective

Complete one course in the following range: 4

SOCL 4000 to SOCL 4999

### Experiential Learning

Complete one of the following courses, or complete a study abroad or a dialogue of civilizations: 4

SOCL 3487	Applied Sociology: Practice and Theory
COOP 3945	Co-op Work Experience
SOCL 4971	Junior/Senior Honors Project 2

## Anthropology Major Requirements

Code	Title	Hours
<b>Cultural Anthropology Core Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4

### Advanced Area Courses

Complete two of the following: 8

ANTH 4350	Ethnography of Southeast Asia
ANTH 4500	Latin American Society and Development
ANTH 4505	Native North Americans
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India

### Anthropology Electives

Complete four ANTH courses. One study-abroad course may also count toward this requirement with prior permission from the department. 16

## Integrative Requirement

Students must choose between a one-semester senior project, which they would complete in the context of Senior Seminar (ANTH 4600) or Senior Seminar (SOCL 4600), or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

Code	Title	Hours
<b>Required Course</b>		
ANTH 2305	Global Markets and Local Culture	4
<b>Capstone</b>		
SOCL 4600 or ANTH 4600	Senior Seminar	4

## Sociology and Cultural Anthropology Major Grade Requirement

A GPA average of 2.000 across all major courses is required.

## Sociology and Cultural Anthropology Combined Major Credit Requirement

Complete 76 semester hours in the major.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 809).

## Program Requirement

128 total semester hours required

## Cultural Anthropology, Minor

The cultural anthropology minor at Northeastern focuses on the study of culture as it is located in issues of race, ethnicity, class, gender, history, and globalization. Students develop proficiencies in widely applicable skills and frameworks, such as cultural relativism, comparative analysis, cross-cultural communication, research design, and ethnographic field research. Students have the opportunity to work with faculty members with regional expertise in Latin America, Europe, Asia, Africa, and North America and who teach courses on contemporary issues such as globalization, digital technologies, consumerism, sports, gender and sexuality, tourism, and social movements. This minor can complement a wide range of majors throughout the university, providing students with regional expertise and a depth of cultural understanding.

## Minor Requirements

Students minoring in Cultural Anthropology must complete Peoples and Cultures (ANTH 1101), plus any three ANTH electives, at least one of which must be at the 3000 level or above.

## Required Courses

Code	Title	Hours
ANTH 1101	Peoples and Cultures	4

## Anthropology Electives

Code	Title	Hours
Complete three ANTH electives, one of which must be at the 3000 level or above.		12

## GPA Requirement

2.000 GPA required in the minor

### Science and Technology Studies, Minor

The science and technology studies (STS) minor offers an interdisciplinary program of study focused on the critical role of science and technology in contemporary societies. Rather than viewing science and technology as autonomous or self-generating domains, STS traces the complex interplay that exists between science and technology and the social, political, and cultural contexts in which they are formed. Combining coursework in such fields as sociology, history, philosophy, engineering, and the humanities, the STS program offers students an opportunity to obtain a deeper understanding of the norms, values, and beliefs that often lie hidden within scientific knowledge and engineering designs. In this way, the program is designed to equip students to anticipate and address the many ethical and policy dilemmas that scientific and engineering knowledge provoke, especially as these bear on health, the environment, and community life around the world.

The STS minor is relevant for students embarking on STEM careers as well as those majoring in social science or humanities fields. The curriculum is flexible, enabling students to customize their studies in accordance with their individual interests.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Course

Code	Title	Hours
SOCL 2485	Environment, Technology, and Society	4
or HIST 2220	History of Technology	

## STS Electives

Code	Title	Hours
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### Foundational Requirement

Complete one 1000–2000-level course from the following: 4

CIVE 1200	How Cities Work: Experiencing Urban Infrastructure	
ENVR 1104	Natural Disasters and Catastrophes	
HIST 1225	Gender, Race, and Medicine	
HIST 2233	The History of Medicine in North America	
PHIL 1145	Technology and Human Values	
PHIL 3050	Information and Uncertainty	
POLS 2390	Science, Technology, and Public Policy	
SOCL 1280	The Twenty-First-Century Workplace	
WMNS 2505	Digital Feminisms	

### Advanced Electives

Complete two of the following: 8

ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
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ENGL 3340	Technologies of Text	
PHIL 4510	Philosophy of Science	
PPUA 5264	Energy Democracy and Climate Resilience: Technology, Policy, and Social Change	
SOCL 4528	Computers and Society	

## GPA Requirement

2.000 GPA required in the minor

### Sociology, Minor

The sociology minor at Northeastern helps students to understand how to apply empirical evidence to address a wide range of social problems. Sociology minors can take courses in quantitative and qualitative research methods and theoretical and empirical reasoning. Elective courses draw on our faculty's expertise in violence, family life, health and illness, the environment, technology, gender and sexuality, occupations and professions, social movements, the law, and social inequality. This minor can complement a wide range of majors throughout the university, providing students with a range of skills to better understand their place in complex social environments.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Introduction to Sociology

Code	Title	Hours
SOCL 1101	Introduction to Sociology	4

## Electives

Code	Title	Hours
Complete three SOCL courses, at least one course must be from the 3000 level or above.		12

## GPA Requirement

2.000 GPA required in the minor

### Accelerated Bachelor/Graduate Degree Programs

The College of Social Sciences and Humanities offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

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**Appendix**

- University Leadership (p. 1320)
- Governing Boards and Officers of Northeastern (p. 1320)
- Statements of Accreditation and State Authorization (p. 1321)
- Major CIP Codes (p. 1323)
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**Raj Echambadi, BS, MBA, PhD, *Dean of the D'Amore-McKim School of Business***

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**Elizabeth Hudson, BA, MA, PhD, *Dean of the College of Arts, Media and Design***

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**James R. Hackney, AB, JD, *Dean of the School of Law***

**Uta Poiger, BA, MA, AM, PhD, *Dean of the College of Social Sciences and Humanities***

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### Statements of Accreditation and State Authorization

#### Accreditation

Northeastern University has maintained its status as a member in good standing of the New England Commission of Higher Education, Inc. (NECHE), previously New England Association of Schools and Colleges (NEASC), since it was awarded its initial accreditation in 1940. The university was last reviewed by NECHE in 2018 and will be reviewed again in fall 2028.

Northeastern University possesses degree-granting authority in Massachusetts, under the auspices of the Massachusetts Board of Higher Education.

#### *Bouvé College of Health Sciences*

Program	Accrediting Agency
BS Health Science	Council on Education for Public Health (CEPH)

MPH Public Health	Council on Education for Public Health (CEPH)
BSN Nursing	Commission on Collegiate Nursing Education (CCNE) and Massachusetts Board of Registration in Nursing <sup>2</sup>
BSN Nursing, Accelerated Program for Second-Degree Students <sup>2</sup>	Commission on Collegiate Nursing Education (CCNE) and Massachusetts Board of Registration in Nursing <sup>2</sup>
BSN Nursing, Accelerated Program for Second-Degree Students <sup>3</sup>	Commission on Collegiate Nursing Education (CCNE) and North Carolina Board of Nursing <sup>3</sup>
MS Nursing	Commission on Collegiate Nursing Education (CCNE)
MS Nursing Anesthesia	Council on Accreditation of Nurse Anesthesia Educational Programs (COA); Commission on Collegiate Nursing Education (CCNE)
DNP Nursing Practice with Concentration in Nurse Anesthesia	Council on Accreditation of Nurse Anesthesia Educational Programs (COA); Commission on Collegiate Nursing Education (CCNE)
DNP Nursing Practice (Post-Master's)	Commission on Collegiate Nursing Education (CCNE)
MS Physician Assistant Studies	Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA)
DPT Physical Therapy	Commission on Accreditation in Physical Therapy Education (CAPTE)
MS Speech-Language Pathology	Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association (ASHA), Massachusetts Board of Elementary and Secondary Education <sup>1</sup>
MS/CAGS School Psychology	Massachusetts Department of Education (DOE) and National Association of School Psychologists (NASP)
PhD Counseling Psychology	American Psychological Association (APA)
PhD School Psychology	American Psychological Association (APA) and National Association of School Psychologists (NASP)
PharmD Pharmacy	Accreditation Council for Pharmacy Education (ACPE)

<sup>1</sup> The Massachusetts Board of Education approves (not accredits) programs.

<sup>2</sup> The Massachusetts Board of Registration in Nursing approves (not accredits) programs.

<sup>3</sup> The North Carolina Board of Nursing approves (not accredits) programs.

### **College of Arts, Media and Design**

Program	Accrediting Agency
Master of Architecture	National Architectural Accreditation Board (NAAB)

### **D'Amore-McKim School of Business**

Program	Accrediting Agency
All programs offered in 2021–22	AACSB International—The Association to Advance Collegiate Schools of Business

### **College of Engineering**

Program	Accrediting Agency
BSCmpE Computer Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>
BSChE Chemical Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>
BSCE Civil Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>
BSEE Electrical Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>
BSIE Industrial Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>
BSME Mechanical Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>

### **College of Science**

Program	Accrediting Agency
BS Biochemistry	American Society for Biochemistry and Molecular Biology (ASBMB)

### **College of Professional Studies**

Program	Accrediting Agency
BS Finance and Accounting Management <sup>1</sup>	AACSB International—The Association to Advance Collegiate Schools of Business
BS Management <sup>1</sup>	AACSB International—The Association to Advance Collegiate Schools of Business
BSET Computer Engineering Technology	Accredited by the Technology Accreditation Commission of ABET, 111 Market Place Suite 1050 Baltimore, MD 21202-4012 Telephone: 410.347.7700
BSET Electrical Engineering Technology	Accredited by the Technology Accreditation Commission of ABET, 111 Market Place Suite 1050 Baltimore, MD 21202-4012 Telephone: 410.347.7700

BSET Mechanical Engineering Technology  
Accredited by the Technology Accreditation Commission of ABET, 111 Market Place Suite 1050 Baltimore, MD 21202-4012 Telephone: 410.347.7700

MS Organizational Leadership (with concentration in Project Management)  
Project Management Institute's Global Accreditation Center

Education Programs in:

Elementary Education, 1–6	Massachusetts Department of Elementary and Secondary Education
Sheltered English Immersion Administrator—Endorsement	Massachusetts Department of Elementary and Secondary Education
Sheltered English Immersion Teacher—Endorsement	Massachusetts Department of Elementary and Secondary Education
Teacher of Biology, 8–12	Massachusetts Department of Elementary and Secondary Education
Teacher of Chemistry, 8–12	Massachusetts Department of Elementary and Secondary Education
Teacher of Earth and Space Science, 8–12	Massachusetts Department of Elementary and Secondary Education
Teacher of English, 5–12	Massachusetts Department of Elementary and Secondary Education
Teacher of English as a Second Language (ESL), PreK–6, 5–12	Massachusetts Department of Elementary and Secondary Education
Teacher of History, 5–12	Massachusetts Department of Elementary and Secondary Education
Teacher of Mathematics, 8–12	Massachusetts Department of Elementary and Secondary Education
Teacher of Physics, 8–12	Massachusetts Department of Elementary and Secondary Education
Teacher of Political Science/Political Philosophy, 8–12	Massachusetts Department of Elementary and Secondary Education
Teacher of Social Science, 5–12	Massachusetts Department of Elementary and Secondary Education
Teacher of Students with Moderate Disabilities, PreK–8, 5–12	Massachusetts Department of Elementary and Secondary Education

<sup>1</sup> Accredited under the aegis of the “sponsoring” full-time college.

### **College of Social Sciences and Humanities**

Program	Accrediting Agency
BS American Sign Language—English Interpreting	Commission on Collegiate Interpreter Education

MPA Public Administration	Network of Schools of Public Policy, Affairs, and Administration
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### School of Law

Program	Accrediting Agency
JD Law	American Bar Association; Association of American Law Schools <sup>1</sup>

<sup>1</sup> The Association of American Law Schools is an elected membership organization, not an accrediting body.

## State Approvals, Authorizations, and Exemptions

Some states require that universities authorized to operate in their state make public disclosures. Please visit State Authorization Statements and Complaint Resolution (<https://www.northeastern.edu/graduate/state-authorization-statements-and-complaint-resolution/>) for up-to-date, state-prescribed regulatory information applicable to all degree levels.

### Major CIP Codes

The following is a list of Northeastern University majors for programs accepting new students during the 2021-2022 catalog year, along with each major's corresponding CIP code. "CIP" refers to the Classification of Instructional Programs published by the U.S. Department of Education's National Center for Education Statistics (<https://nces.ed.gov/ipeds/cipcode/Default.aspx?y=56>).

### Resources

#### Online Resources

The following online resources supplement this catalog:

- Academic Calendars (<http://www.northeastern.edu/registrar/calendars.html>)
- Campus Maps (<http://www.northeastern.edu/campusmap/>)
- Class Schedules (<https://registrar.northeastern.edu/article/schedule-of-classes/>)
- University Events

### General Information

The *Northeastern University Catalog* contains the university's primary statements about approved academic programs and degree requirements, as authorized by the president or the Board of Trustees.

The *Northeastern University Catalog* contains current information about the university calendar, admissions, degree requirements, fees, and regulations; however, such information is not intended and should not be regarded to be contractual. Course information was current as of June 9, 2021. For updated course information, students and advisors should consult the Banner course catalog (<https://nubanner.neu.edu/StudentRegistrationSsb/ssb/term/termSelection/?mode=courseSearch>).

#### ACCREDITATION

Northeastern University is accredited by the New England Commission of Higher Education, Inc.

#### DELIVERY OF SERVICES

Northeastern University assumes no liability for delay or failure to provide educational or other services or facilities due to causes beyond its reasonable control. Causes include, without limitation, power failure, fire, strikes by university employees or others, damage by natural elements, and acts of public authorities. The university will, however, exert reasonable efforts, when it judges them to be appropriate, to provide comparable services, facilities, or performance; but its inability or failure to do so shall not subject the university to liability.

Northeastern University reserves the sole right to promulgate and change rules and regulations and to make changes of any nature in its program; calendar; admissions policies, procedures, and standards; degree requirements; fees; and academic schedule whenever necessary or desirable, including, without limitation, changes in course content and class schedule, the cancellation of scheduled classes and other academic activities, and the substitution of alternatives for scheduled classes and other academic activities. In any such case, the university will give whatever notice is reasonably practical.

Northeastern University will endeavor to make available to its students a fine education and a stimulating and congenial environment. However, the quality and rate of progress of an individual's academic career and professional advancement upon completion of a degree or program are largely dependent on his or her own abilities, commitment, and effort. In many professions and occupations, there are also requirements imposed by federal and state statutes and regulatory agencies for certification or entry into a particular field. These requirements may change while a student is enrolled in a program and may vary from state to state or country to country. Although the university stands ready to help its students find out about requirements and changes in them, it is the student's responsibility to initiate the inquiry.

#### FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

In accordance with the Family Educational Rights and Privacy Act of 1974, Northeastern University permits its students to inspect their records wherever appropriate and to challenge specific parts of them when they feel it is necessary to do so. Specific details of the law as it applies to Northeastern are discussed in this section of the catalog (<http://catalog.northeastern.edu/graduate/academic-policies-procedures/ferpa/>).

#### PERSISTENCE RATES UNDER THE STUDENT RIGHT-TO-KNOW ACT

In the fall of 2020, the persistence rate for undergraduate students who entered in the fall 2019 cohort was 96.8 percent.

#### TUITION DEFAULT POLICY

In cases where the student defaults on his or her tuition, the student shall be liable for the outstanding tuition and all reasonable associated collection costs incurred by the university, including attorneys' fees.

#### NONDISCRIMINATION POLICIES

Northeastern University is committed to providing a living, learning, and working environment free from discrimination and harassment and does not discriminate on the basis of race, color, religion, genetic information, sex, gender, gender identity, sexual orientation, age, national origin, ancestry, disability, or veteran status in admission to, access to, treatment in, or employment in its programs and activities. The university will not tolerate any conduct that violates rights guaranteed by law, or any of the university policies that prohibit discrimination, including the Policy on Equal Opportunity ([https://www.northeastern.edu/policies/pdfs/Policy\\_on\\_Equal\\_Opportunity.pdf](https://www.northeastern.edu/policies/pdfs/Policy_on_Equal_Opportunity.pdf)), Policy Prohibiting Sexual and Gender-Based Harassment ([https://www.northeastern.edu/policies/pdfs/Policy\\_Prohibiting\\_Sexual\\_and\\_Gender-Based\\_Harassment.pdf](https://www.northeastern.edu/policies/pdfs/Policy_Prohibiting_Sexual_and_Gender-Based_Harassment.pdf)), Policy on Rights and Responsibilities

Under Title IX ([https://www.northeastern.edu/policies/pdfs/Policy\\_on\\_Rights\\_and\\_Responsibilities\\_Under\\_Title\\_IX.pdf](https://www.northeastern.edu/policies/pdfs/Policy_on_Rights_and_Responsibilities_Under_Title_IX.pdf)), and the Policy on Non-Fraternization ([https://www.northeastern.edu/policies/pdfs/Policy\\_on\\_Non-Fraternization.pdf](https://www.northeastern.edu/policies/pdfs/Policy_on_Non-Fraternization.pdf)). Furthermore, university policy also includes prohibitions of retaliation for filing complaints of discrimination with the Office for University Equity and Compliance (OUEC). Links to the university's nondiscrimination policies and its grievance procedures are available at the OUEC (<https://www.northeastern.edu/ouec/>). Inquiries regarding the university's nondiscrimination policies may be directed to:

Office for University Equity and Compliance (<https://www.northeastern.edu/ouec/>)  
125 Richards Hall  
Northeastern University  
Boston, Massachusetts 02115  
617.373.4644  
[ouec@northeastern.edu](mailto:ouec@northeastern.edu)

The university strongly encourages any person to report information relating to alleged discrimination or harassment to the OUEC (<https://www.northeastern.edu/ouec/>) by completing the form available at Reporting to OUEC ([https://cm.maxient.com/reportingform.php?NortheasternUniv&layout\\_id=7](https://cm.maxient.com/reportingform.php?NortheasternUniv&layout_id=7)) or through any of the contact options listed above. OUEC's policies, as well as other helpful information, can be found at the OUEC website (<https://www.northeastern.edu/ouec/>).

### **DISABILITY RESOURCE CENTER**

The Disability Resource Center provides a variety of disability-related services and accommodations to Northeastern University's students with disabilities.

Northeastern University's compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 are coordinated by the senior director of the Disability Resource Center. Persons requiring information regarding the Disability Resource Center should contact the center at 617.373.2675 or, if using TTY, via Relay 711.

### **CLERY ACT**

Northeastern is committed to assisting all members of the university community in providing for their own safety and security. Information regarding campus security and personal safety, including topics such as crime prevention, university police law enforcement authority, crime reporting policies, crime statistics for the most recent three-year period, and disciplinary procedures, is available in the Annual Security & Fire Safety Reports, located on the NUPD website (<https://nupd.northeastern.edu/annual-reports/>).

### **EMERGENCY INFORMATION**

The university is prepared to respond to emergencies and urgent situations that require immediate action with a trained team of police officers, EMTs, health and counseling experts, student affairs and residential life staff, and other professionals from a coordinated group that is able to manage a wide range of potential situations.

In case of emergency or crisis situations that require immediate notification, university officials will deploy the NU ALERT system, which sends email, voicemail, and text messages to students, faculty, and staff. NU ALERT is intended to communicate pertinent information and, when appropriate, provide directions to those in the affected area(s).

A record of past Timely Warnings and NU ALERT Emergency Notifications for our campus community can be found on the NUPD website (<https://nupd.northeastern.edu/safety-notifications/>).

Examples of crisis situations range from snow storms to national emergencies that have a local impact.

Additional information on the university's emergency information systems can be found on the university's (<https://www.northeastern.edu/emergency-information/>) *Emergency Information* website.

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