Northeastern University

## Undergraduate Catalog 2018-2019

Full-Time Day Programs

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## Admission Policy and Entrance Requirements

Admission to Northeastern is highly selective. The complexity of the admission process is not one that can be defined through a formula. At Northeastern, we evaluate all applicants holistically in order to identify candidates who will bring a diverse set of experiences and interests to our community. Each year, approximately 2,800 new freshmen and 400 new transfer students enroll in September. In addition, over 900 new students will enroll in January through participation in The N.U.in Program. The N.U.in Program is an innovative first-year global experience during which admitted students begin their college studies at one of our partner institutions overseas while earning transfer credits in the fall semester ${ }^{1}$ and transitioning to the Boston campus in the spring semester. See additional information about The N.U.in Program.

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 freshman admission, the committee considers whether the applicant's high school transcript reflects the various academic opportunities offered such as honors, advanced placement, international baccalaureate, 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.
${ }^{1}$ 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.

## Deadlines and Decisions

Northeastern offers the following application options.

## 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 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.

## FRESHMAN APPLICANTS

More than 62,000 students apply for a space in the freshman class. The committee has the responsibility of selecting applicants for admission who it believes will contribute to Northeastern's diverse and vibrant academic and social community. The committee is particularly interested in applicants who have challenged themselves academically; are highly motivated; have a strong work ethic; 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.
- Application fee of \$75.
- Secondary school counselor and teacher recommendations.
- Secondary school transcripts with final junior-year grades. Firstsemester or first-trimester grades should be submitted when they are available; first-quarter grades are not required.
- Early Decision Agreement for students applying under the binding Early Decision I or II application options.
- Official SAT or ACT results. Northeastern's CEEB college code is $3667 /$ ACT college code is 1880 . Test scores must be sent to Northeastern directly from the testing agency.
- Portfolios are required for Studio Art and are highly encouraged for majors within the College of Arts, Media and Design. Beginning in spring 2018, a portfolio is no longer required for music technology applicants. Northeastern uses SlideRoom for online portfolio submissions. See additional information (p. 14).
- 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 course work.
- 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 (including four years of English) 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.
- 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.
- English proficiency: Northeastern seeks to enroll the most talented and academically qualified students. All Northeastern courses are instructed in English, and therefore attention is paid in application review to preparedness for success in an English-language environment. There may be additional requirements for applicants whose first language is not English. Please see the admissions website (https://www.northeastern.edu/admissions/applicationinformation) for the most up-to-date information.
- For applicants applying from secondary schools located outside the United States, SAT or ACT scores are not required and will not be considered for admission if submitted. Applicants are encouraged to submit results from nationally accredited exams that signify completion of secondary education and are required for entry into universities in their home country. Applicants who attend a high school in the United States are required to submit their official SAT or ACT results.


## TRANSFER APPLICANTS

Each year we receive over 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:

- 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.
- SAT/ACT scores for students who have completed fewer than 24 college credits (after high school graduation) at the time of the application deadline. This is not required for students who have been out of high school for more than five years. Standardized test scores are
not required for students who did not complete high school in the United States.
- Joint Service Transcript (if you are a veteran).
- English proficiency: Northeastern seeks to enroll the most talented and academically qualified students. All Northeastern courses are instructed in English, and therefore attention is paid in application review to preparedness for success in an English-language environment. There may be additional requirements for applicants whose first language is not English. Please see the admissions website (https://www.northeastern.edu/admissions/applicationinformation) for the most up-to-date information.
- 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 twoyear 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 course work taken more than 10 years ago and math and science course work 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, International Baccalaureate, and National Education exam scores and official transcripts from colleges and universities. These 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 course work completed at an international institution must be translated into English and evaluated by a recognized credential agency.

## ADVANCED EXAMINATIONS

Students may apply up to 32 semester hours of advanced credit toward their undergraduate degrees. You may enter the university with advanced credit on the basis of your test scores on certain specific examinations (listed below) or on successful completion of accredited collegelevel courses that you took before you enrolled at Northeastern. For consideration, students should submit 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
- British GCE A-Level Examination
- German Abitur
- French Baccalaureate
- International Baccalaureate
- Swiss Federal Maturita Diploma


## Advanced Placement Evaluations

The university awards credit for test scores of 4 and 5 . Visit the Transfer Equivalency Database (https://ugadmissions.northeastern.edu/ transfercredit/TransferCreditevaluatedstudent2.asp) for an up-to-date AP listing.

Credit awarded: 4-10 semester hours or up to two courses per exam (refer to AP listing).

## British GCE A-Level Examination

The university awards credit for A-level courses with final exam grades of C or better.

## German Abitur

The university awards credit for intensive subjects with scores of 7 or higher on a 15 -point scale and 4 or higher on a 6 -point scale only for subjects that required a written exam.

## French Baccalaureate

The university awards credit for any series A-E on the Baccalaureate de l'Enseignement du Second Degré with a coefficient of 4 or above and a score of 10 or better on a 20-point scale.

## International Baccalaureate

The university generally awards credit for exam scores of 5,6 , or 7 in higher-level courses only. Visit the International Baccalaureate guide page (https://www.northeastern.edu/admissions/wp-content/ uploads/2016/09/International-Bac-Chart-2016.2017.pdf) for an up-todate IB listing.

## Swiss Federal Maturita Diploma

The university awards credit for a final score of 4 or higher on a 6-point scale or 6 or higher on a 10-point scale.

## ADDITIONAL INFORMATION FOR INTERNATIONAL APPLICANTS

International student applications are reviewed considering their performance in their particular academic environments. SAT or ACT scores are not required for applicants who will graduate from schools located outside the United States. International citizen applicants who attend a high school in the United States are required to submit test scores. U.S. Department of Defense school students are required to submit SAT or ACT scores.

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, including the Student and Exchange Visitor Information System (SEVIS), make it especially important for students in the " $F$ " (student) and " $J$ " (exchange visitor) categories to consult regularly with an international student advisor at the Office of Global Services (OGS) (http://www.northeastern.edu/ogs) before taking any action that might affect their immigration status and educational endeavors in the United States.

International students in $\mathrm{F}-1$ and $\mathrm{J}-1$ 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. In addition, international students must not begin, extend, or resume any type of employment without first obtaining proper employment authorization or verification from the OGS. Any exceptions to full-time registration requirements must be preapproved by the OGS in accordance with specified federal regulations.

In order for prospective F-1 and J-1 students to start their undergraduate program here, they must obtain the certificate of eligibility from OGS.
For F-1 students, this document is called Form I-20, and for J-1 students, this document is called Form DS-2019. The international student will
need to complete the e-form on the myOGS system and work with the undergraduate admissions office to meet all requirements needed for successful submission of the request for I-20 or DS-2019. Once the request is approved by the undergraduate admissions office, the OGS will get a request for the student's $1-20$ and will need 10 business days to generate the student's certificate of eligibility. Students then are able to apply for their $\mathrm{F}-1$ or $\mathrm{J}-1$ visa stamp at a U.S. consulate overseas and, if the visa is granted, enter the United States no earlier than 30 days prior to the start date of their academic program to begin their studies here.

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 nonimmigrant visa classification. Some international students must apply and be approved for a change of status (e.g., from F-2 to F-1) before beginning their program at Northeastern. For information on nonimmigrant visa 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 required by your academic program), contact the OGS at ogs@northeastern.edu. Not all visa categories allow for internships, co-ops, international travel associated with an academic program, and/or other experiential learning opportunities. Note that some academic programs at Northeastern have experiential learning requirements (e.g., co-op or study abroad). Nonimmigrant visa statutes other than F-1/J-1 may not allow for those requirements to take place and, as such, may impede the successful completion of your program of study.

## REQUIREMENTS FOR APPLICANTS WHOSE PRIMARY LANGUAGE IS NOT ENGLISH

Students whose native language is not English, regardless of their country of citizenship or residence, are required to submit official results of the Test of English as a Foreign Language (TOEFL), the English Test of the International English Language Testing System (IELTS), or the Pearson Test of English (PTE). Applicants must present the required minimum passing scores for admission.

## 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. Transfer students may not apply to the Explore Program for undeclared students.

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. Hardcopy 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).

## University Honors Program

The University Honors Program values integrated, student-directed, and experiential learning that is personalized to meet students' unique interests and goals. Our community of intellectually engaged students, advisors, and faculty are committed to making a difference at home and in the world. Students benefit from unique and enriched educational options that include stimulating courses and opportunities for global exploration, research and creative endeavors, service-learning, mentoring, and more. Honors students are guided and supported as they chart their unique educational plans through personalized advising and through their 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 or second semester who wish to be considered for the University Honors Program may consult the program's website for instructions on how to apply: www.northeastern.edu/honors. (https://www.northeastern.edu/ honors)

## 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 for consideration into other programs. These selections are based on a holistic review of student credentials.

Northeastern is continually assessing 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 programs webpage (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 study abroad at a partner institution earning transfer credit and enroll in classes as part of the Northeastern community in Boston in the spring. These transfer credits earned are guaranteed to be valid at Northeastern but might not be accepted by other institutions. Participants have studied at partner institutions located in Australia, Canada, China, England, Germany, Greece, Ireland, and Italy in recent years.

## 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. 47).

## Foundation Year

This first-year college program is designed for recent high school graduates and General Equivalency Diploma (GED) completers from the city of Boston who would benefit from a more structured and supportive first year in order to be successful in the rest of their college career. Foundation Year offers students rigorous academic and career preparation as well as wraparound support services that include advising, tutoring, mentoring, social networking, and work-ready skill development.

## Torch Scholars Program

The Torch Scholars Program is a comprehensive support program for first-generation college students who have already succeeded against the odds but who have not yet reached their full academic potential. After a holistic review and thorough interview process, selected Torch Scholars are granted admission to the university and awarded a full-tuition, fees, and room-and-board scholarship for our Summer Immersion Program and eight subsequent semesters of undergraduate study.

## N.U. Bound

N.U. Bound is a first-year college program for non-U.S. citizens that provides rigorous academics and acculturation support to ensure a smooth transition to Northeastern in the student's second year. The fall and spring academic terms are delivered in the city of Suzhou, China, through a partnership with the China Institute, while the final phase of N.U. Bound is a two-week prematriculation program delivered at Northeastern University's Boston campus. Please note, N.U. Bound provides a conditional offer of admission to Northeastern upon successful completion of the program.

## N.U. Immerse

N.U. Immerse is a transitional experience for students who require English-language preparation and are looking to earn credit while gaining an introduction to the American education system and college culture. Students will improve language and academic skills through a specially designed two-semester curriculum. N.U. Immerse offers conditional admission to undergraduate degree programs upon successful completion of the program.

## ContiNUe

ContiNUe is a yearlong academic program for first-year students, many of whom are continuing their family legacy at Northeastern. With a focus on preparing our students to be leaders, ContiNUe teaches students transferable skills such as problem solving, decision making, and the game-changer mindset. ContiNUe students complete two semesters of first-year courses through the College of Professional Studies. Students then participate in NUterm before beginning their second full year. ContiNUe provides a conditional offer of admission to Northeastern upon successful completion of the program.

## The American Classroom Program

Please note that beginning in fall 2018, students may only apply directly to the American Classroom program. Students will no longer be referred to the program through the undergraduate admission process.

## 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 Hispanic Scholar Scholarships

Award: A scholarship for admitted freshman applicants who are designated National Merit Finalists or National Hispanic Recognition Program Scholars. Students who are National Hispanic Recognition Program Scholars must submit documentation to Northeastern by the posted deadline. National Merit Finalists must rank Northeastern as their school of choice by the posted listing deadline. 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 are U.S. citizens or documented permanent residents and have been designated National Merit Finalists by the National Merit Scholarship Corporation (NMSC) and students identified as National Hispanic Recognition Program Scholars.

## Merit Scholarships

Awards: Students who are in the top 10 to 15 percent of our applicant pool are considered for competitive merit awards, 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. Additional details regarding scholarships and grants for Honors Program students may be found online (http://www.northeastern.edu/honors/community/honors-program-scholarships).

## 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 course work. 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. Ujima Global Leaders are expected to participate in Northeastern's Civic Engagement Program and complete 50 hours of community service each year.

Contact the Office of Undergraduate Admissions if you have any questions about the application process.

Office of Undergraduate Admissions
Northeastern University
360 Huntington Avenue
Boston, MA 02115-5000 USA
Website (https://www.northeastern.edu/admissions)
admissions@northeastern.edu
617.373.2200
617.373 .8780 (fax)

Credentials not being submitted online (transcripts and recommendations) should be mailed to our Application Processing Center. Please check the admissions website (https:// www.northeastern.edu/admissions) for the most current address.

Application fees; application fee waiver requests (being sent separate from the application); and FedEx, UPS, or Priority Mail packages must be mailed to the following address:

Office of Undergraduate Admissions
200 Kerr Hall
Northeastern University
360 Huntington Avenue
Boston, MA 02115-5000 USA
For more information, consult the admissions website (https:// www.northeastern.edu/admissions).

## Information for Entering Students

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- Orientation for International Students (p. 16)
- Parent/Family Programs (p. 16)
- Residential Life (p. 17)
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- English-Language Testing (p. 17)
- Accommodations for Students with Disabilities (p. 17)
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- Information Technology Services (p. 17)


## Student Orientation

It is mandatory for all incoming first-year and transfer undergraduate students to participate in student orientation hosted by the Office of Student Orientation and Parent/Family Programs.

Students beginning in the fall will attend sessions during the months of June and July. Students starting in the spring will attend a session in January prior to the start of the semester. Once a student officially commits to the university by paying the enrollment fee, they will have the ability to register for student orientation through the myNortheastern (https://my.northeastern.edu) admitted student portal.

At orientation, students will get acclimated to campus and Boston, prepare for the start of the academic year, and experience what makes Northeastern unique. Students will also register for classes, get their student ID card, and partake in a variety of activities to meet fellow classmates.

The undergraduate student fee supports student orientation costs, including the opportunity to have two complimentary guests participate in the Parent/Family Orientation. This is a tuition-based fee; more information may be found on the Student Financial Services (https:// studentfinance.northeastern.edu) website.

Undergraduate international students (non-U.S. citizens) are required to attend the student orientation session immediately preceding the start of the fall academic semester. The Office of Global Services (OGS) (https:// www.northeastern.edu/ogs) will host a specialized presentation that will be incorporated into the two-day student orientation program; separate registration is not required. Following student orientation, OGS will continue with acculturation programming, such as regional excursions and intercultural/diversity education seminars. Students who are U.S. citizens, but reside abroad, are more than welcome to join OGS sessions/ activities.

The Office of Student Orientation and Parent/Family Programs
101 Ell Hall
Northeastern University
360 Huntington Avenue
Boston, MA 02115
Website: northeastern.edu/orientation (http://www.northeastern.edu/ orientation)
Phone: 800.696.6516
Email: orientation@northeastern.edu

## Orientation for International Students

The Office of Global Services (OGS) (http://www.northeastern.edu/ ogs) organizes year-round orientation and acculturation programming throughout the year for newly arrived international students and U.S. citizens from abroad. OGS's International Student Orientation provides a unique forum for intercultural interaction and learning, with activities that include an "airport welcome," cultural enrichment programming, information sessions, $\mathrm{F}-1$ or J-1 international student advising, regional excursions, and educational seminars that bring a cross-cultural focus to topics such as academic success, student life, and the dynamics of diversity. OGS's mandatory International Student Online Check-In process and orientation begin prior to the start of the fall and spring semesters, comprising several weeks of activities that provide international students (and others who have lived abroad) an opportunity to gain familiarity with Northeastern in a cross-cultural context while also serving to facilitate the formation of friendships across cultures.

International students holding an $\mathrm{F}-1$ or $\mathrm{J}-1$ visa should plan to arrive several days before the start of the semester as outlined in the OGS orientation schedule in order to attend the scheduled International Student Orientation program and complete the International Student Online Check-In process. All matriculating international students will have access to a preliminary schedule from the OGS prior to their arrival in the United States. Immediately prior to the start of the semester, the Office of New Student Orientation organizes mandatory orientation and academic advising.

For further details on the OGS International Student Orientation and Online Check-In process, and for other information pertinent to international students, contact:

The Office of Global Services (OGS))
405 Ell Hall
Northeastern University
360 Huntington Avenue
Boston, MA 02115
Website (http://www.northeastern.edu/ogs)
617.373.2310

## Parent/Family Programs

The Office of Student Orientation and Parent/Family Programs assists families in making connections with the university and its resources during their student's time at Northeastern. The office helps with a broad spectrum of issues-academic, administrative, and personal.

The office hosts several events each year, including Parent \& Family Weekend, and provides timely communications on important campus news and events through their website (http://northeastern.edu/parents), Parent Matters newsletters, Facebook (https://www.facebook.com/ ParentFamilyProgramsAtNortheasternUniversity) page, Tuesday Talks webinars, Parent Corner Message Board, and Parent Portal.

Parents and guardians of students can create an online Parent Portal account by visiting the myNortheastern web portal (https:// my.northeastern.edu), through which their student may grant them access to services related to their Northeastern experience.

The Office of Student Orientation and Parent/Family Programs
101 Ell Hall
Northeastern University
360 Huntington Avenue
Boston, MA 02115
Website: northeastern.edu/parents (http://northeastern.edu/parents)
Phone: 800.696.6516
Email: parents@northeastern.edu

## Residential Life

The Department of Residential Life strives to create a community for our residents by planning programs and activities that help students get to know others on their floor and in their residence hall. We also provide services that support our residents in accomplishing their academic and personal goals. Residential Life staff are trained in counseling, crisis intervention, and conflict resolution, as well as interpersonal communications, in order to assist our students to achieve their aspirations.

Each hall is supervised by a professional residence director and student resident assistants, who work together to maintain close contact with students to help make their experience living on campus a positive one.

The university offers a variety of housing options tied to specific programs of study for first-year students known as Living Learning Communities (LLCs). The LLCs offer students a supportive, achievementoriented environment with opportunities for friendship around common interests as well as continued learning and sharing outside the classroom. LLCs commonly feature tutoring, advising, and study groups as well as unique programs designed to promote student growth and advancement.

## Health Requirements-University Health and Counseling

Services (UHCS)
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 website (http://www.northeastern.edu/uhcs) to access the Health Report online.

## English-Language Testing

NU Global conducts English-language testing for international students who are referred for this service. The testing takes about two hours. The NU Global Test measures English composition, listening comprehension, grammar, vocabulary, and reading comprehension and is administered by the NU Global Office at Northeastern University.

Any department may refer students for testing. Students must arrive on time on designated test days. Referral forms and a schedule of test dates are available to departments by request. Departments should contact cpsadmissions@northeastern.edu for more information.

## Accommodations for Students with Disabilities

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 $\operatorname{AD}(H) D$
- 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 at: http:// www.northeastern.edu/drc/ for additional information or contact staff at 617.373.2675.

## We Care

We Care is a program that assists students experiencing unexpected challenges maintaining their academic progress. We Care works with the student to coordinate among university offices and to offer appropriate on- and off-campus referrals to support successfully resolving issues. For further information, contact:

We Care
104 Ell Hall
617.373.4384

Website (wecare@northeastern.edu)
www.northeastern.edu/wecare (http://www.northeastern.edu/wecare)

## Information Technology Services

617.373.4357 (xHELP)
help@northeastern.edu
Website (http://www.northeastern.edu/its)
Information Technology Services (ITS) is the centralized technology resource for students, faculty, and staff. ITS provides secure, high-speed internet access through the on-campus networks NUnet and ResNet; wireless internet connectivity through NUwave; centralized computer labs -the InfoCommons and the Digital Media Commons (DMC)-with the latest software; on-site and remote printing; access to the Blackboard learning management system; a vast array of software applications for Windows and Mac; access to myNEU, Northeastern's online portal; on-site and online training on popular software; and high-performance research computing.

## ITS Service Desk

Help and Information Desk, Snell Library
617.373 .4357 xHELP
help@northeastern.edu
The ITS Service Desk provides phone-based and walk-up technology support services to students, faculty, and staff. The ITS Service Desk staff also offers support for ITS-managed printers and answers general computing questions. Contact the ITS Service Desk for the following services:

- Troubleshooting Northeastern University-provided accounts and applications, including email
- Investigating wired and wireless network connection problems
- Troubleshooting network printer problems
- Assisting students with myNEU and Blackboard questions
- Support with ITS-managed labs
- Access to equipment available for loan, including AV equipment and laptop adapters

The ITS Service Desk is located at the Help and Information Desk on the first floor of Snell Library near the InfoCommons and provides assistance on computer-related issues to students, faculty, and staff with a valid Northeastern ID.

## myNEU

Website (http://myneu.neu.edu)
myNEU-the online portal for the Northeastern community-is a central resource for students, faculty, and staff. Your myNEU username and password provide access to key university platforms, from the myNEU portal to other university systems, including wireless network access, printing, and email.

The myNEU portal offers services tailored to your role at Northeastern for all academic, personal, and recreational needs. Resources available for students include links to student email, information channels, financial aid, Blackboard, and online course registration. NU Alert, our real-time university emergency notification system, utilizes the contact information provided within myNEU. It is your responsibility to maintain accurate personal and emergency contact information.

## ResNet and the ResNet Resource Center

Speare Commons
617.373.HELP (x4357)
resnet@northeastern.edu
Website (http://www.northeastern.edu/resnet)
ResNet-a service of Information Technology Services and Housing Services-provides internet access to all students living in Northeastern residence halls. The ResNet Resource Center, located in Speare Commons, provides students with support for the HuskyCable TV service, mobile devices, gaming systems and other devices, student email, computer troubleshooting, and repair services for Apple and Dell computers.

## Printing

The Northeastern Printing Program provides a limited amount of free printing each year to students, faculty, and staff. Each September, as an active member of the community, you are given a credit of \$120 on your Husky Card to use at your discretion at any of the ITS-managed printers located across campus. Print credits do not carry over from one academic year to the next.

Print jobs can be directly sent to the appropriate printer queue from any ITS computer labs or from your own computer by using the Virtual Print Client software to remotely print. When you locate a printer associated with the appropriate printing queue, simply swipe your Husky Card, select your print job, and it will print.

## Appropriate Use Policy

The information systems of Northeastern University are intended for the use of authorized members of the community in the conduct of their academic and administrative work. The Appropriate Use Policy (AUP) describes the terms and conditions of Northeastern information systems use. For more information, visit the Appropriate Use Policy webpage (http://www.northeastern.edu/aup).

## Training Services

Snell Library
617.373.5858
training@northeastern.edu
Information Technology Services training provides the following instructor-led and web-based courses to all members of the Northeastern community:

- Web-based training. ITS training offers computer training over the internet, including Mac tutorials, MS Office tutorials, some application-specific training provided by the application vendors, and via Lynda.com, which offers 24/7 access to an extraordinary breadth of training modules. Web-based training is an innovative, selfpaced learning method that allows students, faculty, and staff to train anytime or anywhere, using a computer with an internet connection.
- Instructor-led training includes classes such as Public Speaking for Presentations, Advanced Excel, SharePoint, Adobe Photoshop, and Blackboard. These workshops are available at no charge to the entire university community.

To register for a class, visit the training section of the ITS website.

## Academic Technology Services (ATS)

212 Snell Library
ats@northeastern.edu
Website (http://www.ats.neu.edu)
For graduate students performing teaching assistant/graduate assistant work, Academic Technology Services (ATS) is a resource for choosing and implementing technological solutions for a wide range of classroom goals. Whether creating online classes or incorporating flipped classroom techniques into on-ground classes, ATS offers consultation and support for implementation. Additionally, ATS manages the Discovery Lab, located on the first floor of Snell Library, which is a space for showcasing ideas and innovations at Northeastern. The Discovery Lab is an area to host both events and exhibitions.

## College Expenses

Student Financial Services is available to assist you in developing a plan for financing a Northeastern education. Through a variety of options, including financial aid, Northeastern's Monthly Payment Plan, supplemental loans, and your own resources, a plan can be designed that will make your education costs affordable. To learn more, visit the Student Financial Services website (https:// studentfinance.northeastern.edu) or call 617.373.3190.

- Financial Aid (p. 19)
- Student/Parent Loans (p. 19)
- Bill Payment (p. 20)
- Tuition, Room, Board, and Fees Per Semester (p. 21)


## 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, freshmen and transfer students must submit the Free Application for Federal Student Aid (FAFSA) (https:// fafsa.gov). Additionally, for institutional aid consideration, freshmen and transfer students must also complete the CSS Profile (https:// cssprofile.collegeboard.org) form. Returning students must submit the FAFSA each academic year. Submitting your financial aid application materials by the priority filing deadline date will ensure that you are considered for all available financial aid programs for which you qualify. To view the priority filing deadline dates, please 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. 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 financial aid administrator.

## 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 that whenever possible, students discuss the impact of such changes with their financial aid counselor 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 until this process is completed.

## Change in Circumstances

If the 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 their financial aid counselor for further evaluation. For additional information, please refer to the Student Financial Services website (https://studentfinance.northeastern.edu/ policies-procedures/changes-in-financial-circumstances).

## Northeastern's Monthly Payment Plan

Northeastern University offers a monthly payment plan, administered through Tuition Management Systems (TMS), which allows students and families to divide their educational costs into smaller, more manageable installments. For additional information, visit the financing options webpage (https://studentfinance.northeastern.edu/billing-payments/ financing-options).

## Student/Parent Loans

There are a number of educational loan programs available to assist 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. Additional information regarding private student and parent
loan options is available on the Student Financial Services website (https://studentfinance.northeastern.edu/billing-payments/financingoptions). When researching the loan and lender that best meet your needs, make sure you take into consideration the interest rate, origination, disbursement, repayment fees, and the quality of customer service.

## 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 pastdue balance may result in late fees, prevention of registration, prevention of grade release, prevention of participation in international 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/paymentmethods).

## Payment of Tuition

Accepted methods of payment are:

- Checks and E-checks can be made on the web via NUPAY on myNortheastern (http://myneu.neu.edu/cp/home/loginf). Check or money order, payable to Northeastern University.
- Through the monthly payment plan, administered through Tuition Management Systems. For additional information, visit the Student Financial Services website (https://studentfinance.northeastern.edu/ billing-payments/financing-options).
- Supplemental student and parent loans. Review options on the Student Financial Services website (https:// studentfinance.northeastern.edu/billing-payments/financingoptions).
- Additional payment options and payment details are available online (https://studentfinance.northeastern.edu/billing-payments/paymentmethods).
- 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. Review how to initiate payment at the Student Financial Services website (https://studentfinance.northeastern.edu/billing-payments/paymentmethods).


## 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). This agreement must be completed once per academic year, and is located on the student's myNortheastern portal. Failure to complete the SFRA will result in a hold which prevents registration.

## Discrepancies in Your Bill

Discrepancies in a bill should be addressed in writing by the student to the Office of Student Accounts at 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.

If there is a billing problem, pay the undisputed portion of the bill to avoid responsibility for any late fees.

## Overloads/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 course work 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. 27)" and
"Reduced Load Policies (p. 27)."

## 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 financial aid policies webpage (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-abroadrelated withdrawal policies, refer to the Global Experience Office (http:// www.northeastern.edu/geo/studyabroad).

## Refunds for Course Withdrawals

Undergraduate day students should refer to the "Overload Policy (p. 27)" and "Reduced Load Policies (p. 27)" 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.

## Refunds for Complete Withdrawal from the University

## FULL SEMESTERS

Official withdrawal during the first $100 \%$ refund
week
Official withdrawal during the $100 \%$ refund second week
Official withdrawal during the third $100 \%$ refund week
Official withdrawal during the fourth $60 \%$ refund

## week

Official withdrawal during the fifth $40 \%$ refund week
Official withdrawal after the fifth no refund week

SUMMER HALF SEMESTERS
Official withdrawal during the first $100 \%$ refund
week
Official withdrawal during the $100 \%$ refund
second week
Official withdrawal during the third $50 \%$ refund week
Official withdrawal during the fourth $25 \%$ refund

## week

Official withdrawal after the fourth no refund week

## 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.

## 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 Costs

The total costs for students living in our residence halls and enrolled in the 15 -meal plan are as follows:

## TUITION AND FEES

|  | Per Full Semester | Per Summer Half <br> Semester |
| :--- | :--- | :--- |
| Tuition | $\$ 25,225$ | $\$ 12,613$ |
| Student center fee | $\$ 75$ | $\$ 38$ |
| Student activities fee | $\$ 136$ (per year) |  |
| Campus recreation fee | $\$ 56$ | $\$ 33$ |
| Undergraduate student <br> fee | $\$ 310$ | $\$ 155$ |

ROOM, BOARD, AND FEES PER SEMESTER

|  | Per Full Semester | Per Summer Half <br> Semester |
| :--- | :--- | :--- |
| Residence activity fee | $\$ 32$ | $\$ 16$ |
| Housing | range from $\$ 4,470-$ <br> $\$ 5,720^{1}$ | approximately $1 / 2$ of <br> semester rate $^{1}$ |
| $15{\text {-meal } \text { plan }^{2}}^{\$ 3,665}$ | $\$ 1,833$ |  |

${ }^{1}$ Rates vary depending on occupancy and assignment. Visit the housing website (http://www.northeastern.edu/housing) for a detailed list of housing rates.
2 See "Dining Services (p. 23)" 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. 27)" and "Reduced Load Policies (p. 27).")

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 he or she stays 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 1, May-June, and summer 2, July-August). The six-month coop assignments generally span either the spring plus summer 1 terms or the summer 2 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 15, 2018, from students accepted for Early Decision I, by February 20, 2018, for students accepted for Early Decision II, and by May 1, 2018, from all other accepted freshman students entering in September 2018. A \$350 international student fee is included in the enrollment deposit for international students. This fee supports programs and services provided by the Office of Global Services (OGS) (https://www.northeastern.edu/ogs) on campus. Housing is required for all first- and second-year students. Students entering at other times of the year, and transfer students entering in September, should note the required deposit due date on their letter of admission.

## UNDERGRADUATE STUDENT FEE

The mandatory undergraduate student fee supports enrollmentrelated 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 \$310 undergraduate student fee is assessed each in-class or study-abroad term for undergraduate students. During summer half semesters, 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 activities fee of $\$ 136$ is charged to support student clubs.

## CAMPUS RECREATION FEE

All undergraduate students at Northeastern University will be assessed a campus recreation fee of \$56 per in-school full semester or \$33 per inschool 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)
Since September 1989, Massachusetts law (Massachusetts General Laws, Chapter 15A, Section 18) has required every full-time and parttime student enrolled 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. Students who have comparable health plan coverage may waive NUSHP by completing a waiver on their myNortheastern portal (https://my.northeastern.edu) by the designated deadline date each academic year. For deadlines and additional information, visit the NUSHP website (http://www.northeastern.edu/ nushp).

## 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. Housing is required for all first- and secondyear 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, he or she must do so, in writing, to 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 OGS.

## 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.

## TERMINATION CHARGE AND ROOM RATE ADJUSTMENTS

The university provides on-campus and leased accommodations that are assigned each term. Students are billed at the beginning of each term and are obligated to pay the full charge for the term. The high demand for on-campus housing makes it necessary for Housing and Residential Life to enforce its cancellation policy strictly. It is imperative to note that a student whose Residence Hall and Dining License Agreement is revoked for disciplinary reasons is subject to the same financial assessments as outlined below.

Students who are suspended or expelled from the university will have their current and any active housing application(s) canceled effective the date of suspension. When suspension or expulsion is sanctioned, the student will be charged according to the "Termination Credit Policy for Official Withdrawal from the University" below. All housing deposits on file will be forfeited. Upon readmittance to the university, the student
must reapply for housing and if capacity has been reached, the student will be placed on the housing waitlist.

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 complete the official housing withdrawal form and check out properly with their residence director. Housing charges for students who withdraw from the university will be prorated only through the end of the fifth week of full semesters and through the end of the fourth week of summer half semesters.

Termination Credit Policy for Official Withdrawal from the University Fall and Spring Semesters

| Official Withdrawal from University | Room Charge Credited |
| :--- | :--- |
| Week 1 | 100 percent $^{1}$ |
| Week 2 | 90 percent $^{1}$ |
| Week 3 | 80 percent $^{1}$ |
| Week 4 | 60 percent $^{1}$ |
| Week 5 | 40 percent $^{1}$ |
| After week 5 ${ }^{2}$ | 0 percent $^{2}$ |

1 This credit can also be based on the daily charges of time used.
${ }^{2}$ 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 $^{1}$ |
| :--- | :--- |
| Week 2 | 75 percent $^{1}$ |
| Week 3 | 50 percent $^{1}$ |
| Week 4 | 25 percent $^{1}$ |
| After week $4^{2}$ | 0 percent $^{2}$ |
| 1 |  |
| 2 | This credit can also be based on the daily charges of time used. |
| Students withdrawing after week 4 incur a 100 percent room charge |  |
| for the term. |  |

## Termination Charge Policy for Cancellation from the Residence Halls for Matriculating Students

Failure to provide timely, written notification of cancellation of housing will result in a charge to students for their assigned space. For example, if you are assigned to a room for the fall semester with a rate of $\$ 5,350$ and you cancel your housing on June 20, 2017, you will be assessed 50 percent of your room rate, which is $\$ 2,675-$ not 50 percent of your deposit for the fall term.

If you cancel your housing prior to receiving an assignment, you will be assessed a cancellation fee according to the cancellation schedule at the rate of a standard double room for freshmen or a standard double in an apartment for upperclass and graduate students. 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 <br> Charged | For Fall <br> Semester | For Spring <br> Semester | For Summer 1 For Summer 2 |
| :--- | :--- | :--- | :---: |
| Deposit Before Before | Before 3/1/18 Before |  |  |
| refunded; no | $5 / 15 / 17$ | $10 / 1 / 17$ | $4 / 15 / 18$ |
| charge |  |  |  |

25 percent After 5/15/17 After 10/1/17 After 3/1/18 After 4/15/18 of term room
charge ${ }^{1}$
50 percent After 6/15/17 After After 3/15/18 After 4/30/18 of term room 10/15/17
charge ${ }^{1}$
75 percent After 7/15/17 After 11/1/17 After 4/1/18 After 5/15/18 of term room
charge ${ }^{1}$
100 percent After 8/1/17 After 12/1/17 After 4/15/18 After 5/31/18 of term room
charge ${ }^{1}$
${ }^{1}$ The student's deposit for the term is applied to the cancellation charge assessed.

## DINING SERVICES

All students living in university residence halls that require students to have a meal plan are required to participate in the 19-, 15 -, or 10-meal plan operated by University Dining Services.

All freshmen (during their first two semesters as matriculated college students) living in university residence halls are required to have a traditional meal plan. They are required to have at least a 10-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 5 -meal plan.

Students living in a meal-plan-required residence hall are automatically billed for the 15 -meal plan but can increase to a 19-meal plan or decrease to a 10-meal plan. 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 the dining website (http://www.nudining.com).

The traditional meal plan rates for 2017-2018 are shown below. For updated 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 |
| :--- | :--- | :--- |
| 19 | $\$ 3,970$ | $\$ 1,985$ |
| 15 | $\$ 3,665$ | $\$ 1,833$ |
| 10 | $\$ 3,175$ | $\$ 1,588$ |
| 5 | $\$ 1,630$ | $\$ 815$ |

## 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. Profiler meal plans for 2017-2018 are valid from August 27, 2017, through August 25, 2018, and may be used at:

- Levine Marketplace
- Stetson West
- International Village
- Outtakes
- Rebecca's Café in Churchill Hall
- West End in Curry Student Center

Note: Dining locations are limited during the summer.
The profiler rates for 2017-2018 are shown below. For updated rates, visit the tuition and fees webpage (https:// studentfinance.northeastern.edu/billing-payments/tuition-and-fees)

| Meals | Cost |
| :--- | :--- |
| 25 | $\$ 445$ |
| 50 | $\$ 870$ |
| 86 | $\$ 1,465$ |
| 110 | $\$ 1,845$ |

Profiler plans are nonrefundable and cannot be modified.

## Husky Dollars

Students can deposit funds into a Husky Dollar account and access these funds using their Husky Card at many restaurants and retail locations on and off campus, including the university's bookstore.

Note that the account accrues no interest and cannot be used for cash withdrawals. Visit the Husky Card website (http://www.northeastern.edu/ huskycard) for additional information, including vendor locations and instructions on how to add funds to your account.

## Academic Policies and Procedures

This section presents general information about what is expected of students and how progress toward graduation is measured. The university assumes no liability for any delay in providing or failing to provide educational or related services or facilities due to causes beyond the reasonable control of the university. Causes include, but are not limited to, power failure, fire, strikes by university employees or others, weather damage, and acts of public authorities. However, when in its judgment it is appropriate to do so, the university will exert reasonable efforts to provide comparable or substantially equivalent services, facilities, or performance; but its inability or failure to do so shall not subject it to liability. No faculty member, administrator, or other representative of the university shall make any representations to, or enter into any agreements with, or act toward any student or other person in any manner that is not in conformity with established university policies, practices, and procedures as expressed in this or any other official university document.

## Academic Integrity Policy

The following academic integrity policy was designed and approved by the Student Government Association and was also approved by the Faculty Senate.

Visit the Office of Student Conduct and Conflict Resolution (http:// www.northeastern.edu/osccr/academic-integrity-policy) website 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.

## Accommodations for Students with Disabilities

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 $\operatorname{AD}(H) D$
- 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 at: http:// www.northeastern.edu/drc/ for additional information or contact staff at 617.373.2675.

## Attendance Requirements

The university expects students to meet attendance requirements in all courses to qualify for credit. Attendance requirements vary; 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. Classes for day students are normally scheduled from 8:00 a.m. to 5:40 p.m., Monday through Friday. 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 course work 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, accident, catastrophic event such as fire, and bereavement, may cause a student to be absent from class. If such events occur, students should notify their academic advisor and instructors as soon as possible to apprise them of the circumstances leading to their absence, as well as how much time will be missed. Students should work with their instructors to develop a plan, with a timetable, to make up missed course work. Students may be asked to provide documentation that the class absence is warranted. Faculty and students should note that the University Health and Counseling Service does not provide sick notes or medical excuses except for long-term illness. One approach to documentation of shortterm illness is that students themselves draft and sign absence notes to be provided to their instructors upon their return to class, with integrity in this process an expectation of the Northeastern Academic Integrity Policy. 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.

## 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 (http://www.myneu.neu.edu).

## 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 (http://www.myneu.neu.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.

## Course Numbering System

Every semester course number at Northeastern University consists of two parts:

- A two- or four-letter subject code
- A four-digit number

For example, in the course number Principles of Macroeconomics (ECON 1115), ECON is the subject code, and 1115 is the four-digit number.

The four-digit number indicates the level of the course as indicated below.
UNDERGRADUATE

| 0001-0999 | Orientation and basic |
| :---: | :---: |
|  | No degree credit |
| 1000-1999 | Introductory level (first year) |
|  | Survey, foundation, and introductory courses, normally with no prerequisites and designed primarily for students with no prior background |
| 2000-2999 | Intermediate level (sophomore/ junior year) |
|  | Normally designed for sophomores and above, but in some cases open to freshman majors in the department |
| 3000-3999 | Upper intermediate level (junior year) |
|  | Designed primarily as courses for juniors; prerequisites are normally required, and these courses are prerequisites for advanced courses |
| 4000-4999 | Advanced level (senior year) |
|  | Designed primarily for juniors and seniors; also includes specialized courses such as research, capstone, and thesis |


| GRADUATE |  |
| :--- | :--- |
| 0001-0999 | Orientation and basic |
| $5000-5999$ | No degree credit <br> First-level graduate <br> Courses primarily for graduate <br> students and qualified <br> undergraduate students with <br> permission |
| $6000-6999$ | Second-level graduate <br> Generally for master's and clinical <br> doctorate only |
| $7000-7999$ | Third-level graduate <br> Master's- and doctoral-level <br> courses; includes master's thesis |
| $8000-8999$ | Clinical/research/readings |


|  | Includes comprehensive exam <br> preparation |
| :--- | :--- |
| $9000-9999$ | Doctoral research and dissertation |

## 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 Blackboard 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, $1 / 16^{\text {th }}$ 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, $1 / 16^{\text {th }}$ of the fullsemester 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 course work 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. Firstyear 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 auditadd period. Excluded courses are co-op, labs, language courses, any offcampus course, any online course, and any course required for the major or degree. Audits carry no academic credit.

## Taking a Course while on Co-op or on Summer Vacation

Students who wish to take a course while on co-op or on summer vacation must complete an appropriate form in their college academic student services office before the term begins. Students on co-op should complete the petition registration form, and students on summer vacation should complete the summer-only petition registration form. Students who do not file the appropriate form will be dropped from their preregistered courses. Students who take a course while on co-op will be billed the overload tuition rate. Students who take a course while on summer vacation will be billed at the underload tuition rate. (See "Overload Policy" and "Reduced Load Policies" above.)

## Transfer Credits for Current Students

Once they matriculate, students are expected to complete all course work 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 (http:// www.myneu.neu.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 (http:// www.myneu.neu.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 (http:// www.myneu.neu.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 (http:// www.myneu.neu.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 (http://www.northeastern.edu/ registrar/form-late-reg.pdf) is available online.

## 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 finalexam schedule webpage (http://www.northeastern.edu/registrar/ finexsched.html).
- 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 (http:// www.myneu.neu.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 (http://www.northeastern.edu/registrar/form-finex-conflict.pdf) 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.


## Course Credit Guidelines

Course credit hours (semester hours) are assigned to a course based on the established national educational standard that one credit hour is equal to approximately three hours of student learning time per week over a period of a semester. 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 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.

## Grading System

Grades are officially recorded by letters, evaluated as follows.

| Letter Grade | Numerical Equivalent | Explanation <br> A |
| :--- | :--- | :--- |
| Outstanding <br> achievement |  |  |
| A- | 4.000 |  |
| B+ | 3.667 | Good achievement |
| B | 3.333 |  |
| B- | 3.000 | Satisfactory |
| C+ | 2.667 | achievement | | C | 2.333 | Poor achievement |
| :--- | :--- | :--- |


| 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 semesters. 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.

## 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.


## 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.

Freshmen with multiple course deficiencies, including incomplete grades, may be required by their college academic advisor to rectify the deficiencies within a period of time less than the normal year.

To request an incomplete grade, the student must obtain and complete in consultation with the instructor an Incomplete-Grade Contract (http:// www.northeastern.edu/registrar/form-inc-grade.pdf) 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 course work must be completed within one calendar year from the end of the semester in which the course was offered.)

University policy states that any grade outstanding for twelve 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 course work.

## 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 course work.

## 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 course work. 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, a student may be advised to take a preapproved course at Northeastern's College of Professional Studies or 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 can be found on $p$. 1 of the Undergraduate Student Handbook (http://www.northeastern.edu/ osccr/wp-content/uploads/2017/06/2017-18-UG-Student-Handbook.pdf).

## 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 <br> 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. 29) for a complete list of grades and numerical equivalents.

## Grade Reports

Grades are available to students approximately three days after the end of each semester via the myNortheastern web portal (http:// www.myneu.neu.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 (http://www.myneu.neu.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). All questions concerning transcript requests should be directed to 617.373.2300, TTY 617.373.5360.

## 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 <br> cum laude) |
| $3.850-4.000$ | Graduate with highest honor <br> (summa cum laude) |

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

## 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 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. See the program's website (http:// www.northeastern.edu/honors) for information about the guidelines on how continuing students may join.

## 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.

## 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. 19)."

## 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 should 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. 30)" and "Clearing an Academic Deficiency (p. 30)."

## 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 <br> semester hours |
| Junior | At least 64 but less than 96 <br> semester hours |
| Senior | At least 96 semester hours |

## 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 course work 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## 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.

## 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 submit a petition form to earn a minor as early as possible and, generally, no later than the end of the junior year, by applying to the department offering the minor. 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 (http://www.northeastern.edu/registrar/changemajoroffices.html). 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 College of Computer and Information Science 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 course work 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 and Independent Majors

Students with academic interests not available in the context of existing majors, minors, and double majors may propose a combined or independent major. In these majors, students pursue in-depth study in areas that are supported and approved by the appropriate Northeastern faculty members.

## COMBINED MAJORS

Combined majors include at least nine courses associated with each of two participating disciplines. There must be at least one course that acts as a bridge between the disciplines. No more than two courses may count for both disciplines, i.e., there must be at least 16 courses in the combined major. 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. There are three categories of combined majors:

1. A number of defined combined majors currently exist where the curriculum is specific to each individual program; see the online list of current combined major program options (http:// www.northeastern.edu/registrar/major-2.html\#defined).
2. A number of disciplines have preapproved template programs that may be paired in a variety of combinations to yield combined majors; see the online list of current preapproved template programs (http:// www.northeastern.edu/registrar/major-2.html\#templates).
3. Disciplines will consider combined programs upon student request.

## Currently Defined Combined Major

Students may request admission to a currently defined 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. Students completing a combined major receive one degree and one diploma. The combined major and home college will appear on the transcript and diploma.

## Student-Requested Combined Major

Students may request admission to a new combined major via the Combined Major Approval form (http://www.northeastern.edu/registrar/ form-maj-comb.pdf) that requires approval by both disciplines/colleges together with an approved curriculum. The request may be for a combined major comprised of preapproved template programs or for a new combined major to be considered by the participating disciplines. During the planning process, advisors from both disciplines will be designated, and one will be identified as the primary advisor. If the two disciplines partnering in the combined major are in different colleges, a home college will be designated in which the student will be registered and from which he or she will be graduated. A meeting of the student and both advisors representing the two disciplines must be held to plan the combined-major curriculum and to consider NUpath requirements. See the online list of discipline advisors and college contacts for new studentrequested combined majors (http://www.northeastern.edu/registrar/ contacts-stu-req-combined.html).

Students completing a combined major receive one degree and one diploma. The combined major and home college will appear on the transcript and diploma. When the two components of the combined major individually offer different degree designations, the degree designation that will appear on the transcript and diploma will be designated during the approval process.

## INDEPENDENT MAJORS

In the rare cases when students have academic interests that fall within the expertise of Northeastern faculty members and that are not available in the large number of existing majors, minors, and combined majors, they may propose an independent major. Independent majors form an integrated 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 and may involve an integrative project. 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 the associate dean overseeing undergraduate studies in their current home college or the college most relevant to the proposed course of study.

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 he or she will be graduated. Students completing an independent major receive one degree and one diploma. The independent major and home college will appear on the transcript and diploma. 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 (http://www.northeastern.edu/ registrar/form-maj-ind.pdf) 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. 40))
- 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.

## 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).

Northeastern University School of Law also admits students from a small number of programs in the College of Social Sciences and Humanities to a $3+3$ program 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.

## Personal Information

## Change of Name

Report all name changes to the Office of the Registrar immediately. This is especially important when students marry and wish to use a new name on university records.

## Change of Address

Report all address changes via the myNEU web portal (http:// www.myneu.neu.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 within ten days in order to ensure compliance with Student and Exchange Visitor Information System (SEVIS) requirements.

## 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 parttime)
- 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

## Student Right-to-Know Act

See online information about the Student Right-to-Know Act (http:// www.northeastern.edu/registrar/right-to-know.html).

## Leaves of Absence and University Withdrawal

## General Leave of Absence Policy

Students who wish to take a leave of absence are encouraged to apply for the leave by filling out the proper petition through the myNortheastern web portal before the last day to drop without a $W$ in a term. Students can request a leave up 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. Students can take up to one year of leave, excluding medical and emergency leaves of absence. Any leave of absence type, if approved, will take into account the following conditions:

- Students who do not return at the end of the leave will be withdrawn and must contact their college for re-entry prior to the term start.
- Students must return to classes, not 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.
- Students in university housing should refer to the Housing and Residential Life Office for policy information.
- A Student's enrollment status cannot include more than one academic year of consecutive non-class 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.
- International students must make an appointment with the Office of Global Services (OGS) (http://catalog.northeastern.edu/professional-studies/academic-policies-procedures/absence-withdrawal/ \#military) to discuss leave of absence procedures in accordance with federal regulations.

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 re-entry at the time of registration for the return term. Students are expected to register for classes upon returning from a leave of absence.

## 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 petitions must be initiated at University Health and Counseling Services (UHCS). Students are not allowed to take classes for credit toward their degree at Northeastern while on a medical leave of absence. Students can petition their college for an exception to take classes elsewhere while on a medical leave of absence based on extenuating circumstances.

Students who wish to re-enter the university following a medical leave must contact UHCS. Re-entry from a medical leave requires receipt of all documentation delivered to UHCS on or around one month prior to the planned re-entry 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 re-entry process, along with the application for leave, can be found at the UHCS website (http:// www.northeastern.edu/uhcs/access-to-care).

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 can access the application and submit their request for an Emergency Leave of Absence online by going to the myNortheastern web portal (http://www.myneu.northeastern.edu), and typing "Registrar Forms" in the search box, choosing Leave of Absence, and then selecting Emergency as the leave type.

The university's medical leave of absence and emergency leave policy states that all tuition charged for the term in which the leave has been granted will be held by the university and applied toward future tuition charges in the same academic program. This does not include housing and other fees. Outstanding balances (including unpaid balances) for the academic term in which the leave is taken are still due the university. Tuition adjustments are made depending on the timing of the leave. The adjustments would follow the same schedule as the official withdrawal adjustments. See the schedule for "Refunds for Complete Withdrawal from the University (http://catalog.northeastern.edu/undergraduate/ expenses/bill-payment/\#comp-with)." Financial aid recipients must contact their financial aid counselor to understand the effects on aid received.

If the leave extends more than six months, student loans may go into repayment. Students enrolled in the Northeastern University Student Health Plan (NUSHP) will remain enrolled in the plan for the plan year, ending August 31.

## 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 re-entry 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 re-entered 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 re-enter the university following a medical leave must contact the Medical Leave Team at UHCS. Re-entry from a medical leave requires receipt of all documentation delivered to UHCS on or around one month prior to the planned re-entry to classes. Once all documentation is received by the Medical Leave Team, it will be reviewed and the student will be notified of the decision. Students must attend classes for the term they wish to return from medical leave of absence.

## Leave of Absence Due to Military Deployment or Missionary Service

When a student is called to active duty or missionary service, they must apply for the leave by filling out the proper petition through the myNortheastern web portal (http://myneu.northeastern.edu). 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, which 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 additionally fill out a form for leave of absence with OGS.

## Leave of Absence for International Students

International students should discuss maintenance of proper U.S. immigration status with an advisor at OGS before requesting any type of 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, academic, or medical reasons. In the last case, the vice president for student affairs will review the recommendations of the director of health services to determine whether the student should withdraw. Withdrawals are made only when it is determined that the student is a danger to himself or herself or to other members of the university community, or when the student has demonstrated behavior detrimental to the educational mission of the university.

Note that withdrawal from the university will impact an international student's immigration status. Thus, international students should discuss the means to maintain proper U.S. nonimmigrant status with an advisor at OGS before requesting or after having been placed on withdrawal.

## University Academics

- NUpath (p. 37)
- University-Wide Requirements (p. 41)
- Living and Learning Communities (p. 41)
- Experiential Learning (p. 41)
- Cooperative Education (p. 41)
- Research and Creative Activity (p. 42)
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## NUpath

## Learning, Knowing, Doing, Leading

NUpath is Northeastern University's set of institution-wide general education requirements for all students in all majors. The goal of the NUpath 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 NUpath a unique tool for personalized curricular enrichment. NUpath is competency based rather than course based. It is built around essential, broad-based knowledge and skillssuch as understanding societies and analyzing data-integrated with specific content areas and disciplines.

NUpath requirements are met throughout a student's program of study. NUpath 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. NUpath courses may not be taken pass/fail. NUpath 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. 37)
- Learning Goals (p. 38)
- Writing-Intensive Courses (p. 40)
- Additional Requirements for BA Students (p. 40)


## NUpath Requirements

NUpath 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. NUpath requirements are as follows:

- Natural and Designed World
- Creative Expression and Innovation
- Interpreting Culture
- Formal and Quantitative Reasoning
- Societies and Institutions
- Analyzing and Using Data
- Differences and Diversity
- Ethical Reasoning
- Writing across Audiences and Genres
- Integrating Knowledge and Skills through Experience
- Demonstrating Thought and Action in a Capstone

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

- Natural and Designed World
- Creative Expression and Innovation
- Interpreting Culture
- Formal and Quantitative Reasoning
- Societies and Institutions
- Analyzing and Using Data
- Differences and Diversity
- 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 NUpath attributes of the Northeastern course equivalents. Up to five of the
following eight requirements can be met by transferred or placement test credits:

- Natural and Designed World
- Creative Expression and Innovation
- Interpreting Culture
- Formal and Quantitative Reasoning
- Societies and Institutions
- Analyzing and Using Data
- Differences and Diversity
- Ethical Reasoning

Transfer credits cannot be used to fulfill the capstone or experiential requirements. Of the writing requirements (p. 40), only the first-year writing requirement can be met by transferred or placement test credits.

## NUpath 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:

1. Formulate a question that can be answered through investigation or a challenge that can be addressed through research or design.
2. 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.
3. 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:

1. Describe creative processes in one or more disciplines (e.g. art, business, writing, science, engineering).
2. Generate an artifact (e.g., design, poem/essay, application, visualization, musical composition, product, prototype) through a creative process.
3. 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:

1. Recognize and identify a variety of cultural practices and creations, their forms of production, and development over time.
2. Acquire and assess techniques of interpretation (including critical reading and observation techniques), criticism, and analysis of cultural practices, texts, and/or artifacts.
3. 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:

1. Recognize when examination of a phenomenon or situation can benefit from problem-solving techniques and analyses that use formal reasoning.
2. 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.
3. 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:

1. Describe current theories of how social, political, or economic institutions, systems, and processes work.
2. Explain the historical and cultural contingency of many descriptions and explanations of human behavior, institutions, systems, and processes.
3. 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:

1. Describe how data may be acquired, stored, transmitted, and processed.
2. Analyze at least one important type of data and summarize the results of an analysis in ways that provide insight.
3. Use mathematical methods and/or computational tools to perform analysis.
4. 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:

1. Describe how notions of human difference have changed over time and across local and global contexts.
2. Discuss the value in recognizing, respecting, and embracing human diversity and how diversity contributes to culture and society, including civic sustainability.
3. Evaluate and compare two or more theories of human difference and approaches to cultivating and leveraging diversity.
4. 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:

1. Describe the moral and ethical elements of an issue, problem, or situation.
2. Explain at least two key ethical theories.
3. Apply ethical theories to moral dilemmas and personal positions.

## Writing Across Audiences and Genres

## Short Name: Writing Across Audiences/Genres

Note: This requirement is met by four courses. See more details under Writing-Intensive Courses (p. 40).

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

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

1. Adapt writing for multiple academic, professional, and public occasions and audiences.
2. Develop facility with genres of their chosen academic field and profession.
3. Identify credible, relevant sources and engage meaningfully with them in their writing.
4. Demonstrate control of writing conventions, including citation standards and mechanics.

## Integrating Knowledge and Skills Through Experience

## Short Name: Integration of Experience <br> 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:

1. Apply knowledge and skills in new, authentic contexts.
2. Gain new knowledge and develop new skills to successfully engage in unfamiliar tasks and activities.
3. 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.
4. 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 <br> and ENGW 1111 | Introductory First-Year Writing <br> and First-Year Writing | 8 |
| ENGW 1102 | First-Year Writing for Multilingual <br> Writers | 4 |
| ENGW 1101  <br> and ENGW 1102 and First-Year Writing for Multilingual | 8 |  |

Depending on performance in Introductory First-Year Writing (ENGW 1110) or (ENGW 1101), 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 course placement webpage (http://
www.northeastern.edu/writing/first-year-writing/course-placement) for details.

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

Note: (ENGW 1101) and Introductory First-Year Writing (ENGW 1110) are not credited toward graduation in the College of Engineering.

## 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 nonnative 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 frequent and regular writing, assessment and revision of student work, and the opportunity for students to improve their work.

## Additional Requirements for BA Students

In addition to successfully completing the university requirements of NUpath (p. 37), 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 course work (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 languagespecific 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 myNEU web portal (http://www.myneu.neu.edu), click on the "SelfService" tab, then on "My Degree Audit."
3. Demonstrate conversational 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

## 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.

## Living and Learning Communities

All first-year students are required to live on campus. The First Year Experience (FYE) program has been developed to help Northeastern University's first-year students transition into this new and exciting chapter of their lives-college life. The Department of Residential Life is dedicated to working with Northeastern students to help them build strong community living environments that support personal development and academic success. These environments provide opportunities to learn outside of the classroom through the Living Learning Community program.

The foundation for the FYE program is held by four pillars: personal development, academic success, experiential learning, and community development. These pillars are the guiding principles of the programs and resources specific to the needs of first-year students. The goal is to help students navigate the university and familiarize them in their first year living away from home and with life in a new environment.

## Experiential Learning

Website (http://www.northeastern.edu/experiential-learning)
Experiential learning offers the opportunity for an education that is richer and more meaningful, 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 course work and experiential learning occurs throughout the major curriculum as well as in the required capstone course.

## 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 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.

Northeastern's cooperative education is a full-time employment experience outside the classroom supporting the concept of experiential learning. Students use the full-time experience to reflect on areas of study and academic interest. Cooperative education experiences are recalled throughout the student's academic career in classes and capstone papers. 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. In addition, those who wish to do so may live on campus while on co-op. International students must obtain proper authorization from the Office of Global Services (OGS) (http://www.northeastern.edu/ogs) before engaging in or extending any period of co-op.

## Co-op Scheduling Options

Northeastern provides the flexibility to pursue co-op and other experiential opportunities in a way that fits individual educational goals. Full-time undergraduates may complete up to three six-month co-ops in five years and as many as two six-month co-ops in four years at Northeastern. The design of some programs, such as pharmacy and theatre, requires four-month co-ops.

All co-op patterns share four semesters when students attend classes on a full-time basis: fall and spring terms of the first year, fall term of the second year, and final term of the senior year. In the first three terms, students have an opportunity to develop academic expertise as well as professional development skills. In the last term, students have an opportunity to integrate their in-class and experiential activities in a capstone course. Generally, half of the required course credit will be completed in these four terms.

The remaining half of the required course credit may be arranged in a variety of schedules that incorporate six-month co-op periods and fulltime classes in full semesters and summer half semesters. Students may also elect to take courses (on-campus or online) during co-op periods or to complete extra course credit in some terms. Advisors assist students in developing plans of study that best fit the students' experiential learning goals and the requirements of majors/minors.

For better financial planning, students and parents should be aware that:

1. No tuition is charged while a student is on co-op only (although the student will pay room and board if he or she stays in the dorm).
2. If a student takes a class/earns academic credit while on co-op, tuition will be charged at the per-credit rate.
3. Financial aid will be distributed to match the student's academic program and tuition bills.

## Co-op Eligibility

Every student must meet specific eligibility requirements to participate in co-op. These are general requirements for all students; however, students must work closely with their cooperative education coordinator to ensure that they meet any college- or major-specific requirements and are aware of major-specific logistics, deadlines, and required paperwork. In accordance with U.S. federal regulations, international students must not begin, extend, or resume any co-op experience without first receiving employment authorization from the OGS.

## General Requirements

Students must:

- Take and pass a preparatory course before starting co-op.
- Satisfactorily complete the requirements and deadlines set by their specific co-op program.
- Register for co-op, either through their pattern of attendance or through a change in pattern of attendance, which must be approved by their cooperative education coordinator and academic advisor.
- Have received a Satisfactory (S) grade and have resolved any outstanding Incomplete (X or I) grades for previous co-ops. Students who have received an Unsatisfactory (U) grade must work with their cooperative education coordinator to reestablish eligibility in accordance with the policies and requirements of their program.
- Resolve any previous disciplinary or academic probation issues, or have their cooperative education coordinator approve a plan to resolve these issues, prior to being referred to co-op jobs.
- Have any self-developed co-op approved by their 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.


## Academic Requirements

Students must:

- Be making satisfactory progress toward their degree as defined by the university, their colleges, and the curricula in their major programs.
- Have a cumulative 2.000 grade-point average to be eligible to go on domestic co-op or an international co-op at the time they apply for a co-op position.
- Students must be full-time while on co-op. Full-time status for co-op is defined as either.
- one full-time co-op job,
- two part-time co-op jobs, or
- one part-time co-op job and half-time classes.


## Transfer 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. Students transferring from one major to another within Northeastern
must have completed the requisite courses and requirements as defined by their current major's co-op program.

## Appeals Process

If students do not meet the co-op eligibility requirements and/or their cooperative education coordinator has determined they are ineligible to go on co-op, they may appeal to the director of cooperative education for their college. If the matter cannot be resolved informally, they may appeal the decision to the college academic standing committee.

## Registering for Co-op

Students are registered for co-op based on the job placement in NUcareers. Registration into the co-op experience class occurs one month before the term of the co-op job. All co-op placements need to be approved by a co-op coordinator.

## Co-op Documentation

Students who fully and successfully participate in co-op will receive a grade of Satisfactory; those who fail to complete their co-op assignment will receive a grade of Unsatisfactory. These grades will appear on the student's academic transcript. However, no academic credit is awarded for the completed co-op assignment.

## Further Information

For more detailed information about co-op policies and procedures, see the Cooperative Education Student Handbook.

## Research and Creative Activity

Website (http://www.northeastern.edu/research)
Pursuing research at the university level makes our students knowledge creators and develops their teamwork skills. The discipline of mind that research requires is one of the best ways to learn to think critically. With dozens of majors and minors, many interdisciplinary research centers and institutes, and more than six hundred full-time faculty engaged in active research and scholarship, Northeastern offers countless opportunities for students to apply their classroom learning to the process of discovery.

Undergraduate students can participate in research and creative activity in a variety of formats, including the following:

- Research courses, which generally fulfill major elective requirements
- Research co-ops or internships
- Community-based research
- Research-based activity as the option for work-study work
- Research as a volunteer activity
- Junior/senior honors research projects

Undergraduate students can apply for funding to support their research projects through the university-wide Provost Undergraduate Research and Creative Endeavor Program and from a number of other offices and programs. They often present their research findings at Northeastern's annual Research Expo, as well as at academic conferences and in scholarly journals.

## Service-Learning

Website (http://www.northeastern.edu/servicelearning)
Community service is an integral part of Northeastern's mission. But more than good works, community service through structured
service-learning programs on our campus 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.

Students participate in organized service projects, coordinated by their professors and/or program directors, which meet needs identified by the community. 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.

## Global Experience

Website (http://www.northeastern.edu/studyabroad)
Marina Markot, PhD, Director
Global Experience Office
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617.373 .5702 (fax)
geo@northeastern.edu
Northeastern University strongly endorses global experience as an important dimension of learning. To foster this, it maintains a Global Experience Office (GEO) that has developed a series 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 and political sensitivity, utilize and strengthen foreign language skills, and explore global career options.

## International Study

While studying abroad in a Northeastern-sponsored program, students maintain full-time Northeastern status and earn Northeastern credits. In all cases, upon successful 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. Traditional studyabroad 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).

Students who wish to study abroad should start by researching program opportunities on the GEO website (http://www.northeastern.edu/ studyabroad) or by attending an information session or walk-in advising hours. Students refine their search by working with GEO advisors who provide the final planning assistance. Schedules for information sessions and walk-in advising hours are available on the GEO website and in the GEO office. After choosing a program, students should also consult with their departmental or college advisors. International students should also consult with the Office of Global Services (OGS) (http:// www.northeastern.edu/ogs) to determine if an updated I-20 for reentry 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.

## 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 (semester or summer). Students are based at a partner institution 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; University of Montevideo in Montevideo, Uruguay; London School of Economics in England, United Kingdom; and the University of Tokyo in Tokyo, Japan.
2. Dialogue of Civilizations. The Dialogue of Civilizations are faculty-led study-abroad programs that build upon and enhance the students' academic studies and training in Boston. The Dialogues 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.
3. Internship. These 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.
4. International research. The focus of a student's time abroad is on an independent research project. In most cases, the studyabroad 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, and oceanography while sailing in the Atlantic/Pacific cruise track of the SEA Semester Program.

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

## Global Co-op

The Global Cooperative Education Program provides opportunities for Northeastern students to co-op on all seven continents with foreign 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 should consult with the 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 coop.

## World Languages Center

## Stacey Bourns, PhD

Director
201 Renaissance Park
617.373.3131

Stacey Bourns, Director, s.bourns@northeastern.edu
The primary goal of the World Languages Center (WLC) is to offer an expanding array of languages in a variety of instructional formats for

Northeastern students 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, German, or Spanish must take the online written placement exam if they wish to enroll in a French, German, or Spanish language class. The link for this exam can be found on the WLC or the Languages, Literatures, and Cultures 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. Classes missed as a result of registering late for a class will count as unexcused absences; 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. These immersion classes are numbered 1301, 1302, $2301,2302,3301$, and 3302 and are designed to be part of a facultyled study trip. Typically, these classes are offered during summer 1 and summer 2 terms. These courses will count toward fulfillment of the BA language requirement, assuming a student receives a grade of $C$ or better.

## Study-Away/Abroad Classes

The WLC will authenticate credit-bearing language classes taken in studyaway/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.

## BSIB Language Classes

The Bachelor of Science in International Business program is offered through the D'Amore-McKim School of Business. Because of the intensive expectations of the program (one semester in classes abroad, one semester international co-op), the WLC offers classes that are restricted to BSIB students only. These courses are numbered 1201, 1202, $2201,2202,3201,3202,4201$, and 4202. Only BSIB majors may enroll in these BSIB-designated courses.

## University Scholars Program

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617.373 .6597 (fax)
universityscholars@northeastern.edu
Launched in fall 2012, the Northeastern University Scholars Program is a full-tuition scholarship program offered to a limited number of students. Individuals invited to join this program have distinguished themselves academically; displayed an entrepreneurial approach to study, achievement, involvement, and life; and have demonstrated curiosity and creativity that extend far beyond the classroom to impact the world around them. The program is intended to meet the interests of students who demand to be challenged, are passionate about learning, and will innovate when given the freedom to explore.

## University Honors Program

Laurie Kramer, PhD
Director
150 Richards Hall
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' unique interests and goals. Our community of intellectually engaged students, advisors, and faculty are committed to making a difference at home and in the world. Students benefit from unique and enriched educational options that include stimulating courses and opportunities for global exploration, research and creative endeavors, service-learning, mentoring, and more. Honors students are guided and supported as they chart their unique educational plans through personalized advising and through their 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 or second semester who wish to be considered for the University Honors Program may consult the program's website for instructions on how to apply: www.northeastern.edu/honors (http://www.northeastern.edu/ honors).

## Northeastern Explore Program

Website (http://www.northeastern.edu/undeclared)
Kim Irmiter, MA
Director
1 Meserve Hall
617.373.2306

The Northeastern 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 freshman 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. 32)."

## Premedical and Other Preprofessional Health Career <br> Preparation

Website (http://www.northeastern.edu/prehealth)

## Prehealth Studies

Because medical schools place a priority on well-rounded achievement, the prehealth course requirements can be integrated into any major at Northeastern. Medical 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 the prehealth professions requirements, with demonstrated academic rigor and excellence. For some majors it may be necessary to complete additional credit hours of course work, with associated tuition, to fulfill all prehealth requirements. Prehealth students should research requirements and plan a program of study as early as possible in consultation with both major and prehealth advisors to ensure that requirements will be completed in a timely fashion.

The PreHealth Advising Program provides support for Northeastern students who are planning to pursue doctoral-level training in medicine, including allopathic medicine (MD), dentistry, optometry, osteopathic medicine, podiatric medicine, and veterinary medicine.

## Prerequisite Courses

Most health professional schools require a common set of courses. The following program meets the minimum requirements of most health professional programs. Students should work with prehealth advisors to review their course selections.

Note: Corequisite laboratories are required for most science courses.

## BIOLOGY

Introductory biology (typically two semesters)
The following course work is required or recommended by many programs and necessary for MCAT preparation:

- Genetics and molecular biology
- Biochemistry

Additional biology courses are required or recommended by many programs and may be helpful for admission exam preparation.

## CHEMISTRY

- General chemistry
- Organic chemistry


## PHYSICS

Two semesters

## MATHEMATICS

Two semesters of calculus and/or statistics

## ENGLISH

Two semesters
Some programs require both writing and literature courses.

## BEHAVIORAL SCIENCES

The following course work is required or recommended by many programs and necessary for MCAT preparation:

One semester each of psychology and sociology
Additional courses may be required or recommended by individual schools or programs. Students should refer to school websites as well as the appropriate official admission guidebooks for up-to-date information:

- ADEA Official Guide to Dental Schools (http://www.adea.org)
- College Information Book (http://www.aacom.org)
- Colleges of Podiatric Medicine Admissions Requirements (http:// www.aacpm.org)
- Medical School Admissions Requirements (http://www.aamc.org)
- Schools and Colleges of Optometry Admissions Requirements (http://www.opted.org)
- Veterinary Medical School Admissions Requirements (http:// www.aavmc.org)


## Prelaw Preparation

Website (http://www.northeastern.edu/prelaw)
Northeastern University adopts in full the statement of the American Bar Association on the "Preparing for Law School (http://www.abanet.org/ legaled/prelaw/prep.html)" page of its website. Most law school admission committees give no preference to any particular undergraduate major.

The primary goal of the Prelaw Program at Northeastern is to assist current students, staff, and alumni in navigating the law school application process. This includes identifying and researching a variety of law schools to which the person may want to apply. For current Northeastern students, the Prelaw Program provides academic advising that guides course selection and activities aimed at maximizing the student's chance of being admitted to law school. These courses must have at least one, and preferably more, core skills and values, such as analytic/problem-solving skills, critical reading, writing skills, oral communication/listening abilities, general research skills, task organization/management skills, public service, and promotion of justice.

## Education

Website (http://www.cps.neu.edu/discover/schools-institutes/school-ofeducation.php)

## Lydia Young, PhD

Interim Associate Dean, Academic and Faculty Affairs, Graduate School of Education

41 Belvidere
617.373.4216
617.373.6600 (fax)

Lydia Young, Associate Dean, I.young@northeastern.edu

Northeastern University's Department of Education offers a Master of Arts in Teaching (MAT) PlusOne program. The program provides a pathway for undergraduate students in the College of Arts, Media and Design; College of Science; and College of Social Sciences and Humanities who aspire to be elementary or secondary classroom teachers.

## Programs

## Dual Degree

- MAT PlusOne Program (p. 46)


## Teaching, MAT PlusOne Program

The Master of Arts in Teaching (MAT) PlusOne program provides a pathway for undergraduate students in the College of Arts, Media and Design; College of Science; and College of Social Sciences and Humanities who aspire to be elementary (1-6) or secondary (8-12) classroom teachers. Undergraduates in majors that align with approved areas of educator licensure can complete their bachelor's degree in four years and earn a Master of Arts in Teaching in just one additional year. In consultation with their advisor, undergraduates may complete up to 12 semester hours of MAT course work and apply these credits toward their bachelor's degree. This partnership between the colleges and the Graduate School of Education leads to initial licensure, as approved by the Massachusetts Department of Elementary and Secondary Education (DESE).

Interested students must express their interest and submit admissions materials by March 1 st during their third year. To apply, you do not have to submit a full application. However, to qualify you must:

- Be enrolled in an appropriate major
- Plan in consultation with advisor and Graduate School of Education lead faculty
- Apply to the PlusOne MAT during your third year
- Submit a statement of purpose
- Provide a letter of recommendation from a faculty member
- Hold an overall GPA of 3.000 or higher
- Earn a B or higher in Education in the Community (EDUC 1111), Child and Adolescent Development, Learning, and Teaching (EDUC 5504), Inclusion, Equity, and Diversity (EDUC 5570), and Culture, Equity, Power, and Influence (EDUC 5503)
- Take and pass all required MTELs by early March of your fourth year

Please contact your undergraduate advisor to learn more about this opportunity.

## Program Requirements

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

## Requirements

Complete all education courses with a cumulative GPA of 3.000:

| Code | Title | Hours |
| :--- | :--- | ---: |
| EDUC 1111 | Education in the Community | 4 |
| EDUC 1111 should be taken no later than the first semester <br> of the third year |  |  |
| EDUC 5503 | Culture, Equity, Power, and Influence | 4 |
| EDUC 5504 | Child and Adolescent Development, <br> Learning, and Teaching | 4 |
| EDUC 5570 | Inclusion, Equity, and Diversity | 4 |
| A required education or education-related co-op |  |  |

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

## Army ROTC Program

Major Joseph L. Luchetta
Professor and Chair, Department of Military Science
335A Huntington Avenue
617.373 .2375
617.373 .8677 (fax)

Army ROTC website (http://www.rotc.neu.edu)
Sheila Hutchins, ROTC Staff Assistant, s.hutchins@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 617.373.2375

Completion of the Army ROTC program will lead to a commission as a second lieutenant in the United States 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 decisionmaking 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 twenty 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 Boston Navy ROTC (https://www.bu.edu/rotc/navy/contact) unit is a six-school consortium that includes students from Boston University, Boston College, Northeastern, Tufts, Harvard, and MIT. All Navy ROTC scholarships are for nursing only and cover full tuition, mandatory fees, a $\$ 375$-per-semester book stipend, and a $\$ 250$-per-month living stipend 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, there is a four-year active-duty commitment.

NROTC nursing students are required to take four naval science classes, in addition to their regular course work, and attend a leadership laboratory once a week. 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 NROTC-related activities. Additionally, Navy nurses complete two summer cruises, or training sessions, prior to graduation, each of which lasts approximately four weeks. They spend one session with a medical unit at sea (on a Navy ship) and one session at a land-based Navy hospital. All lodging, transportation, meals, and uniforms are paid for by the Navy during summer training sessions. For more information, contact the recruiting officer at 617.358.3470 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 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 Officer 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 full tuition, $\$ 18,000$ per year, and $\$ 9,000$ per year. Scholarship winners will also receive a monthly stipend, a book allowance, and uniforms. Applications for scholarships are due by December 1 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, students do not need a scholarship to commission through Air Force ROTC. For more information, call 617.353.6316 or 617.353.4705.

## General Studies Program

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

## Lynn Dornink, MA

Director
1 Meserve Hall
617.373.2306

The General Studies Program (GSP) is a full-year program for entering freshmen, offering a unique learning environment where faculty, advisors, and peer leaders provide guidance and support to ensure the students' academic success. The GSP curriculum satisfies first-year academic requirements and is geared to students' academic and career goals. Program benefits include a low student-advisor ratio, fall and spring critical-thinking seminars taught by the student's GSP advisor, a learning community organizational model, 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 their intended majors' requirements. Following the successful completion of the General Studies year, and the meeting of the major requirements, students enter one of the university's seven undergraduate colleges with sophomore status in a specified major. Students may also choose to enter the Program for Undeclared Students with sophomore status. GSP 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

GSP students must meet the following criteria to successfully transition to sophomore standing:

1. 2.000 GPA (individual program entrance requirements vary)
2. 28 semester hours of credit ( 32 recommended)
3. Successful completion of 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. 32)."

## Academic Probation

Same as university standards.

## University Withdrawal, Low Scholastic Performance <br> Same as university standards.

## About Sample Curricula

The university's official repository of curricular information is this undergraduate catalog in conjunction with the Degree Audit Reporting System. In case of discrepancy, the Degree Audit Reporting System shall take precedence. All curricula are approved through the university undergraduate curriculum committee. Undergraduate students should
consult with their academic advising office to make certain they have all the necessary resources before planning a curriculum.

## 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)


## College of Computer and Information Science

- Bachelor of Arts in Computer Science
- Bachelor of Science in Computer Science
- Bachelor of Science in Data 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.

## 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, Associate Dean for Graduate Programs and Research Hilary Poriss, PhD, Associate Dean for Faculty and Academic Affairs Thomas Michael, MBA, Associate Dean for Administration and Finance Katherine Calzada, M.Ed, Assistant Dean for Research Development Adam Smith, MBA, Assistant Dean for Academic Programs

102 Ryder Hall
617.373 .3682
617.373 .5084 (fax)
camd@northeastern.edu (camdadvising@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 programs, and emphasizes general education through the NU Core. 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 may choose a four- or five-year experiential learning plan in most programs. Either 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 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/academics/advising) system that consists of academic advisors located in the Academic Advising and Cooperative Education office in 100 Meserve Hall 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/academics/advising). Prelaw advising (http:// www.northeastern.edu/prelaw) and premedical/predental advising
(http://www.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.

## Academic Progression Standards

The College of Arts, Media and Design adheres to the university's academic progression standards (p. 31). 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 in 100 Meserve Hall to determine their remaining graduation requirements. Some departments also require a meeting with a faculty mentor. The graduation clearance (https:// camd.northeastern.edu/academics/advising/faq/\#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. 37). In addition, students pursuing a Bachelor of Arts degree (BA) must fulfill the BA requirements (p. 40).

## School of Architecture

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

## Dan Adams

Director and Associate Professor
da.adams@northeastern.edu

## Kate Zephir

Administrative Assistant
k.zephir@northeastern.edu

151 Ryder Hall
617.373.4637

Architecture and urban landscape 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 urban landscape 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 urban landscape. 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 urban landscape.

## Preapproved Template Programs in Architecture and in Urban Landscape

The School of Architecture offers preapproved template programs in architecture and in urban landscape. Each template program may be paired with another preapproved template program to create a combined major; to see a list of current preapproved template programs, visit the combined majors webpage (https://registrar.northeastern.edu/article/ combined-majors).

Students may request admission to such a combined major via the Combined Major Approval form (http://www.northeastern.edu/ registrar/form-maj-comb.pdf), which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on preapproved template programs, see "Student-Requested Combined Major (p. 33)." For template program requirements, visit the
myNortheastern web portal (http://www.myneu.neu.edu), click on the "Self-Service" tab, then on "My Degree Audit."

## Programs

## Bachelor of Science (BS)

- Architecture (p. 50)
- Architectural Studies (p. 52)
- Architecture and English (p. 55)
- Architecture and Graphic and Information Design (p. 57)


## Bachelor of Landscape Architecture (BLA)

- Landscape Architecture (p. 54)


## Minors

- Architectural and Urban History (p. 59)
- Urban Landscape Studies (p. 59)


## Architecture, BS

Website (https://camd.northeastern.edu/architecture/academicprograms/architecture)

## Undergraduate Program Coordinator

Lucy Maulsby, PhD
Associate Professor
I.maulsby@northeastern.edu

383 Ryder Hall
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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| SEMESTER 1 |  |  |
| ARCH 1000 | Architecture at Northeastern | 1 |
| ARCH 1310 and ARCH 1311 | Architecture and Global Cultures, Prehistory to 1400 and Recitation for ARCH 1310 | 4 |
| SEMESTER 2 |  |  |
| ARCH 1110 | Fundamental Architectural Representation (Studio 1) | 4 |
| ARCH 1120 | Fundamental Architectural Design | 6 |
| Architecture History Requirement |  |  |
| Complete one of | following: | 4 |


| ARCH 1350 | American Architecture |  |
| :---: | :---: | :---: |
| ARCH 2320 | Chinese Architecture 2: Modern |  |
| SEMESTER 3 |  |  |
| ARCH 2130 | Site, Space, and Program | 6 |
| ARCH 2240 | Architectonic Systems | 4 |
| ARCH 2330 and ARCH 2331 | Architecture, Modernity, and the City, 1800 to 1910 and Recitation for ARCH 2330 | 4 |
| SEMESTER 4 |  |  |
| ARCH 2140 | Urban Institutions | 6 |
| ARCH 2340 and ARCH 2341 | Architecture, Modernity, and the City, 1910 to 1980 and Recitation for ARCH 2340 | 4 |
| ARCH 3210 and ARCH 3211 | Environmental Systems and Recitation for ARCH 3210 | 4 |
| ARCH 3450 | Advanced Architectural Communication | 4 |

## SEMESTER 5

## Abroad:

| ARCH 3155 | Studio Abroad | 3.2 |
| :--- | :--- | :--- |
| ARCH 3361 | Architecture and Urbanism Abroad | 3.2 |

ARCH 3363 1.6
ARCH 3363 1.6

## SEMESTER 6

ARCH 3170
Architecture, Infrastructure, and the City
$\left.\begin{array}{llr}\text { ARCH 5230 } & \text { Structural Systems } & 4 \\ \text { and ARCH 5231 } & \text { and Recitation for ARCH 5230 }\end{array}\right]$

1 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 |
| :---: | :---: | :---: |
| SEMESTER 1 |  |  |
| ENGW 1111 | First-Year Writing | 4 |
| MATH 1241 | Calculus 1 | 4 |
| SEMESTER 2 |  |  |
| PHYS 1141 | General Physics | 4 |
| EEAM 2000 | Professional Development for Co-op | 1 |
| SEMESTER 6 |  |  |
| ENGW 3314 <br> or ENGW 3315 | Advanced Writing in the Arts, Media, and Design <br> Interdisciplinary Advanced Writing in the Disciplines | 4 |
| Cooperative Education |  |  |
| Architecture majors are required to complete two six-month co-ops. |  |  |
| COOP 3945 | Co-op Work Experience |  |

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 advisor 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

146 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 <br> and | 4 ARCH 1120 | 6 |  |  |
| ARCH 1311 |  |  |  |  |
| ENGW 1111 | 4 EEAM 2000 | 1 |  | 0 |
| MATH 1241 | 4 PHYS 1141 | 4 |  |  |
| Elective | 4 Elective | 4 | 0 |  |


| Year 2 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Fall | SRCH 2130 | 6 ARCH 2140 | 6 Vacation | 0 Co-op |$\quad 0$


| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | ARCH 3155 | 3.2 | Vacation |  | Vacation |  |
|  |  | ARCH 3361 | 3.2 |  |  |  |  |
|  |  | ARCH 3363 | 1.6 |  |  |  |  |
|  |  | ARCH 3363 | 1.6 |  |  |  |  |
|  |  | ARCH 3440 | 1.6 |  |  |  |  |
|  |  | Humanities elective | 3.2 |  |  |  |  |
|  |  | Language elective | 1.6 |  |  |  |  |
|  |  | 5.999999999 | 99998 |  | 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 <br> or 3315 | 4 ARCH 3370 | 4 |  |  |
| ARCH 5230 <br> and <br> ARCH 5231 | 4 ARCH 5310 | 4 |  | 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 <br> 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 <br> and | 4 ARCH 1120 | 6 |  |  |
| ARCH 1311 |  |  |  |  |
| ENGW 1111 | 4 PHYS 1141 | 4 |  |  |
| MATH 1241 | 4 EEAM 2000 | 1 |  | 0 |
| Elective | 4 Elective | 4 | 0 |  |


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| ARCH 2130 | 6 ARCH 2140 | 6 Vacation | 0 Vacation | 0 |
| ARCH 2330 | 4 ARCH 2340 | 4 |  |  |
| $\begin{array}{l}\text { and } \\ \text { ARCH 2331 }\end{array}$ | $\begin{array}{llll} \\ \text { and }\end{array}$ |  |  |  |
| ARCH 2240 2341 | 4 ARCH 3450 | 4 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| ARCH 3155 | 3.2 Co-op | 0 Co-op | 0 Vacation |  |
| ARCH 3361 | 3.2 |  |  |  |
| ARCH 3362 | 3.2 |  |  |  |
| ARCH 3363 | 1.6 |  |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| ARCH 3170 | 6 Co-op | 0 Co-op | 0 Vacation |  |

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
Advanced Architectural Communication (ARCH 3450) may also be taken in Summer 2 after your second or fourth year.

## Architectural Studies, BS

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

## Undergraduate Program Coordinator

Amanda Lawrence, PhD
Associate Professor
am.lawrence@northeastern.edu
377 Ryder Hall
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 sixmonth co-op and have the option of a second four-month summer coop. 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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
Architecture at Northeastern

| ARCH 1000 | Architecture at Northeastern |  |
| :---: | :---: | :---: |
| General Architecture and Studio |  |  |
| 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 | Architecture, Infrastructure, and the City | 6 |
| Technology |  |  |
| ARCH 2260 | Introduction to Building Systems | 4 |
| History |  |  |
| ARCH 1310 | Architecture and Global Cultures, Prehistory to 1400 | 4 |
| ARCH 2330 and ARCH 2331 | Architecture, Modernity, and the City, 1800 to 1910 and Recitation for ARCH 2330 | 4 |


| ARCH 2340 | Architecture, Modernity, and the City, | 4 |
| :--- | :--- | :--- |
| and ARCH 2341 | 1910 to 1980 <br> and Recitation for ARCH 2340 |  |

## Capstone

ARCH $4960 \quad$ 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 24
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 |  |
| :--- | :--- |
| Real Estate |  |
| ENTR 2206 | Global Social Enterprise |
| ENTR 2301 | Innovation! |
| ENTR 2303 | Entrepreneurial Marketing and Selling |
| ENTR 3330 | Lean Design and Development for <br> Entrepreneurs |
| ENTR 4501 | Business Planning for Technology <br> Ventures |
| MKTG 2209 | Introduction to Marketing |
| Sustainability | Water Resources |
| ENVR 3200 | Sustainable Development |
| ENVR 4515 | How Cities Work: Experiencing Urban <br> Infrastructure |
| CIVE 1200 | Environmental Engineering 1 |
| CIVE 2334 | Design for Sustainable Transportation: <br> Netherlands |
| CIVE 4566 | Sustainable Design and Technologies in <br> Construction |
| SBSY 5100 | Sustainable Engineering Systems for <br> Buildings |
| SBSY 5200 | Environmental Ethics |
| PHIL 1180 |  |

History, Theory, and Culture

| ARTH 1100 | Interactive Media and Society |
| :--- | :--- |
| ARTH 2215 | History of Graphic Design |
| ARTH 5200 | Issues in Contemporary Art |
| ARTH 5400 | Contemporary Visual Culture |
| ARTH 5902 | Special Topics in Art and Design <br> 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 <br> Code <br> Title <br> Hours

If students wish to be eligible for the two-year Master of Archtiecture 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 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  | 17 |  | 19 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| ARCH 2130 | $\begin{aligned} & 6 \text { ARCH } 2340 \\ & \text { and } \\ & \text { ARCH } 2341 \end{aligned}$ | 4 Optional Summer Coop | Optional Summer Coop |  |
| ARCH 2330 <br> and <br> ARCH 2331 | 4 ARCH 2140 | 6 |  |  |
| ARCH 2260 | 4 ENGW 3314 | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
|  | 18 | 18 | 0 | 0 |

Year 3


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 Hours |  |
| 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

## Landscape Architecture, BLA

website (https://camd.northeastern.edu/architecture/academic-programs/architecture-urban-landscape)

## Undergraduate Program Coordinator

Nicholas Brown, PhD
Associate Teaching Professor
nic.brown@northeastern.edu 539 Holmes Hall

Northeastern University offers a Bachelor of Liberal Arts in Urban Landscape. 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.

## Major Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| ARCH 1000 | Architecture at Northeastern |  |
| Calculus |  | 1 |
| MATH 1241 | Calculus 1 | 4 |
| Environmental Geology |  |  |
| ENVR 1112 | Environmental Geology | 4 |
| Foundation Courses |  | 4 |
| ARCH 1110 | Fundamental Architectural |  |
| ARCH 1120 | Representation |  |

## History/Theory Courses

| ARCH 1310 and ARCH 1311 | Architecture and Global Cultures, Prehistory to 1400 and Recitation for ARCH 1310 | 4 |
| :---: | :---: | :---: |
| ARCH 3361 | Architecture and Urbanism Abroad | 4 |
| ARCH 1320 and ARCH 1321 | Architecture and Global Cultures, 1400 to Present and Recitation for ARCH 1320 | 4 |
| ARCH 3362 | Seminar Abroad | 4 |
| LARC 2330 | Cities, Landscape, and Modern Culture | 4 |
| LARC 2340 | Cities, Landscape, and Contemporary Culture | 4 |
| LARC 5310 | Urban Landscape Seminar | 4 |
| Technology/Science Courses |  |  |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 | 5 |
| LARC 2230 | Site Materials and Methods | 4 |
| LARC 2430 | Plant Identification | 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 3155 | Studio Abroad | 6 |
| 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 |
| Cooperative Education |  |  |
| Urban landscape | ors are required to complete two six- | 0 |

month co-ops.
COOP $3945 \quad$ Co-op Work Experience

## Major GPA Requirement

Minimum 2.500 GPA required

## Major Credit Requirement

Complete 117 semester hours for the major.

## Program Requirement

145 total semester hours required

## Plan of Study

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

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | :---: |
| ARCH 1000 | 1 ARCH 1110 | 4 Vacation |  |
| ARCH 1310 <br> and | 4 ARCH 1120 | 6 |  |
| ARCH 1311 |  |  |  |
| MATH 1241 | 4 ENGW 1111 | 4 |  |
| ENVR 1112 | 4 EEAM 2000 | 1 |  |
| Elective | 4 Elective | 4 | 0 |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | ---: | :---: | ---: |
| LARC 2130 | 6 LARC 2140 | 6 Vacation |  |
| LARC 2430 | 4 LARC 2240 | 4 |  |
| LARC 2330 | 4 LARC 2440 | 4 |  |
| LARC 2230 | 4 LARC 2340 | 4 |  |
|  | 18 | 18 | 0 |

Year 3

| Fall | Hours Spring | Hours | Summer 1 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| ARCH 3155 | 6 Co-op 1 |  | Co-op 1 |  |
| ARCH 3362 | 4 |  |  |  |
| ARCH 3361 | 4 |  |  |  |
| Language or cultural elective | 4 |  |  |  |
|  | 18 | 0 |  | 0 |
| Year 4 |  |  |  |  |
| Fall | Hours Spring | Hours | Summer 1 | Hours |
| LARC 3170 | 6 Co-op 2 |  | Co-op 2 |  |
| ENGW 3314 | 4 |  |  |  |
| LARC 5210 | 4 |  |  |  |
| ENVR 3300 <br> and <br> ENVR 3301 | 5 |  |  |  |
|  | 19 | 0 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| 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: 145

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

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 |
| :--- | :--- | ---: |
| Required Courses | Fundamental Architectural <br> ARCH 1110 | 4 |
| ARCH 1120 | Fundamental Architectural Design | 6 |
| ARCH 1310 | Architecture and Global Cultures, <br> Prehistory to 1400 | 4 |
| ARCH 1320 | Architecture and Global Cultures, 1400 <br> to Present | 4 |
| ARCH 1450 | Understanding Design | 4 |
| ARCH 2130 | Site, Space, and Program | 4 |
| ARCH 2240 | Architectonic Systems | 6 |
| ARCH 2330 | Architecture, Modernity, and the City, <br> 1800 to 1910 | 4 |
| Electives | Complete two of the following courses: | 4 |


| ARCH 3370 | Topics in Architectural History |
| :--- | :--- |
| ARCH 3450 | Advanced Architectural Communication |
| ARCH 5310 | Design Tactics and Operations |

## English Requirements

Code Title Hours

## 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

## Foundational Courses

| ENGL 1400 | Introduction to Literary Studies | 4 |
| :--- | :--- | :--- |
| ENGL 1160 | Introduction to Rhetoric | 4 |

or ENGL 1410 Introduction to Writing Studies

## Diversity

Complete one of the following courses. This course may also
be used to fulfill an additional English requirement below:
\(\left.\left.$$
\begin{array}{ll}\hline \text { ENGL 2150 } & \text { Literature and Digital Diversity } \\
\hline \text { ENGL 2296 } & \text { Early African-American Literature } \\
\hline \text { ENGL 2450 } & \text { Postcolonial Literature }\end{array}
$$\right] \begin{array}{ll}\hline ENGL 2451 \& Postcolonial Women Writers <br>

\hline ENGL 2455 \& American Women Writers\end{array}\right]\)| ENGL 2460 | Multiethnic Literatures of the U.S. |
| :--- | :--- |
| ENGL 2470 | Asian-American Literature |


| ENGL 1600 | Introduction to Shakespeare |
| :--- | :--- |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following: 4
ENGL 2260 Romantic Poetry
ENGL 2330 The American Renaissance
ENGL 2340 American Realism
ENGL 3619 Emerson and Thoreau
ENGL 3720 19th-Century Major Figure
ENGL 4040 Topics in 19th-Century Literatures
ENGL 2301 The Graphic Novel
ENGL 2410 Contemporary American Literature
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 $3730 \quad$ 20th- and 21 st-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 Writing Studies
ENGL $2150 \quad$ 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 <br> Writing |
| ENGL 3700 | Narrative Medicine |
| ENGL 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and |
| Linguistics |  |
| LING 2350 | Linguistic Analysis |
| LING 3450 3452 | Syntax |
| SING 3454 | Semantics |
| LING 3456 | Language and Gender |
| LING 3458 | Topics in Linguistics |

Comparative Literature
Complete one of the following:

## 4

ENGL 1120 Trouble in Utopi
ENGL 1130 Animals, Objects, Humans
ENGL 1450 Reading and Writing in the Digital Age
ENGL $1500 \quad$ British Literature to 1800
ENGL 1502 American Literature to 1865
ENGL $1503 \quad$ American Literature 1865 to Present
ENGL 2150 Literature and Digital Diversity
ENGL 2370 The Modern Short Story
ENGL 2380 The Modern Novel
ENGL 2400 Modern Poetry
ENGL 2420 Contemporary Poetry
ENGL 2430 Contemporary Fiction
ENGL 2450 Postcolonial Literature
ENGL 2451 Postcolonial Women Writers
ENGL 2455 American Women Writers
ENGL 2460 Multiethnic Literatures of the U.S.
ENGL 2470 Asian-American Literature
ENGL 2510 Horror Fiction
ENGL 2520 Science Fiction
ENGL 2600 Irish Literary Culture (Abroad)
ENGL 2620 What Is Nature? (Abroad)
ENGL $2690 \quad$ Boston in Literature
ENGL 3427 The Literature of Science
ENGL $3487 \quad$ Film and Text (Abroad)
ENGL $3582 \quad$ Children's Literature
ENGL 3663 The African-American Novel
ENGL 3676 Representing Gender and Sexuality in Literature

ENGL $4070 \quad$ Topics in Genre

## Writing

Complete one of the following:

| ENGL 2700 | Creative Writing |
| :--- | :--- |
| ENGL 2710 | Style and Editing |
| ENGL 2730 | Digital Writing |
| 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 <br> Practice |
| ENGL 3375 | Writing Boston |
| ENGL 3376 | Creative Nonfiction |
| ENGL 3377 | Poetry Workshop |
| ENGL 3378 | Fiction Workshop |
| ENGL 3380 | Topics in Writing |
| ENGL 3382 | Publishing in the 21st Century |
| ENGL 3384 | The Writer's Marketplace |
| Capstone | Capstone Seminar |
| ENGL 4710 |  |
| or ENGL 4720 | Capstone Project |
| English Electives |  |
| Complete two additional ENGL electives. | 4 |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| ARCH 2330 | Architecture, Modernity, and the City, | 4 |
|  | 1800 to 1910 |  |

## Program Requirement

128 total semester hours required

## Architecture and Graphic and Information Design, BS

The School of Architecture and the Department of Art + Design offer a combined major in architecture and graphic and information design. Students interested in the combined major connect specific problem solving inherent to architectural understanding with the larger context of contemporary cities. They learn to conceptualize, synthesize, and represent complex architectural, urban, and environmental issues. Students combine this knowledge 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ARCH 1110 | Fundamental Architectural Representation | 4 |
| ARCH 1310 | Architecture and Global Cultures, Prehistory to 1400 | 4 |
| ARCH 1120 | Fundamental Architectural Design | 6 |
| ARCH 1320 | Architecture and Global Cultures, 1400 to Present | 4 |
| ARCH 1450 | Understanding Design | 4 |
| ARCH 2130 | Site, Space, and Program | 6 |
| ARCH 2330 | Architecture, Modernity, and the City, 1800 to 1910 | 4 |
| ARCH 2340 | Architecture, Modernity, and the City, 1910 to 1980 | 4 |
| Electives |  |  |
| Complete two of th | ollowing courses: | 8 |


| ARCH 3370 | Topics in Architectural History |
| :--- | :--- |
| ARCH 3450 | Advanced Architectural Communication |
| ARCH 5310 | Design Tactics and Operations |

## Graphic and Information Design Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Art and Design at Northeastern |  |  |
| ARTF 1000 | Art and Design at Northeastern | 1 |

## Art and Design Fundamentals

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| :--- | :--- | :--- |
| ARTF 2220 | 4D Fundamentals: Sequence and <br> Drawing (with optional ARTF 2221) | 4 |

Art and Design History
ARTH $2210 \quad$ Modern Art and Design History

| ARTH 2215 | History of Graphic Design | 4 |
| :--- | :--- | ---: |
| Design |  | 4 |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 2250 | Typography 1 (with optional <br>  <br>  <br> 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 |

Art and Design Electives
Complete one of the following: 4

| ARTD 2360 | Photo Basics (with optional <br>  <br> ARTD 2361 ) |
| :--- | :--- |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |
| ARTG 2260 | Programming Basics |
| ARTF 1120 | Observational Drawing |
| ARTF 1121 | Conceptual Drawing |


| ARTF 1124 | 3D Fundamentals: Structure and <br> Drawing (with optional ARTF 1124) |
| :--- | :--- |
| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224) |
| ARTG 2400 | Interaction Design 1: Responsive (with <br> optinal ARTG 2401 ) |
| ARTG 3351 | Time-Based Design |
| ARTG 3450 | Graphic Design 2 |
| ARTG 3460 | Identity and Brand Design |
| ARTG 4552 | Information Design 2 |
| ARTG 4553 | Environmental Information Design |
| ARTG 4554 | Typography 3 |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| ARTG 4551 | Design Degree Project 2 | 4 |

## Program Requirement

132 total semester hours required

## Plan of Study

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

Year 1


Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | ---: |
| ARCH 2130 | 6 ARCH 2340 | 4 Vacation | 0 Vacation | 0 |
| ARTG 2250 <br> (with <br> optional | 4 ARTG 2252 | 4 |  |  |
| ARTG 2251) |  |  |  |  |
| ARTH 2210 | 4 ARCH 1450 | 4 |  | 0 |
| ARCH 2330 | 4 Elective | 4 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Architecture <br> elective | 4 Co-op | 0 Co-op | 0 |  |
| ARTG 3350 | 4 |  |  |  |
| ARTH 2215 | 4 |  |  |  |
| ENGW 3314 <br> or 3315 | 4 |  |  | 0 |
| EEAM 2000 | 1 |  |  | 0 |
|  | 17 | 0 | 0 | 0 |


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

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | :---: |
| ARTG 4550 | 4 ARTG 4551 | 4 |
| Art and <br> design <br> elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 134

## 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 in architecture or BS in architectural studies major. BLA in 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 |
| :---: | :---: | :---: |
| Architectural History Core |  |  |
| ARCH 1310 | Architecture and Global Cultures, Prehistory to 1400 | 4 |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| ARCH 1350 | American Architecture |  |
| ARCH 2330 | Architecture, Modernity, and the City, 1800 to 1910 |  |
| ARCH 2340 | Architecture, Modernity, and the City, 1910 to 1980 |  |
| ARCH 3362 | Seminar Abroad |  |
| ARCH 3370 | Topics in Architectural History |  |
| ARCH 4850 | Urban and Architectural History Abroad |  |

## 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.

## Requirements for Students Not Majoring in Architecture

Code Title Hours

## Required Courses

| ARCH 1310 | Architecture and Global Cultures, <br> Prehistory to 1400 | 4 |
| :--- | :--- | :---: |
| ARCH 1320 | Architecture and Global Cultures, 1400 <br> to Present | 4 |
| LARC 2330 | Cities, Landscape, and Modern Culture | 4 |
| LARC 2340 | Cities, Landscape, and Contemporary <br> Culture | 4 |
| Elective |  | 4 |


| ARCH 1450 | Understanding Design |
| :--- | :--- |
| ENVR 1200 | Dynamic Earth |
| ENVR 4515 | Sustainable Development |
| ENVR 5210 | Environmental Planning |

## Requirements for Architecture Majors

Code Title Hours
Required Courses

| LARC 2330 | Cities, Landscape, and Modern Culture | 4 |
| :--- | :--- | :--- |
| LARC 2340 | Cities, Landscape, and Contemporary | 4 |
|  | Culture | 4 |

Electives
Complete two of the following, or a minimum of 8 semester 8
hours:

| ENVR 1112 | Environmental Geology |
| :--- | :--- |
| ENVR 3200 | Water Resources |
| ENVR 3300 | Geographic Information Systems |
| ENVR 4515 | Sustainable Development |
| ENVR 5210 | Environmental Planning |
| CIVE 2334 | Environmental Engineering 1 |
| CIVE 4566 | Design for Sustainable Transportation: |
|  | Netherlands |
| PHTH 5214 | Environmental Health |

## GPA Requirement

3.000 GPA required in the minor

## Art + Design

Website (https://camd.northeastern.edu/artdesign)

## Tad Hirsch, PhD

Chair
239 Ryder Hall
617.373.4340

Nhora Delgado, Administrative Assistant, n.delgado@northeastern.edu
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 in Iceland, Ireland, Venice, Rome, Berlin, Budapest, Cuba, and Ecuador 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

A studio-based fine art program that offers a broad and deep exploration of what it means to be culturally aware, skilled, and productive, the Bachelor of Arts in Art balances studio courses in drawing/painting and digital media with art history and visual studies. Students' education, experience, and training in understanding cultural practices take full advantage of the remarkable scope of the College of Arts, Media and Design. The focus of obtaining a well-rounded liberal arts education, within a broad study of the arts and humanities, is complemented by the study of a language and its cultural context and knowledge in the natural, physical, and social sciences. Some courses in this program are offered in Ireland, a cultural treasure house amid natural splendor, where students have an intensive and immersive experience. There, students make art in their own studios in an art school equipped with all the tools and resources an artist requires. Most important, ample elective choices include study-abroad programs and span the complete range of offerings of our college.

The concentration in visual studies incorporates art and design history with a cultural study of seeing. Understanding vision to be as much a product of lived culture and a phenomenon that is as dynamic, creative, and social as it is physical and biological, visual studies explores differing ways to interpret the visible world that surrounds us. Students are exposed to the history and theory of the visual arts and visual experience as they address connections between topics as wide-ranging
as Leonardo da Vinci's Mona Lisa and the computer interface used in Apple's Lisa. Visual studies seeks to develop critical insight into, and understanding of, what is seen.

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 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. Concentrations in design practices are graphic and information design, interaction design, and experience design.

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 ambiance for consideration. Information design focuses on visualizing concepts and data to enhance human understanding of complex and vital knowledge.

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.

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.

As intensive studio programs, the curricula balance theory and design history and theory with studio projects in all media. As a design analyst, inventor, interpreter, curator, and producer of information, interaction, and experience, students can integrate many facets of university and liberal arts education.

The Bachelor of Fine Arts in Design is offered with the following concentration options: experience design, interaction design, or graphic and information design.

## Games, BFA

The Bachelor of Fine Arts in Games 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 game industry, including broader platforms and audiences and more distribution channels, students will be oriented toward developing games and playful media in an independent creative context, preparing graduates to become leaders within a growing segment of the game industry. Curriculum is geared to cultivating the students' own unique creative voice through courses that apply theory analysis to game-making practice 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 production. BFA in games majors will have a minimum of four games courses in which they interact with and collaborate with students in the BS in computer science and game development major.

## 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 practices of animation, game, game art, 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 and promotion, visualization, motion graphics, interactive art, illustration, and short animated film are offered. An intensive studio program, the curriculum provides knowledge, experience, and techniques of media arts informed by theory, experimentation, and critique. Extensive digital imaging and interactive media editing and production facilities offer the opportunity to become highly proficient in the current skills and emerging practices necessary for remarkable work. The media arts are evolving and expanding their reach into culture and society in daily life and global experience. The revolutions in 3-D printing, embedded devices, and robotics are changing the landscape in which the media artist will operate. This degree prepares students to meet the challenges of continuous change with adaptive ingenuity.

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

The Bachelor of Fine Arts 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), adjacent to the Northeastern campus. In this major, the studio art classes are taken at the SMFA at Tufts, which permits students to explore a wide range of artistic media including ceramics, drawing, film, glasswork, metalsmith, painting, performance, print and paper, sculpture, and sound in their extensive studio environments. Art and design history courses are taken in the department. In addition, students have access to all the elective courses, co-op, study-abroad programs, technology, and student resources that Northeastern students experience.

The Bachelor of Fine Arts in Studio Art degree is awarded by Northeastern.

## Preapproved Template Programs

The Department of Art + Design offers preapproved template programs in the following areas:

- Experience design
- Game design
- Graphic and information design
- Interaction design
- Media arts
- Visual studies

Each template program may be paired with another preapproved template program to create a combined major; to see a list of current preapproved template programs, visit the combined majors webpage (https:// registrar.northeastern.edu/article/combined-majors).

Students may request admission to such a combined major via the Combined Major Approval form (http://www.northeastern.edu/registrar/ form-maj-comb.pdf), which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on
preapproved template programs, see "Student-Requested Combined Major (p. 33)." For template program requirements, visit myNortheastern (https://my.northeastern.edu/welcome), click on the "Self-Service" tab, then on "My Degree Audit."

## 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. 14)."

## Academic Progression Standards

Same as college standards.

## Programs

## Bachelor of Arts (BA)

- Art (p. 62)
- Communication Studies and Graphic and Information Design (p. 87)
- English and Graphic and Information Design (p. 89)
- Media and Screen Studies and Media Arts (p. 98)
- Media Arts and Communication Studies (p. 100)
- Theatre and Interaction Design (p. 102)


## Bachelor of Fine Arts (BFA)

- Design (p. 64)
- Games (p. 67)
- Media Arts (p. 68)
- Studio Art (p. 73)
- Game Art and Animation (p. 92)


## Bachelor of Science (BS)

- Architecture and Graphic and Information Design (p. 57)
- Business Administration and Design (p. 76)
- Computer Science and Design (p. 80)
- Computer Science and Game Development (p. 83)
- Computer Science and Media Arts (p. 84)
- Game Design and Music with concentration in Music Technology (p. 94)
- Graphic and Information Design and Mathematics (p. 95)
- Journalism and Interaction Design (p. 96)
- Theatre and Interaction Design (p. 103)


## Minors

- Animation (p. 105)
- Art (p. 105)
- Art History (p. 106)
- Experience Design (p. 106)
- Game Art (p. 107)
- Game Design (p. 107)
- Graphic and Information Design (p. 108)
- Interaction Design (p. 108)
- Photography (p. 109)
- Photojournalism (p. 109)
- Video Arts (p. 109)


## Art, BA

A studio-based fine art program that offers a broad and deep exploration of what it means to be culturally aware, skilled, and productive, the Bachelor of Arts in Art balances studio courses in drawing/painting and digital media with art history and visual studies. Students' education, experience, and training in understanding cultural practices take full advantage of the remarkable scope of the College of Arts, Media and Design. The focus of obtaining a well-rounded liberal arts education, within a broad study of the arts and humanities, is complemented by the study of a language and its cultural context and knowledge in the natural, physical, and social sciences. Some courses in this program are offered in Ireland, a cultural treasure-house amid natural splendor, where students may have an intensive and immersive experience. There students make art in their own studios in an art school equipped with all the tools and resources an artist requires. Most important, ample elective choices include study-abroad programs and span the complete range of offerings of our college.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| ARTF 1000 | Art and Design at Northeastern | 1 |
| Art and Design Fundamentals |  |  |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing (with optional ARTF 1123) | 4 |
| ARTF 1124 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125) | 4 |
| ARTF 2220 | 4D Fundamentals: Sequence and Drawing (with optional ARTF 2221) | 4 |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing (with optional ARTF 2224) | 4 |
| Drawing Fundamentals Elective |  |  |

or ARTF 1121
Observational Drawing
Conceptual Drawing
Art and Design History

| ARTH 1110 | Global Art and Design History: Ancient <br> to Medieval | 4 |
| :--- | :--- | :--- |
| ARTH 1111 | Global Art and Design History: <br> Renaissance to Modern | 4 |
| ARTH 2210 | Modern Art and Design History | 4 |
| ARTH 2211 | Contemporary Art and Design History | 4 |

Degree Project
ARTD $4530 \quad$ Media Arts Degree Project 1 4
ARTD $4670 \quad$ Media Arts Degree Project 2

## Concentration or Electives

Complete the following concentration or the elective section below:

- Concentration in Visual Studies (p. 63)

| Code | Title | Hours |
| :---: | :---: | :---: |
| Arts, Media and Design Electives |  |  |
| Complete four | from the following lists: | 16 |
| Art + Design |  |  |
| ARTS 2330 | Sculpture Basics |  |
| ARTS 2340 | Painting Basics |  |
| ARTS 2341 | Figure Drawing |  |
| ARTS 3449 | Drawing in Mixed Media |  |
| ARTH 1100 | Interactive Media and Society |  |
| ARTH 2213 | Nineteenth-Century Art |  |
| ARTH 5100 | Contemporary Art Theory and Criticism |  |
| ARTH 5200 | Issues in Contemporary Art |  |
| ARTH 5400 | Contemporary Visual Culture |  |
| ARTD 2100 | Narrative Basics |  |
| ARTD 2360 | Photo Basics (with optional ARTD 2361) |  |
| ARTD 2370 | Animation Basics (with optional ARTD 2371) |  |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |  |
| ARTD 3460 | Photography 1 |  |
| 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 2 |  |
| ARTD 4570 | Animation 2 |  |
| ARTD 4575 | Animation 3 |  |
| ARTD 4577 | Digital Sculpture and Model Making |  |
| ARTD 5582 | Collaborative Video and Community Engagement |  |
| ARTD 4660 | Studio Photography |  |
| ARTD 4661 | Alternative Photographic Processes |  |
| ARTG 1250 | Design Process Context and Systems |  |
| ARTG 2250 | Typography 1 (with optional ARTG 2251) |  |
| ARTG 2252 | Graphic Design 1 |  |
| 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 |
| Architecture | ARCH 1310 Architecture and Global Cultures, <br> and ARCH 1311 Prehistory to 1400 <br> and Recitation for ARCH 1310  |
| ARCH 1320 <br> and ARCH 1321 | Architecture and Global Cultures, 1400 <br> to Present |
| ARCH 1350 | And Recitation for ARCH 1320 |

## 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 |
| Art and Design History Electives |  |  |
| Courses in arc studies may al Department of | ural history and media and screen used upon approval by the chair of the Design. |  |
| Complete four | following: | 16 |
| 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 5200 | Issues in Contemporary Art |
| :--- | :--- |
| ARTH 5400 | Contemporary Visual Culture |

## Plan of Study

## Sample Five Years, Two Co-ops in Summer 2/Fall Sample. YA or ZA Plan of Study optional.

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| ARTF 1000 | 1 ARTF 1124 <br> (with optional ARTF 1125) | 4 Vacation | 0 Vacation | 0 |
| ARTF 1122 <br> (with optional ARTF 1123) | 4 ARTH 1111 | 4 |  |  |
| ARTH 1110 | 4 Elective | 4 |  |  |
| Arts, media and design elective | 4 Elective | 4 |  |  |
| Elective | 4 |  |  |  |
|  | 17 | 16 | 0 | 0 |


| Year 2 |  |
| :--- | :--- | :--- |
| Fall $\quad$ Hours Spring $\quad$ Hours Summer 1 Hours Summer 2 Hours |  |



## Year 3

| Fall | HoursSpring Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | ARTF 2223 <br> (with | 4 Vacation | 0 Co-op |  |
|  | optional <br> ARTF 2224) |  |  |  |
|  | Elective | 4 |  |  |
|  | Elective | 4 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Co-op | Arts, media <br> and design <br> elective | 4 Vacation | Vacation |  |
|  | Elective | 4 |  |  |
|  | Elective | 4 |  | 0 |

Year 5
Fall Hours Spring Hours

| Elective | 4 Elective | 4 |
| :--- | :---: | :---: |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 130

## Design, BFA

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. Concentrations in design practices are graphic and information design, interaction design, and experience design.

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.

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.

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.

As intensive studio programs, the curricula balance theory and design history and theory with studio projects in all media. As a design analyst, inventor, interpreter, curator, and producer of information, interaction, and experience, students can integrate many facets of university and liberal arts education.

## Program Requirements - All Concentrations

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| ARTF 1000 | Art and Design at Northeastern | 1 |
| Art and Design Fundamentals |  |  |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing (with optional ARTF 1123) | 4 |
| ARTF 1124 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125) | 4 |
| ARTF 2220 | 4D Fundamentals: Sequence and Drawing (with optional ARTF 2221) | 4 |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing (with optional ARTF 2224) | 4 |
| Art and Design History |  |  |
| 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 |
| :---: | :---: | :---: |
| Design Courses |  |  |
| 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 |

## Degree Project

Complete one of the following: 8

| ARTG 4550 | Design Degree Project 1 |
| :--- | :--- |
| and ARTG 4551 | and Design Degree Project 2 |
| ARTG 4700 | Interaction Team Degree Project 1 |
| and ARTG 4701 | and Interaction Team Degree Project 2 |

## Design Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| Art and Design Elective |  |  |
| Complete one of the following: |  | 4 |
| ARTF 1120 | Observational Drawing |  |
| ARTF 1121 | Conceptual Drawing |  |
| ARTD 2100 | Narrative Basics |  |
| ARTE 3901 | Art and Design Special Topics |  |
| Design History Elective |  |  |
| ARTH 1100 or ARTH 2215 | Interactive Media and Society History of Graphic Design | 4 |
| Media Arts Basics Elective |  |  |
| Complete one of the following: |  | 4 |
| ARTD 2360 | Photo Basics (with optional ARTD 2361) |  |
| ARTD 2370 | Animation Basics (with optional ARTD 2371) |  |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |  |

## 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 <br> CONCENTRATION IN <br> Code <br> CRAPHIC AND INFORMATION DESIGN <br> Required Courses | Title |  |
| :--- | :--- | ---: |
| ARTG 2252 |  |  |$\quad$| Graphic Design 1 |
| :--- |$\quad 4$

$\begin{array}{lll}\text { CONCENTRATION IN INTERACTION DESIGN } \\ \text { Code } & \text { Title Hours }\end{array}$

| Required Courses |  | 4 |
| :--- | :--- | ---: |
| ARTG 2252 | Graphic Design 1 | 4 |
| ARTG 2260 | Programming Basics | 4 |
| ARTG 2400 | Interaction Design 1: Responsive (with <br> optional ARTG 2401) | 4 |
| ARTG 3700 | Interaction Design 2: Mobile | 4 |
| Electives |  | 8 |
| Complete two of the following: |  |  |
| ARTE 3901 | Art and Design Special Topics |  |
| ARTE 5901 | Special Topics in Art and Design Studio |  |
| ARTG 3250 | Physical Computing |  |
| ARTG 3351 | Time-Based Design |  |
| ARTG 3450 | Graphic Design 2 |  |
| ARTG 3460 | Identity and Brand Design |  |
| ARTG 3462 | Experience Design 1 |  |
| ARTG 3463 | Experience Design 2 |  |
| ARTG 4552 | Information Design 2 |  |
| ARTG 4553 | Environmental Information Design |  |
| ARTG 4554 | Typography 3 |  |

CONCENTRATION IN EXPERIENCE DESIGN
Code Title Hours

## Required Courses

ARTG 2260 Programming Basics
4

| ARTG 3462 | Experience Design 1 | 4 |
| :--- | :--- | :--- |
| ARTG 3463 | Experience Design 2 | 4 |

Electives
Complete three of the following:

| ARTG 2252 | Graphic Design 1 |
| :--- | :--- |
| ARTG 3250 | Physical Computing |
| ARTG 3351 | Time-Based Design |
| ARTG 3450 | Graphic Design 2 |
| ARTG 3460 | Identity and Brand Design |
| ARTG 3700 | Interaction Design 2: Mobile |
| ARTG 4552 | Information Design 2 |
| ARTG 4553 | Environmental Information Design |
| ARTG 4554 | Typography 3 |
| ARTE 3901 | Art and Design Special Topics |
| ARTE 5901 | Special Topics in Art and Design Studio |

## Plan of Study - Experience Design

## Sample Five Years, Two Co-ops in Spring/Summer 1. YA or ZA Plan of Study optional.

Year 1


Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| ARTF 2220 <br> (with optional ARTF 2221) | 4 ARTG 3462 | 4 Vacation | Vacation |  |
| ARTF 2223 <br> (with optional ARTF 2224) | 4 ARTG 2260 | 4 |  |  |
| ARTH 2211 | 4 Design history elective | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
|  | 16 | 16 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| ARTG 3350 | 4 Co-op | Co-op | Vacation |  |
| ARTG 3463 | 4 |  |  |  |


| Art and | 4 |  |  |  | Elective | 4 Elective |  | 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| design elective |  |  |  |  |  | 16 |  | 16 |  | 0 |  | 0 |
| Elective | 4 |  |  |  |  |  |  |  |  |  |  |  |
| EEAM 2000 | 1 |  |  |  | Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
|  | 17 | 0 | 0 | 0 | ARTG 3450 |  | Co-op |  | Co-op |  | Vacation |  |
|  |  |  |  |  | ARTG 3451 | 4 |  |  |  |  |  |  |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours | Media arts elective | 4 |  |  |  |  |  |  |
| ARTG 3451 | 4 Co-op | 0 Co-op | 0 Vacation |  | Elective | 4 |  |  |  |  |  |  |
| Design elective | 4 |  |  |  | EEAM 2000 | 1 |  |  |  |  |  |  |
| Media arts | 4 |  |  |  |  | 17 |  | 0 |  | 0 |  | 0 |


| elective <br> Elective | 4 |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 16 | 0 | 0 | 0 |


| Year 5 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| ARTG 4550 <br> or 4700 | 4 <br> ARTG 4551 <br> or 4701 | 4 |
| Design <br> elective | Design <br> elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 130

## Plan of Study - Graphic and Information Design

Sample Five Years, Two Co-ops in Spring/Summer 1. YA or ZA Plan of Study optional.

Year 1


Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| ARTF 2220 | 4 ARTF 2223 | 4 Vacation | Vacation |  |
| (with | (with |  |  |  |
| optional | optional |  |  |  |
| ARTF 2221) | ARTF 2224) |  |  |  |
| ARTH 2211 | 4 ARTG 3350 | 4 |  |  |
| ARTG 2252 | 4 <br> Design <br> history <br> elective | 4 |  |  |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Design <br> elective | 4 Co-op | 0 Co-op | 0 Vacation |  |
| Design <br> elective | 4 |  |  |  |
| Art and <br> design <br> elective | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |  |  |
| :--- | :---: | :---: | :---: | :---: |
| ARTG 4550 <br> or 4700 | ARTG 4551 <br> or 4701 | 4 |  |  |
| Design <br> elective | design <br> elective | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
| 16 |  |  |  | 16 |
| Total Hours: 130 |  |  |  |  |
| Plan of Study - Interaction Design |  |  |  |  |
| Sample Five Years, Two Co-ops in Spring/Summer 1. YA or ZA |  |  |  |  |
| Plan of Study 0ptional. |  |  |  |  |

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| ARTF 1000 | 1 ARTF 1124 <br> (with optional ARTF 1125) | 4 Vacation | Vacation |  |
| ARTG 1250 | 4 ARTG 2250 <br> (with optional ARTG 2251) | 4 |  |  |
| ARTF 1122 <br> (with optional ARTF 1123) | 4 ARTH 2210 | 4 |  |  |
| ARTH 1111 | 4 Elective | 4 |  |  |
| Elective | 4 |  |  |  |
|  | 17 | 16 | 0 | 0 |

Year 2


Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| ARTG 2260 | 4 Co-op | Co-op | Vacation |  |
| ARTG 3451 | 4 |  |  |  |
| Design <br> history <br> elective | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
| EEAM 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 |  |

Year 4


Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ARTG 4550 <br> or 4700 | 4 ARTG 4551 | 4 |
| Design 4701 <br> elective | or <br> Design <br> elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 130

## Games, BFA

The BFA in games 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 game industry, including broader platforms and audiences and more distribution channels, students will be oriented toward developing games and playful media in an independent creative context, preparing graduates to become leaders within a growing segment of the game industry. Curriculum is geared to cultivating the students' own unique creative voice through courses that apply theory analysis to gamemaking practice 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 production. BFA in games majors will be based in the College of Arts, Media and Design but will have a minimum of four games courses in which they interact with and collaborate with students in the BS in computer science and game development 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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.

## Games Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Art and Design at Northeastern |  |  |
| ARTF 1000 | Art and Design at Northeastern | 1 |
| Foundation |  | 4 |
| GAME 1110 | Games and Society | 4 |
| GAME 2500 | Foundations of Game Design | 4 |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123 ) | 4 |
| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224 ) | 4 |
| MATH 1260 | Math Fundamentals for Games | 4 |
| ARTG 2260 | Programming Basics | 4 |

Art History Foundation
Complete one art history course within the ARTH subject 4
code.

| Game |  | 4 |
| :--- | :--- | :--- |
| GAME 1850 | Experimental Game Design | 4 |
| GAME 2650 | Introduction to Game Research <br>  <br>  <br> Gethods | 4 |
| GAME 2750 | Games Criticism and Theory | 4 |
| GAME 3700 | Game Studio | 4 |
| Entrepreneurship | Rapid Idea Prototyping for Games | 4 |
| ENTR 2301 | Innovation! | 4 |
| GAME 2010 | The Business of Games | 4 |
| GAME 3800 | Game Concept Development and | 4 |
| ENTR 3305 | Production | 4 |

## Capstone

A grade of $C$ or higher is required:

| GAME 4700 | Game Design Capstone 1 | 4 |
| :--- | :--- | ---: |
| GAME 4701 | Game Design Capstone 2 | 4 |
| Critical Making |  | 4 |
| Complete one of the following: |  |  |
| GAME 2755 | Games and Social Justice |  |
| GAME 2355 | Narrative for Games |  |
| GAME 3055 | Playful Design | 4 |
| Creative Making |  |  |
| Complete one of the following: |  |  |
| ARTG 3250 | Physical Computing |  |
| GAME 4155 | Designing Imaginary Worlds |  |
| Game Electives |  | 12 |
| Complete three GAME courses. |  |  |

## Games Major Credit/GPA Requirement

Complete 94 semester hours for the major with a 2.000 GPA.

## Program Requirement

128 total semester hours required
Plan of Study
Sample Four Years, No Co-op

| Year 1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| ARTF 1000 | 1 | ARTF 2223 <br> (with optional ARTF 2224 ) | 4 | Vacation |  | Vacation | 0 |
| ARTF 1122 <br> (with optional ARTF 1123 ) | 4 | GAME 1110 | 4 |  |  |  |  |
| GAME 2500 | 4 | MATH 1260 | 4 |  |  |  |  |
| Art history elective | 4 | Elective | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 0 |  | 0 |

Year 2


Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 Hours |
| :--- | :---: | :---: | :---: | :---: |
| GAME 3800 | 4 Creative <br> making <br> elective | 4 Vacation | Vacation |


| Elective | 4 Elective | 4 | 0 |
| :--- | :---: | :---: | :---: |
|  | 16 | 16 |  |
| Year 4 |  |  |  |
| Fall | Hours Spring | Hours |  |
| GAME 4700 | 4 GAME 4701 | 4 |  |
| ENTR 2301 | 4 ENTR 3305 | 4 |  |
| GAME | 4 Elective | 4 |  |
| elective | 4 Elective | 4 |  |
| Elective | 16 | 16 |  |
|  |  |  |  |
| Total Hours: 129 |  |  |  |

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 practices of animation, game, game art, photography, and video arts are offered with variations more yet to be invented.

Courses in imaginative and narrative arts, required for professional work in documentary films, game art and promotion, visualization, motion graphics, interactive art, illustration, and short animated film, are offered. An intensive studio program, the curriculum provides knowledge, experience, and techniques of media arts informed by theory, experimentation, and critique. Extensive digital imaging and interactive media editing and production facilities afford you the opportunity to become highly proficient in the current skills and emerging practices necessary for remarkable work. The media arts are evolving and expanding their reach into culture and society in daily life and global experience. The revolutions in 3-D 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.

Video arts 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 artsunderscores 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.

## Program Requirements - All Concentrations

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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
Introduction to College
ARTF $1000 \quad$ Art and Design at Northeastern 1

Art and Design Fundamentals

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123 ) | 4 |
| :--- | :--- | :---: |
| ARTF 1124 | 3D Fundamentals: Structure and <br> Drawing (with optional ARTF 1125 ) | 4 |
| ARTF 2220 | 4D Fundamentals: Sequence and <br> Drawing (with optional ARTF 2221 ) | 4 |
| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224 ) | 4 |
| Art and Design History | 4 |  |
| ARTH 1110 | Global Art and Design History: Ancient <br> to Medieval | 4 |
| ARTH 1111 | Global Art and Design History: <br> Renaissance to Modern | 4 |
| ARTH 2210 | Modern Art and Design History | 4 |

Media Arts Requirements
Code Title

## Hours

## Drawing Fundamentals Elective

| ARTF 1120 | Observational Drawing | 4 |
| :---: | :--- | :--- |
| or ARTF 1121 | Conceptual Drawing |  |

Media Arts Basics Elective
Note: If you are pursuing a concentration, select courses not used for your concentration.
Complete one of the following:

| ARTD 2360 | Photo Basics (with optional |
| :--- | :--- |
| ARTD 2361) |  |$\quad$| Animation Basics (with optional |
| :--- | :--- |
| ARTD 2371 ) |

## Media Arts History Elective

Complete one of the following:

| 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 <br> ARTG 2251 ) | 4 |
| :--- | :--- | :---: |
| Degree Project |  |  |
| ARTD 4530 | Media Arts Degree Project 1 | 4 |
| ARTD 4670 | Media Arts Degree Project 2 | 4 |

## Media Arts Electives or Concentration

Complete the media arts electives or contact your academic advisor to declare one of the following concentrations:

- Animation (p. 70)
- Photography (p. 70)
- Video Arts (p. 70)
Code Title Hours

Note: Courses in this requirement may not be used for the drawing fundamentals elective or media arts history elective. Complete six of the following:

| 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 2213 | Nineteenth-Century Art |
| ARTH 5100 | Contemporary Art Theory and Criticism |
| ARTH 5200 | Issues in Contemporary Art |
| ARTH 5400 | Contemporary Visual Culture |
| ARTS 2330 | Sculpture Basics |
| ARTS 2340 | Painting Basics |
| ARTS 2341 | Figure Drawing |
| ARTS 3449 | Drawing in Mixed Media |
| ARTD 2100 | Narrative Basics |
| ARTD 3460 | Photography 1 |
| 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 2 |
| ARTD 4570 | Animation 2 |
| ARTD 4575 | Animation 3 |
| ARTD 4577 | Digital Sculpture and Model Making |
| ARTD 5582 | Collaborative Video and Community Engagement |
| ARTD 4660 | Studio Photography |
| ARTD 4661 | Alternative Photographic Processes |
| ARTG 2300 | Business Literacy for Design and Media |
| ARTG 3351 | Time-Based Design |

## Program Requirement

130 total semester hours required

| Concentrations (Animation/Photography/Video Arts) |
| :--- |
| CONCENTRATION IN ANIMATION <br> Code$\quad$ Title |
| Animation Requirements |
| ARTD 2100 |$\quad$ Hour

## 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 two of the following: |  |
| :--- | :--- |
| ARTD 2100 | Narrative Basics |
| ARTE 2301 | The Graphic Novel |
| ARTG 2300 | Business Literacy for Design and Media |
| 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 2213 | Nineteenth-Century Art |
| ARTH 5100 | Contemporary Art Theory and Criticism |
| ARTH 5200 | Issues in Contemporary Art |
| ARTH 5400 | Contemporary Visual Culture |
| ARTS 2330 | Sculpture Basics |
| ARTS 2340 | Painting Basics |
| ARTS 2341 | Figure Drawing |
| ARTS 3449 | Drawing in Mixed Media |
| ARTD 3470 | Animation 1 |
| ARTD 3471 | Virtual Environment Design |
| ARTD 3472 | Character Design for Animation |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |
| ARTD 4570 | Animation 2 |
| ARTD 4575 | Animation 3 |
| ARTD 4577 | Digital Sculpture and Model Making |
| ARTD 5582 | Collaborative Video and Community |
| ARTG 2252 | Engagement |
| ARTG 3351 | Time-Based Design |
| ARTD 3473 | Animation for Games |
| ARTH 1100 | Interactive Media and Society |

## CONCENTRATION IN VIDEO ARTS

Code Title Hours
Video Arts Requirements

| ARTD 2380 | Video Basics (with optional | 4 |
| :--- | :--- | ---: |
|  | ARTD 2381 ) | 4 |
| ARTD 3480 | Video: Sound and Image | 4 |
| ARTD 5582 | Collaborative Video and Community | 4 |

## Video Arts Electives

Complete three of the following: 12

## CONCENTRATION IN PHOTOGRAPHY

Code Title Hours

## Photography Requirements

$\left.\begin{array}{lll}\hline \text { ARTD 2360 } & \text { Photo Basics (with optional } & 4 \\ \hline \text { ARTD 2361 ) }\end{array}\right)$

| ARTD 3485 | Experimental Video |
| :--- | :--- |
| CINE 2160 | Narrative Filmmaking |
| CINE 3446 | Topics in Documentary Production |
| CINE 3389 | Screenwriting |
| ARTH 2212 | Survey of the Still and Moving Image |
| THTR 2345 | Acting for the Camera |
| Art and Design Electives |  |
| Note: Courses in this requirement may not be used for the <br> drawing fundamentals elective, media arts basics elective, <br> and media arts history elective. |  |


| Complete two of the following: |  |
| :--- | :--- |
| ARTD 2100 | Narrative Basics |
| ARTE 2301 | The Graphic Novel |
| ARTG 2300 | Business Literacy for Design and Media |
| 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 2213 | Nineteenth-Century Art |
| ARTH 5100 | Contemporary Art Theory and Criticism |
| ARTH 5200 | Issues in Contemporary Art |
| ARTH 5400 | Contemporary Visual Culture |
| ARTS 2330 | Sculpture Basics |
| ARTS 2340 | Painting Basics |
| ARTS 2341 | Figure Drawing |
| ARTS 3449 | Drawing in Mixed Media |
| ARTD 3470 | Animation 1 |
| ARTD 3471 | Virtual Environment Design |
| ARTD 3472 | Character Design for Animation |
| ARTD 4565 | Photography 2 |
| ARTD 4570 | Animation 2 |
| ARTD 4575 | Animation 3 |
| ARTD 4577 | Digital Sculpture and Model Making |
| ARTG 2252 | Graphic Design 1 |
| ARTG 3351 | Time-Based Design |
| ARTD 3473 | Animation for Games |
| ARTH 1100 | Interactive Media and Society |

## Plan of Study - No Concentration

Sample Five Years, Two Co-ops in Spring/Summer 1/Sample. ZA Plan of Study only.

Year 1
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { ARTF 1000 } & \begin{array}{l}\text { ARTF 1122 } \\ \text { (with } \\ \text { optional }\end{array} & 4 \text { Vacation }\end{array} \quad \begin{array}{c}\text { Vacation }\end{array}\right]$

| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| ARTF 2223 <br> (with | Media arts <br> history | 4 Vacation | Vacation |  |
| optional | elective |  |  |  |
| ARTF 2224) | 4 Media arts |  |  |  |
| ARTH 2210 | 4 |  |  |  |
|  |  |  |  |  |


| Media arts <br> basics <br> elective | 4 Elective | 4 |  |  |
| :--- | :---: | ---: | :--- | ---: |
| Elective | 4 Elective | 4 | 0 | 0 |

Year 3


Year 4
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \begin{array}{l}\text { Media arts } \\ \text { elective }\end{array} & 4 \text { Co-op }\end{array} \quad \begin{array}{c}\text { Cocation }\end{array}\right]$

Year 5

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| ARTD 4530 or ARTG 4700 | 4 | ARTD 4670 or ARTG 4701 | 4 |
| Media arts elective | 4 | Media arts elective | 4 |
| Elective | 4 | Elective | 4 |
| Elective | 4 | Elective | 4 |
| 16 |  |  | 16 |

Total Hours: 130

## Plan of Study - Animation

Sample Five 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 |  | ARTF 1122 <br> (with optional ARTF 1123) | 4 | Vacation |  | Vacation |  |
| Drawing fundamentals elective |  | ARTF 2220 <br> (with optional ARTF 2221) | 4 |  |  |  |  |
| ARTF 1124 <br> (with optional ARTF 1125) | 4 | ARTH 1111 | 4 |  |  |  |  |
| ARTH 1110 | 4 | Elective | 4 |  |  |  |  |



Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARTF 2223 <br> (with optional ARTF 2224) | 4 | ARTD 2100 | 4 | Vacation |  | Vacation |  |
| ARTD 2370 <br> (with optional ARTD 2371) | 4 | ARTD 3470 | 4 |  |  |  |  |
| ARTH 2210 |  | Media arts history elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 |  |  |
| Co-op | Hours Summer 2 | Hours |  |  |
| ARTD 4570 | 4 Co-op |  |  |  |
| ARTG 2250 <br> (with | 4 |  |  |  |
| pptional |  |  |  |  |
| ARTG 2251) |  |  |  |  |
| Media arts <br> basics <br> elective | 4 |  |  | 0 |
| Elective | 4 |  |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Co-op | Vacation |  |  |  |
| Animation <br> elective | 4 Co-op |  |  |  |
| Art and <br> design <br> elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 0 |
|  | 16 |  |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | :---: |
| ARTD 4530 | 4 ARTD 4670 | 4 |
| or ARTG | or ARTG |  |
| 4700 | 4701 | 4 |
| Animation <br> elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

[^0]
## Plan of Study - Photography

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

 ZA Plan of Study Only.| Year 1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring |  | Summer 1 | Hours |  | Hours |
| ARTF 1000 | 1 | ARTH 1111 | 4 | Vacation |  | Vacation |  |
| ARTH 1110 |  | ARTF 1122 <br> (with optional ARTF 1123) | 4 |  |  |  |  |
| ARTF 1124 <br> (with optional ARTF 1125) | 4 | ARTF 2220 <br> (with optional ARTF 2221) | 4 |  |  |  |  |
| Drawing fundamentals elective | S 4 | Elective | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 0 |  | 0 |
| Year 2 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| ARTF 2223 <br> (with optional ARTF 2224) |  | ARTD 3460 |  | Vacation |  | Vacation |  |
| ARTD 2360 <br> (with optional ARTD 2361) |  | Media arts basics elective | 4 |  |  |  |  |
| ARTH 2210 | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |
| Year 3 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| ARTD 4565 |  | Co-op |  | Co-op |  | Vacation |  |
| ARTG 2250 <br> (with optional ARTG 2251) | 4 |  |  |  |  |  |  |
| Art and design elective | 4 |  |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
| EEAM 2000 | 1 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Media arts history elective | 4 Co-op | Co-op | Vacation |  |
| Photography elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |


| Year 5 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| ARTD 4530 <br> or ARTG <br> 4700 | 4 ARTD 4670 <br> or ARTG <br> 4701 | 4 |
| Elective | 4 Art and <br> design <br> elective | 4 |
| Elective | 4 Elective | 4 Elective |

Total Hours: 130

## Plan of Study - Video Arts

Sample Five Years, Two Co-ops in Spring/Summer 1/Sample. ZA Plan of Study Only.

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARTF 1000 |  | ARTF 1122 <br> (with optional ARTF 1123) | 4 | Vacation |  | Vacation |  |
| ARTF 1124 <br> (with optional ARTF 1125) |  | ARTF 2220 <br> (with optional ARTF 2221) | 4 |  |  |  |  |
| ARTH 1111 | 4 | ARTH 1110 | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 0 |  | 0 |

Year 2


Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: | :---: |
| ARTD 3480 | 4 Co-op | Co-op | Vacation |  |

Year 4
\(\left.\begin{array}{lccccc}Fall \& Hours Spring \& Hours Summer 1 \& Hours Summer 2 \& Hours <br>

ARTD 5582 \& 4 Co-op \& Co-op \& Vacation\end{array}\right]\)| Art and |
| :--- |
| design <br> elective |
| Video arts <br> elective |
| Elective |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ARTD 4530 | 4 ARTD 4670 | 4 |
| Video arts <br> elective | Art and <br> design <br> elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 130

## Studio Art, BFA

The BFA in studio art is offered in partnership with the School of the Museum of Fine Arts at Tufts University (SMFA at Tufts), affiliated with Tufts University and located adjacent to the Northeastern campus. In this major, the studio art classes are taken at the SMFA at Tufts, which permits students to explore a wide range of artistic media including ceramics, drawing, film, glasswork, metalsmith, painting, performance, print and paper, sculpture, and sound in their extensive studio environments. Art and design history courses are taken at Northeastern. In addition, students have access to all the elective courses, co-op, study-abroad programs, technology, and student resources that Northeastern students experience.

The BFA in studio art degree is awarded by 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 advisors 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 |
| :--- | :---: | :---: |
| Art History Required Courses |  |  |
| ARTH 2210 | Modern Art and Design History | 4 |
| ARTH 2211 | Contemporary Art and Design History | 4 |
| Art and Design History Electives |  |  |
| Complete three of the following: | 12 |  |

Complete three of the following:

| 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 2212 | Survey of the Still and Moving Image |
| ARTH 2213 | Nineteenth-Century Art |
| ARTH 5100 | Contemporary Art Theory and Criticism |
| ARTH 5400 | Contemporary Visual Culture |
| ARTH 5902 | Special Topics in Art and Design History |
| 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 |
| ARCH 1310 | Architecture and Global Cultures, Prehistory to 1400 |
| ARCH 1320 | Architecture and Global Cultures, 1400 to Present |
| ARCH 1350 | American Architecture |
| ARCH 2330 | Architecture, Modernity, and the City, 1800 to 1910 |
| ARCH 2340 | Architecture, Modernity, and the City, 1910 to 1980 |
| CLTR 1240 | Latin American Film |
| CLTR 1260 | Japanese Film |
| CLTR 1280 | French Film and Culture |
| CINE 2336 | American Film and Culture |
| CINE 3392 | Gender and Film |
| CINE 3500 | Film Theory |
| CINE 3920 | Topics in Film Studies |
| 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 3426 | Popular Music as Media Form |


| MUSC 1109 | Introduction to Art, Drama, and Music |
| :--- | :--- |
| MUSC 1113 | Film Music |

## Studio Art Courses

| Code $\quad$ Title | Hours |
| :--- | :--- | ---: |
| Studio Art | 68 |
| Specific courses are targeted to each student's unique <br> program of study, which is determined in consultation with an <br> academic advisor at SMFA at Tufts. These courses generally <br> have the following course number. |  |


| SMFA 3000 | Museum of Fine Arts Studio (4 to 12 |
| :--- | :--- |
|  | SH) |

## Senior Thesis Capstone

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:

```
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 <br> Sample Four Years, No Co-op Plan of Study

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ARTF 1000 | 1 SMFA 3000 | 10 Vacation | 0 Vacation | 0 |
| SMFA 3000 | 10 ARTH 2210 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  |  |
| Art history <br> elective | 4 |  |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| SMFA 3000 | 10 SMFA 3000 | 10 Vacation | 0 Vacation | 0 |
| ARTH 2211 | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 |  | 0 |
|  | 18 | 18 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| SMFA 3000 | 10 SMFA 3000 | 10 Vacation | 0 Vacation | 0 |
| Elective | 4 Art history <br> elective | 4 |  |  |
| Elective | 4 Elective | 4 |  | 0 |
|  | 18 | 18 | 0 |  |

## Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| SMFA 3000 | 4 SMFA 3000 | 4 |
| SMFA 4000 | 4 SMFA 4000 | 4 |
| Art history | 4 Elective | 4 |

elective

| Elective | 4 Elective | 4 |
| :--- | :---: | ---: |
| 16 | 16 |  |

Total Hours: 141

## Architecture and Graphic and Information Design, BS

The School of Architecture and the Department of Art + Design offer a combined major in architecture and graphic and information design. Students interested in the combined major connect specific problem solving inherent to architectural understanding with the larger context of contemporary cities. They learn to conceptualize, synthesize, and represent complex architectural, urban, and environmental issues. Students combine this knowledge 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ARCH 1110 | Fundamental Architectural Representation | 4 |
| ARCH 1310 | Architecture and Global Cultures, Prehistory to 1400 | 4 |
| ARCH 1120 | Fundamental Architectural Design | 6 |
| ARCH 1320 | Architecture and Global Cultures, 1400 to Present | 4 |
| ARCH 1450 | Understanding Design | 4 |
| ARCH 2130 | Site, Space, and Program | 6 |
| ARCH 2330 | Architecture, Modernity, and the City, 1800 to 1910 | 4 |
| ARCH 2340 | Architecture, Modernity, and the City, 1910 to 1980 | 4 |
| Electives |  |  |
| Complete two of th | ollowing courses: | 8 |

[^1]| ARCH 3450 | Advanced Architectural Communication |
| :--- | :--- |
| ARCH 5310 | Design Tactics and Operations |

## Graphic and Information Design Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Art and Design at Northeastern |  |  |
| ARTF 1000 | Art and Design at Northeastern | 1 |

Art and Design Fundamentals

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| :--- | :--- | :---: |
| ARTF 2220 | 4D Fundamentals: Sequence and <br>  | 4 |

Art and Design History

| ARTH 2210 | Modern Art and Design History | 4 |
| :--- | :--- | :--- |
| ARTH 2215 | History of Graphic Design | 4 |


| Design |  | 4 |
| :--- | :--- | :--- |
| 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 |

Art and Design Electives
Complete one of the following: 4

| ARTD 2360 | Photo Basics (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 | 3D Fundamentals: Structure and |
|  | Drawing (with optional ARTF 1124) |


| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224) |
| :--- | :--- |
| ARTG 2400 | Interaction Design 1: Responsive (with <br> optinal ARTG 2401 ) |
| ARTG 3351 | Time-Based Design |
| ARTG 3450 | Graphic Design 2 |
| ARTG 3460 | Identity and Brand Design |
| ARTG 4552 | Information Design 2 |
| ARTG 4553 | Environmental Information Design |
| ARTG 4554 | Typography 3 |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| ARTG 4551 | Design Degree Project 2 | 4 |

## Program Requirement

132 total semester hours required

## Plan of Study

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

Year 1


Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ARCH 2130 | 6 ARCH 2340 | 4 Vacation | 0 Vacation | 0 |
| ARTG 2250 <br> (with | 4 ARTG 2252 | 4 |  |  |
| optional |  |  |  |  |
| ARTG 2251) |  |  |  |  |
| ARTH 2210 | 4 ARCH 1450 | 4 |  |  |
| ARCH 2330 | 4 Elective | 4 | 0 | 0 |
|  | 18 | 16 |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Architecture <br> elective | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| ARTG 3350 | 4 |  |  |  |
| ARTH 2215 | 4 |  |  |  |
| ENGW 3314 | 4 |  |  | 0 |
| or 3315 |  |  | 0 | 0 |
| EEAM 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Architecture | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| elective |  |  |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ARTG 4550 | 4 ARTG 4551 | 4 |
| Art and <br> design <br> elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Business Core Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| 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 |
| :---: | :---: | :---: |
| Accounting |  |  |
| ACCT 1201 | Financial Accounting and Reporting | 4 |
| Business Statistics |  |  |
| MGSC 2301 | Business Statistics | 4 |
| International Business/Social Responsibility |  |  |
| INTB 1203 | International Business and Global Social Responsibility | 4 |
| Marketing |  |  |
| MKTG 2201 | Introduction to Marketing | 4 |
| Finance |  |  |
| FINA 2201 | Financial Management | 4 |
| Organizational Behavior |  |  |
| ORGB 3201 | Organizational Behavior | 4 |
| Business Core Option |  |  |
| Complete one of | ollowing: | 4 |
| ACCT 2301 | Managerial Accounting |  |
| 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 |  |
| Art + Design Requirements |  |  |
| Code | Title | Hours |
| Art + Design Fundamentals |  |  |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing (With optional ARTF 1123) | 4 |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing (With optional ARTF 2224) | 4 |
| Design Courses |  |  |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 2250 | Typography 1 (With optional ARTG 2251) | 4 |
| ARTG 3350 | Typography 2 | 4 |
| ARTG 3460 | Identity and Brand Design | 4 |
| Art+Design History |  |  |
| ARTH 1100 | Interactive Media and Society | 4 |
| ARTH 2215 | History of Graphic Design | 4 |

## Design Option

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one o | 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 3463 | Experience Design 2 |  |
| Experience Design Option |  |  |
| ARTG 3462 | Experience Design 1 |  |
| ARTG 3463 | Experience Design 2 |  |
| Marketing Concentration |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| MKTG 3301 | Marketing Management | 4 |
| MKTG 3401 | Marketing Research | 4 |
| Electives |  |  |
| At least one course must be taken from the business courses listed and one from the interactive media courses listed. |  |  |
| Complete three of the following: |  | 12 |
| Business |  |  |
| MKTG 4502 | Marketing in the Service Sector |  |
| MKTG 4504 | Advertising and Brand Promotion |  |
| MKTG 4506 | Consumer Behavior |  |
| MKTG 4508 | Digital Marketing |  |
| MKTG 4510 | New Product Development |  |
| Art + Design |  |  |
| ARTD 2360 | Photo Basics (With optional ARTD 2361) |  |


| ARTD 2380 | Video Basics (With optional <br> ARTD 2381) |
| :--- | :--- |
| ARTF 2220 | 4D Fundamentals: Sequence and <br> Drawing (With optional ARTF 2221) |
| ARTG 2260 | Programming Basics |
| ARTG 3250 | Physical Computing |
| ARTG 3351 | Time-Based Design |
| ARTG 3451 | Information Design 1 |
| ARTE 4901 | Special Topics in Art and Design Studio |

## Second Business Concentration (Optional)

A second business concentration is optional and may be chosen from the following list. Requirements for the concentrations are listed below (p. 77).

- Accounting (p. 77)
- Business/Interdisciplinary (p. 78)
- Entrepreneurship and Innovation (p. 78)
- Finance (p. 78)
- Management (p. 78)
- Management Information Systems (p. 79)
- Supply Chain Management (p. 79)


## Integrative Courses

Code Title Hours
Integrative Courses
Note: These courses also satisfy requirements above:

| MKTG 3301 | Marketing Management |
| :--- | :--- |
| ARTG 3460 | Identity and Brand Design |

Capstone
Complete the interactive media capstone or the business 4-8
capstone:
Interactive Media Capstone

| ARTG 4550 | Design Degree Project 1 |
| :---: | :--- |
| and ARTG 4551 | and Design Degree Project 2 |
| ARTG 4700 | Interaction Team Degree Project 1 |
| and ARTG 4701 | and Interaction Team Degree Project 2 |
| Business Capstone |  |

STRT 4501 Strategy in Action

## 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

132 total semester hours required

## Second Business Concentration (Optional)

A second business concentration is optional and may be chosen from the following:

CONCENTRATION IN ACCOUNTING
Code Title Hours
Required Courses
ACCT 3401 Financial Reporting and Analysis $1 \quad 4$

| ACCT 4501 | Financial Reporting and Analysis 2 |
| :--- | :--- |
| Electives | 4 |
| Complete two of the following: | 8 |
| ACCT 3403 | Accounting Information Systems |
| ACCT 3416 | Strategic Cost Analysis for Decision <br> Making |
| ACCT 4412 | Auditing and Other Assurance Services |
| ACCT 4414 | Income Tax Determination and <br>  |

## CONCENTRATION IN BUSINESS/INTERDISCIPLINARY

Code Title
Complete four courses in consultation with approved

D'Amore-McKim School of Business faculty member.

## CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION

Code Title
Note: The following courses do not count toward this concentration:

| ENTR 1201 | The Entrepreneurial Universe |  |
| :---: | :---: | :---: |
| ENTR 3308 | Business Economic History of South Africa |  |
| ENTR 3318 |  |  |
| ENTR 3328 |  |  |
| ENTR 3338 | Field Research in Sustainable Energy in Iceland |  |
| ENTR 3346 |  |  |
| ENTR 4510 | Management Consulting Abroad |  |
| ENTR 4514 | Development Practice and Global Citizenship in India |  |
| Introductory Cour |  |  |
| ENTR 2301 or ENTR 2303 | Innovation! <br> Entrepreneurial Marketing and Selling | 4 |
| Capstone Course |  |  |
| Complete one of $t$ | following: | 4 |
| ENTR 4501 | Business Planning for Technology Ventures |  |
| ENTR 4503 | Business Planning for Small and Medium Enterprises |  |
| ENTR 4505 | Entrepreneurial Growth Strategy for Technology Ventures |  |
| ENTR 4506 | Advanced Studies in Social Enterprise |  |
| Electives |  |  |
| Note: Only one no | NTR course may be used as an elective. |  |
| Complete two of t | following: | 8 |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |  |
| ENTR 3212 | Innovation for Social Change |  |
| ENTR 3217 | Global Family Business Leadership |  |


| ENTR 3220 | International Entrepreneurship and <br> Innovation Consulting |
| :--- | :--- |
| ENTR 3305 | Entrepreneurial Strategy and Business <br> Model Design |
| ENTR 3306 | Global Entrepreneurship |
| ENTR 3330 | Lean Design and Development for <br> Entrepreneurs |
| ENTR 3401 | Management of Operations and Growth <br> in Small- and Medium-Sized Enterprises |
| ENTR 3403 | Managing Operations in a Technology- <br> Based Startup Firm |
| ENTR 3520 | Impact Investing and Social Finance |
| ENTR 4225 | Corporate Entrepreneurship through <br> Global Growth, Acquisitions, and <br> Alliances <br> Social Entrepreneurship and <br> Sustainable Development in India |
| ENTR 4512 | Entrepreneurial Finance, Innovation <br> Valuation, and Private Equity |
| FINA 4610 | Negotiating in Business |
| MGMT 3302 |  |

## CONCENTRATION IN FINANCE

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Course |  | 4 |
| FINA 3301 | Corporate Finance |  |
| or FINA 3303 | Investments |  |

Electives
Complete three of the following
ENTR $3520 \quad$ Impact Investing and Social Finance
or FINA 2720 Sustainability in the Business Environment
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 $4220 \quad$ Behavioral Finance
FINA $4310 \quad$ Working Capital Management
FINA 4312 Issues in Corporate Governance
FINA 4320 International Financial Management
FINA $4410 \quad$ Valuation and Value Creation
FINA $4412 \quad$ Personal Financial Planning
FINA $4420 \quad$ Mergers and Acquisitions
FINA 4512 Financial Risk Management
FINA 4514 Investment Banking
FINA 4516 Real Estate Finance
FINA $4524 \quad$ Credit Analysis
FINA $4526 \quad$ Core Topics in Alternative Investments
FINA 4983 Special Topics in Finance
FINA 4602 Turnaround Management
FINA 4604 Fixed-Income Securities
FINA 4608 Advanced Financial Strategy
FINA $4610 \quad$ Entrepreneurial Finance, Innovation
Valuation, and Private Equity



Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| MKTG 3301 <br> or 3401 | 4 Co-op 3 | Co-op 3 | Vacation |  |
| Concentratior <br> elective 1 | 4 |  |  |  |
| Design <br> option 2 | 4 |  |  |  |
| ARTG 3350 | 4 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Concentration | 4 ARTG 4551, | 4 |
| elective 2 | 4701, or <br> STRT 4501 |  |
| ARTG 3460 | 4 Concentratior <br> elective 3 | 4 |
| ARTG 4550 <br> or 4700 (or | 4 Elective | 4 |
| Elective) | 4 Elective | 4 |
| Elective ND <br> or DD | 16 | 16 |

Total Hours: 131

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

Code Title Hours

## Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| or ARTF 1000 | Art and Design at Northeastern |  |
| CS 1210 | Professional Development for CCIS Co- <br> op | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science
fundamental courses.

| CS 1800 | Discrete Structures |  |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 | 5 |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |
| Computer Science | Required Courses |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 4500 | Software Development | 4 |
| and CS 4501 | and Recitation for CS 4500 | 4 |
| IS 4300 | Human Computer Interaction | 4 |

## Presentation Requirement

THTR 1170 The Eloquent Presenter 1

## Computer Science Elective Courses

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, IS, or DS classes that are not 8 already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Design Requirements

Code Title Hours

Design Courses

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| :--- | :--- | ---: |
| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224) | 4 |
|  | Design Process Context and Systems | 4 |
| ARTG 1250 2260 | Programming Basics | 4 |
| ARTG 2250 | Typography 1 (with optional | 4 |
|  | ARTG 2251) |  |
| ARTG 3350 | Typography 2 | 4 |
| ARTG 3451 | Information Design 1 | 4 |

Art + Design History
Complete one of the following: 4

| ARTH 1100 | Interactive Media and Society |
| :--- | :--- |
| ARTH 1111 | Global Art and Design History: <br> Renaissance to Modern |
| ARTH 2210 | Modern Art and Design History |
| ARTH 2211 | Contemporary Art and Design History |
| ARTH 2212 | Survey of the Still and Moving Image |
| ARTH 2215 | History of Graphic Design |

## Degree Capstone Project

Complete one of the following:
ARTG $4550 \quad$ Design Degree Project 1
and ARTG 4551 and Design Degree Project 2
ARTG 4700 Interaction Team Degree Project 1
and ARTG 4701 and Interaction Team Degree Project 2

## Design Options

Complete one of the following options:

| Code | Title | Hours |
| :---: | :---: | :---: |
| Interaction Design Option |  |  |
| ARTG 2400 | Interaction Design 1: Responsive (with optional ARTG 2401) | 4 |
| ARTG 3700 | Interaction Design 2: Mobile | 4 |
| Code | Title | Hours |
| Graphic and Information Design Option |  |  |
| ARTG 2252 | Graphic Design 1 | 4 |
| ARTG 3450 | Graphic Design 2 | 4 |
| Code | Title | Hours |
| Experience Design Option |  |  |
| ARTG 3462 | Experience Design 1 | 4 |
| ARTG 3463 | Experience Design 2 | 4 |
| Degree-Focused Electives |  |  |
| Code | Title | Hours |
| Complete two | s from the following lists: | 8 |
| Art + Design |  |  |
| ARTF 1120 | Observational Drawing |  |
| ARTF 1121 | Conceptual Drawing |  |
| ARTF 1124 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125) |  |
| ARTF 2220 | 4D Fundamentals: Sequence and Drawing (with optional ARTF 2221) |  |
| ARTD 2100 | Narrative Basics |  |
| ARTD 2360 | Photo Basics (with optional ARTD 2361) |  |
| ARTD 2370 | Animation Basics (with optional ARTD 2371) |  |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |  |
| ARTG 2252 | Graphic Design 1 |  |
| ARTG 2300 | Business Literacy for Design and Media |  |
| ARTG 2400 | Interaction Design 1: Responsive (with optional ARTG 2401) |  |
| ARTG 3450 | Graphic Design 2 |  |
| ARTG 3250 | Physical Computing |  |
| ARTG 3351 | Time-Based Design |  |
| ARTG 3450 | Graphic Design 2 |  |
| ARTG 3460 | Identity and Brand Design |  |
| ARTG 3462 | Experience Design 1 |  |
| ARTG 3463 | Experience Design 2 |  |
| ARTG 3700 | Interaction Design 2: Mobile |  |
| ARTG 4552 | Information Design 2 |  |
| ARTG 4553 | Environmental Information Design |  |
| ARTG 4554 | Typography 3 |  |
| ARTE 4901 | Special Topics in Art and Design Studio |  |
| 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 |
| IS 2000 | Principles of Information Science |
| DS 4100 | Data Collection, Integration, and |
| DS 4200 | Inalysis |
| DS 4300 | Visualization Presentation and |
| DS 4400 | Large-Scale Information Storage and  <br> DS 4420 Machine Learning and Data Mining 1 <br> CS 4991 Machine Learning and Data Mining 2 <br> CS 4992 Directed Study <br> Independent Study  |

## 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 2260 | Programming Basics |

## Supporting Course

| Code <br> Computing and Social Issues | Hours |
| :--- | :--- | ---: |
| Complete one of the following: |  |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

## Computer Science Writing Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  |  |
| ENGW 1111 | First-Year Writing | 4 |

Advanced Writing in the Disciplines
ENGW 3302 Advanced Writing in the Technical 4

| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |
| :--- | :--- |

## Required General Electives

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete six 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.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses

## Program Requirement

131 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 <br> ARTF 1000 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | ARTG 1250 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | ARTF 2223 <br> (with optional ARTF 2224) | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| ARTF 1122 <br> (with optional ARTF 1123) | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 0 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| CS 1210 | 1 Co-op 1 | Co-op 1 | Elective | 4 |
| CS 3500 | 4 |  | Elective | 4 |
| Design option course 1 | 4 |  |  |  |
| CS 3000 | 4 |  |  |  |
| ARTG 2250 <br> (with <br> optional <br> ARTG 2251) | 4 |  |  |  |
|  | 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 |  | ENGW 3302 <br> or 3315 | 4 |
| ARTG 2260 | 4 |  |  |  |  | Elective | 4 |
| Degreefocused elective | 4 |  |  |  |  |  |  |
| Art + design history elective | 4 |  |  |  |  |  |  |
| THTR 1170 | 1 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | :---: |
| ARTG 3350 | 4 Co-op 3 | Co-op 3 |  |
| Design <br> option <br> course 2 | 4 |  |  |
| Degree- <br> focused <br> elective 2 | 4 |  |  |
| Computing <br> and social <br> issues <br> elective | 4 |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Design <br> capstone 1 | D Design <br> capstone 2 $^{*}$ | 4 |
| ARTG 3451 | 4 CS elective | 4 |
| CS 4500 | 4 Elective | 4 |
| and CS 4501 | 4 Elective | 4 |
| CS elective | 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 <br> CS 1200 | Hours Summer 1 <br> and CS 2511 | Hours Summer 2 |  | Hours

Year 2

| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARTG 2260 | 4 Co-op 1 |  | Co-op 1 |  | ENGW 3302 | 4 |
| ARTG 2250 <br> (with optional ARTG 2251) | 4 |  |  |  | Elective | 4 |
| Design option course 1 | 4 |  |  |  |  |  |
| Degreefocused elective 1 | 4 |  |  |  |  |  |
| CS 1210 | 1 |  |  |  |  |  |
|  | 17 | 0 |  | 0 |  | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| THTR 1170 | 1 Co-op 2 | Co-op 2 | Elective | 4 |
| IS 4300 | 4 |  | Elective | 4 |
| Design option course 2 | 4 |  |  |  |
| Art + design history elective | 4 |  |  |  |
| Computing and social issues | 4 |  |  |  |
|  | 17 | 0 | 0 | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | ---: |
| Design <br> capstone 1* | 4 Design <br> capstone 2* | 4 Elective | 4 |
| ARTG 3350 | 4 Degree- <br> focused <br> elective 2 | 4 Elective | 4 |
| ARTG 3451 | 4 CS elective | 4 |  |
| CS 4500 <br> and CS 4501 | 4 CS elective | 4 | 8 |
|  | 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | :---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| CS 1800 | Discrete Structures |  |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 Fundamentals of Computer Science 2 <br> and CS 2511 and Lab for CS 2510 5 |  |  |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3520 | Programming in C++ (Integrative <br> course) | 4 |
| CS 3540 | Game Programming (Integrative <br> course) | 4 |
| CS 3650 Computer Systems | 4 |  |
| CS 3700 | Networks and Distributed Systems | 4 |
| CS 4300 | Computer Graphics (Integrative course) | 4 |
| CS 4500 | Software Development <br> and CS 4501 | Building Game Engines (Integrative |
| CS 4850 | course) | 4 |

## Computer Science Elective Course

| CS 4150 | Game Artificial Intelligence (Integrative <br> course) | 4 |
| :---: | :--- | :---: |
| or IS 4300 | Human Computer Interaction |  |

## Presentation Requirement

THTR $1170 \quad$ The Eloquent Presenter 1

## Game Design Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Game Design |  | 4 |
| GAME 1110 | Games and Society | 4 |
| GAME 2010 | The Business of Games | 4 |
| GAME 2500 | Foundations of Game Design | 4 |
| GAME 3700 | Rapid Idea Prototyping for Games | 4 |
| GAME 3800 | Game Concept Development and | 4 |
| GAME 4700 | Groduction | 4 |
| GAME 4701 | Game Design Capstone 1 | 4 |

Game Design Elective
Complete one GAME course other than GAME 2150, GAME
3150, or GAME 3250 .
Computer Science/Game-Related Electives
Complete two courses from the following:
Any course in GAME subject area except GAME 2150,
GAME 3150, or GAME 3250
Any course in the ARTD, ARTE, ARTF, ARTG, ARTH, and
ARTS subject areas

| CS 2500 or higher, except CS 5010 |  |
| :--- | :--- |
| IS 2000 or higher, except IS 4900 |  |
| DS 2000 or higher, except DS 4900 |  |
| MATH 1342 | Calculus 2 for Science and Engineering |
| ECON 2350 | Statistics |
| or PSYC 2320 | Statistics in Psychological Research |

## Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Psychology |  | 4 |
| PSYC 1101 | Foundations of Psychology |  |
| Mathematics |  | 4 |
| A grade of C- or higher is required: |  |  |
| MATH 1260 | Math Fundamentals for Games <br> (Integrative course) | 4 |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |


| Computer Science Writing Requirement |  |  |
| :--- | :--- | ---: |
| Code Title | Hours |  |
| College Writing |  | 4 |
| ENGW 1111 | First-Year Writing |  |

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 <br> Professions |
| :--- | :--- |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Code Title
Hours
Complete four general electives.

## 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 coop.

## Program Requirement

133 total semester hours required

## Plan of Study <br> Sample Pattern, Four Years, Two Co-ops

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 |  | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | MATH 1260 | 4 | MATH 1341 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | Elective | 4 |  |  |  |  |
| GAME 2500 <br> (*) | 4 | GAME 1110 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |

Year 2
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { CS } 3520\left(^{*}\right) & 4 \text { CS } 1210\end{array} \quad \begin{array}{l}1 \text { Elective }\end{array}\right)$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 CS $4850\left(^{*}\right)$ | 4 Co-op | 0 Co-op | 0 |
|  | CS 4300 | 4 |  |  |
|  | ENGW 3302 | 4 |  |  |
|  | PSYC 1101 | 4 |  | 0 |
|  | THTR 1170 | 1 | 0 | 0 |

Year 4

| Fall | Hours | Spring | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GAME 4700 <br> (*) |  | GAME 4701 <br> (*) | 4 | Vacation | 0 |
| CS 3700 |  | Computer science elective | 4 |  |  |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 | Game elective | 4 |  |  |
| CS/game elective | 4 | Elective | 4 |  |  |
|  | 16 |  | 16 |  | 0 |
| 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 humancomputer 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

Code Title Hours
Computer Science Overview
CS $1200 \quad$ Leadership Skill Development
CS 1210 Professional Development for CCIS Co- 1

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science
fundamental courses:

| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 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 | Object-Oriented Design | 4 |
| CS 4300 | Computer Graphics | 4 |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 | 4 |
| IS 4300 | Human Computer Interaction | 4 |

## Presentation Requirement

THTR 1170 The Eloquent Presenter 1

## Computer Science Elective Courses

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, IS, or DS classes that are not
already required. Choose courses within the following ranges:

$$
\text { CS } 2500 \text { or higher, except CS } 5010
$$

IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

| Computer Science Writing Requirement |  |  |
| :--- | :--- | ---: |
| Code Title | Hours |  |
| College Writing |  | 4 |
| ENGW 1111 | First-Year Writing | 4 |

Advanced Writing in the Disciplines

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :--- | :--- |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Media Arts Courses

Code Title Hours

Required Media Arts Courses

| ARTF 1120 | Observational Drawing | 4 |
| :--- | :--- | :--- |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| ARTF 1124 | 3D Fundamentals: Structure and <br>  <br>  <br> Drawing (with optional ARTF 1125) | 4 |
| ARTD 2100 | Narrative Basics | 4 |
| ARTF 2220 | 4D Fundamentals: Sequence and <br>  | Drawing (with optional ARTF 2221) |

Media Arts Electives
Complete six of the following: 24

| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224) |
| :--- | :--- |
| Basics |  |


| ARTD 2360 | Photo Basics (with optional |
| :--- | :--- |
|  | ARTD 2361) |
| ARTD 2370 | Animation Basics (with optional |
|  | ARTD 2371) |

ARTD $2380 \quad$ Video Basics (with optional ARTD 2381)
Photography
ARTD $3460 \quad$ Photography 1
ARTD $4565 \quad$ Photography 2
ARTD 4660 Studio Photography
ARTD 4661 Alternative Photographic 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 |
| ARTD 4577 | Digital Sculpture and Model Making |
| Video |  |
| ARTD 3480 | Video: Sound and Image |
| ARTD 5582 | Collaborative Video and Community |
| History | Engagement |
| ARTH 2212 | Survey of the Still and Moving Image |

Media Arts Capstone Requirement
ARTD $4530 \quad$ Media Arts Degree Project 1
ARTD $4670 \quad$ Media Arts Degree Project 2

## Supporting Courses

Code Title Hours
Mathematics Requirement
MATH $2331 \quad 4$
Computing and Social Issues

| Complete one of the following: |
| :--- | :--- |
| ANTH 3418 Wired/Unwired: Cybercultures and <br> Technopolitics <br> IA 5240 Cyberlaw: Privacy, Ethics, and Digital <br> Rights <br> INSH 2102 Bostonography: The City through Data, <br> Texts, Maps, and Networks <br> PHIL 1145 Technology and Human Values <br> SOCL 1280 The 21st-Century Workplace <br> SOCL 3485 Environment, Technology, and Society <br> SOCL 4528 Computers and Society |

## Integrative Courses

Code
Title
The following courses are fulfilled through the computer science requirement:

| CS 4300 | Computer Graphics |
| :--- | :--- |
| IS 4300 | Human Computer Interaction |

## Required General Electives

## Code Title

Complete five general electives.

## 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


## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses

## Program Requirement

131 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 <br> and CS 2511 | 5 CS 3500 | 4 Vacation | 0 |
| CS 1800 | 5 CS 3200 | 4 Elective | 4 |  |
| and CS 1802 | 5 ARTF 1120 | 4 |  |  |
| CS 2500 <br> and CS 2501 |  |  |  |  |

$\left.\begin{array}{lllll}\begin{array}{l}\text { ARTF 1122 } \\ \text { (with } \\ \text { optional }\end{array} & \begin{array}{l}4 \text { ARTF 1124 } \\ \text { (with } \\ \text { optional }\end{array} & 4\end{array}\right)$

## 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 |  |  |  |
| ARTF 2220 <br> (with <br> optional | 4 |  |  |  |
| ARTF 2221) |  |  |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| THTR 1170 | 1 Co-op | 0 Co-op | 0 Vacation | 0 |
| MATH 2331 | 4 |  |  |  |
| Computer science elective | 4 |  |  |  |
| Media arts elective | 4 |  |  |  |
| Media arts elective | 4 |  |  |  |
|  | 17 | 0 | 0 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CS 4300 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| Media arts <br> elective | 4 ENGW 3302 | 4 |  |  |
| Computer <br> science <br> elective | 4 |  |  |  |
| Media arts <br> elective | 4 |  |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ARTD 4530 <br> (*) | 4 ARTD 4670 <br> $(*)$ | 4 |
| CS 4500 <br> and CS 4501 | 4 Computing <br> and social <br> issues | 4 |
| Media arts <br> elective | 4 Elective | 4 |
| Media arts <br> elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 138
*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 | 4 | CS 3500 | 4 | Vacation | 0 |
| and CS 1802 |  |  |  |  |  |  |  |
| CS 2500 | 4 | CS 3200 | 4 |  |  |  |  |
| CS 2501 | 1 | ARTF 1120 | 4 |  |  |  |  |
| ARTF 1122 <br> (with optional ARTF 1123) | 4 | ARTF 1124 <br> (with optional ARTF 1125) | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |

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 |  | Elective | 4 |
| CS 3000 | 4 |  |  |  |
| ARTF 2220 <br> (with <br> optional | 4 |  |  |  |
| ARTF 2221) |  |  |  |  |
| ARTD 2100 | 4 |  |  | 8 |
|  | 17 | 0 | 0 |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| THTR 1170 | 1 Co-op | 0 Co-op | 0 Elective | 4 |
| CS 4300 | 4 ENGW 3302 | 4 | Media arts <br> elective | 4 |
| Computer <br> science <br> elective | 4 |  |  |  |
| Media arts <br> elective | 4 |  |  |  |
| Media arts <br> elective | 4 | 4 | 0 | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | ---: |
| ARTD 4530 | 4 ARTD 4670 | 4 Elective | 4 |
| CS 4500 <br> and CS 4501 | 4 Computing <br> and social <br> issues | 4 Elective | 4 |
| Computer <br> science <br> elective | 4 Media arts <br> elective | 4 |  |
| Media arts <br> elective | 4 Media arts <br> elective | 4 |  |
|  | 16 | 16 | 8 |

Total Hours: 138
*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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

NUpath requirements 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), 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 |
| :--- | :--- | ---: |
| Communication Studies Common Requirements |  |  |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking | 4 |
| or COMM 2301 | Communication Research Methods |  |
| Foundation Course |  | 4 |


| COMM 1210 | Persuasion and Rhetoric |
| :--- | :--- |
| COMM 1225 | Communication Theory |
| COMM 1231 | Principles of Organizational <br> Communication |
| COMM 1255 | Communication in a Digital Age |
| Cluster Course |  |
| 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 |
| 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 3330 | Argumentation Theory |
| COMM 3400 | Rhetoric of Science |
| COMM 3414 | Great Speakers and Speeches 2, 1930- <br>  <br> Present |
| COMM 3415 | Communication Criticism |
| COMM 3545 | Public Relations Principles |
| COMM 3530 | Free Speech: Law and Practice |
| COMM 3532 | Theories of Conflict and Negotiation |
| COMM 3610 | Communication, Politics, and Social <br>  <br> Change |
| COMM 4535 | Nonverbal Social Interaction |
| COMM 4605 | Youth and Communication Technology |
| COMM 4631 | Crisis Communication and Image |
|  | Management |

## Communication Electives

Complete three COMM courses.

## Graphic and Information Design Requirements

$\left.\begin{array}{llr}\hline \text { Code } & \text { Title } & \text { Hours } \\ \text { Introduction to Art and Design }\end{array}\right)$

Graphic and Information Design Elective
Complete one course with the corresponding tools course, if 4 indicated, from the following:

| ARTD 2360 | Photo Basics (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 | 3D Fundamentals: Structure and <br>  |
|  | Drawing (with optional ARTF 1125) |


| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224) |
| :--- | :--- |
| ARTG 2400 | Interaction Design 1: Responsive (with <br> optional ARTG 2401) |
| ARTG 3351 | Time-Based Design |
| ARTG 3450 | Graphic Design 2 |
| ARTG 3460 | Identity and Brand Design |
| ARTG 4552 | Information Design 2 |
| ARTG 4553 | Environmental Information Design |
| ARTG 4554 | Typography 3 |

## Integrative Requirement

| Code <br> Integrative Course | Title | Hours |
| :--- | :--- | ---: |
| COMM 4602 | Contemporary Rhetorical Theory | 4 |
| or ARTG 4551 | Design Degree Project 2 | 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 Five Years, Three Co-ops in Summer 2/Fall

| Fall | Hours | Spring | Hours | Summer 1 H | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARTF 1000 <br> or COMM 1000 | 1 | ENGW 1111 | 4 | Communicatio studies elective | $4$ | Vacation | 0 |
| COMM 1101 |  | Communicatil studies foundation course |  | Foreign language core course | 4 |  |  |
| ARTG 1250 | 4 | COMM 1112 or 2301 | 4 |  |  |  |  |
| ARTF 1122 <br> (with optional ARTF 1123) |  | ARTF 2220 <br> (with optional ARTF 2221) | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Communication <br> studies <br> cluster <br> course | 4 Elective | 4 Vacation | 0 Co-op | 0 |



Total Hours: 130

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

| Year 1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring H | Hours | Summer 1 Hour | Hours | Summer 2 | Hours |
| ARTF 1000 <br> or COMM <br> 1000 | 1 | Communication studies foundation course | $4$ | Communication studies elective | $4$ | Vacation | 0 |
| COMM 1101 | 4 | ENGW 1111 |  | Foreign language elective | 4 |  |  |
| ARTG 1250 |  | ARTF 2220 <br> (with optional ARTF 2221) | 4 |  |  |  |  |
| ARTF 1122 <br> (with <br> optional <br> ARTF 1123) | 4 | COMM 1112 or 2301 | 4 |  |  |  |  |


| Elective | 4 |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | 17 | 16 | 8 | 0 |

Year 2

|  | Hours Spring | Hours Summer 1 | Hours | Summer 2 Hours |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Communication studies cluster course | 4 Co-op | 0 Co-op | 0 | Communication studies elective | 4 |
| Foreign language core course | 4 |  |  | Communicatic studies writingintensive | 4 |
| Elective | 4 |  |  |  |  |
| EEAM 2000 | 1 |  |  |  |  |
| ARTG 2250 <br> (with optional ARTG 2251) | 4 |  |  |  |  |
|  | 17 | 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 |
| ARTH 2210 | 4 |  |  |  |
| ENGW 3314 <br> or 3315 | 4 |  |  |  |
| ARTG 3350 | 4 |  |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Communication 4 COMM 4602 <br> studies   | or ARTG |  |
| writing- <br> intensive | 4551 |  |
| ARTG 3451 | 4 Graphic and <br> information <br> design <br> elective | 4 |
| Elective | 4 Elective | 4 |
| ARTG 4550 | 4 Elective | 4 |
|  | 16 | 16 |

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## English Requirements

Code Title
Hours
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 |
| :---: | :---: | :---: |
| Foundational Courses |  |  |
| ENGL 1400 | Introduction to Literary Studies | 4 |
| ENGL 1160 or ENGL 1410 | Introduction to Rhetoric Introduction to Writing 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 2450 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2760 | Writing in Global Contexts |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| 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:

| ENGL 1600 | Introduction to Shakespeare |
| :--- | :--- |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following:
ENGL 2260 Romantic Poetry
ENGL 2330 The American Renaissance
ENGL 2340 American Realism
ENGL 3619 Emerson and Thoreau
ENGL 3720 19th-Century Major Figure
ENGL 4040 Topics in 19th-Century Literatures
ENGL 2301 The Graphic Novel
ENGL 2410 Contemporary American Literature
ENGL 2440 The Modern Bestseller
ENGL $2600 \quad$ Irish Literary Culture (Abroad)
ENGL 2610 Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
ENGL 3730 20th- and 21 st-Century Major Figure
Theories and Methods
Complete one of the following:

| ENGL 1140 | Grammar. The Architecture of English |
| :--- | :--- |
| ENGL 1160 | Introduction to Rhetoric |
| ENGL 1410 | Introduction to Writing Studies |
| 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 |
| ENGL 3700 | Writing |
| ENGL 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and |
| LING 2350 | Linguistics |
| 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 1120 | Trouble in Utopia |
| :---: | :---: |
| ENGL 1130 | Animals, Objects, Humans |
| ENGL 1450 | Reading and Writing in the Digital Age |
| ENGL 1500 | British Literature to 1800 |
| ENGL 1502 | American Literature to 1865 |
| ENGL 1503 | American Literature 1865 to Present |
| ENGL 2150 | Literature and Digital Diversity |
| ENGL 2370 | The Modern Short Story |
| ENGL 2380 | The Modern Novel |
| ENGL 2400 | Modern Poetry |
| ENGL 2420 | Contemporary Poetry |
| ENGL 2430 | Contemporary Fiction |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2510 | Horror Fiction |
| ENGL 2520 | Science Fiction |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2620 | What Is Nature? (Abroad) |
| ENGL 2690 | Boston in Literature |
| ENGL 3427 | The Literature of Science |
| ENGL 3487 | Film and Text (Abroad) |
| ENGL 3582 | Children's Literature |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in Literature |
| ENGL 4070 | Topics in Genre |
| Writing |  |

Complete one of the following: 4

| ENGL 2700 | Creative Writing |
| :--- | :--- |
| ENGL 2710 | Style and Editing |
| ENGL 2730 | Digital Writing |
| 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 |
| ENGL 3375 | Wractice |
| ENGL 3376 | Creative Nonfiction |
| ENGL 3377 | Poetry Workshop |
| ENGL 3378 | Fiction Workshop |
| ENGL 3380 | Topics in Writing |
| ENGL 3382 | Publishing in the 21st Century |
| ENGL 3384 | The Writer's Marketplace |
| Capstone |  |
| ENGL 4710 | Capstone Seminar <br> or ENGL 4720Capstone Project |

## English Electives

Complete two additional ENGL electives.

## Graphic and Information Design Requirements

## Code Title Hours

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 | 2D Fundamentals: Surface and Drawing (with optional ARTF 1123) | 4 |
| :---: | :---: | :---: |
| ARTF 2220 | 4D Fundamentals: Sequence and Drawing (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 |

Art and Design Electives
Complete one of the following: 4

| ARTD 2360 | Photo Basics (with optional <br> ARTD 2361) |
| :--- | :--- |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |
| ARTG 2260 | Programming Basics |
| ARTF 1120 | Observational Drawing |
| ARTF 1121 | Conceptual Drawing |
| ARTF 1124 | 3D Fundamentals: Structure and <br> Drawing (with optional ARTF 1125) |
| ARTF 2223 | 5D Fundamentals: Experience and <br>  <br> ARTG 240wing (with optional ARTF 2224) |
| ARTG 3351 | Interaction Design 1: Responsive (with <br> optional ARTG 2401) |
| ARTG 3450 | Graphic Design 2 |
| ARTG 3460 | Identity and Brand Design |
| ARTG 4552 | Information Design 2 |
| ARTG 4553 | Environmental Information Design |
| ARTG 4554 | Typography 3 |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| 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



Year 2


Year 3


Year 4

| Fall | Hours Spring Hours | Summer Hours <br> Full <br> Semester |  |
| :--- | :--- | :--- | :--- |
| Co-op | ARTG 3451 | 4 | Vacation |
|  | Elective | 4 |  |
|  |  |  |  |



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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :---: | :---: | :---: |
| Art and Design Learning Community |  |  |
| ARTF 1000 | Art and Design at Northeastern |  |
| Art and Design Foundation |  |  |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing (with optional ARTF 1123) |  |
| ARTF 1124 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125) |  |
| ARTF 2220 | 4D Fundamentals: Sequence and Drawing (with optional ARTF 2221) |  |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing (with optional ARTF 2224) |  |
| ARTF 1120 | Observational Drawing |  |
| GAME 1110 | Games and Society |  |
| ARTH 1111 | Global Art and Design History: Renaissance to Modern |  |
| ARTH 2212 | Survey of the Still and Moving Image |  |

Art History Elective

| Complete one of the following: |  |
| :--- | :--- |
| ARTH 1100 | Interactive Media and Society |
| ARTH 1110 | Global Art and Design History: Ancient <br> 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 |
| ARTH 5200 | Issues in Contemporary Art |
| ARTH 5400 | Contemporary Visual Culture |

Media Arts Requirements

| GAME 2500 | Foundations of Game Design | 4 |
| :---: | :--- | :---: |
| ARTD 2100 | Narrative Basics | 4 |
| AR GAME 2355 | Narrative for Games |  |
|  | Animation Basics (with optional <br> ARTD 2371) | 4 |

Complete one of the following:
ARTD $2360 \quad$ Photo Basics (with optional ARTD 2361)
ARTD $2380 \quad$ Video Basics (with optional ARTD 2381)

## Animation Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Animation |  |  |
| 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 three of the following: |  | 12 |
| 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 and Production |  |
| 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 |  |
| ARTH 5200 | Issues in Contemporary Art |  |
| ARTH 5400 | Contemporary Visual Culture |  |
| ARTS 2330 | Sculpture Basics |  |
| ARTS 2340 | Painting Basics |  |
| ARTS 2341 | Figure Drawing |  |
| ARTS 3449 | Drawing in Mixed Media |  |
| ARTD 3460 | Photography 1 |  |
| ARTD 3470 | Animation 1 |  |
| ARTD 3480 | Video: Sound and Image |  |
| ARTD 4565 | Photography 2 |  |
| ARTD 4660 | Studio Photography |  |
| ARTD 4661 | Alternative Photographic Processes |  |
| ARTD 4577 | Digital Sculpture and Model Making |  |
| ARTG 2252 | Graphic Design 1 |  |
| ARTG 2300 | Business Literacy for Design and Media |  |
| ARTG 3250 | Physical Computing |  |
| ARTG 3351 | Time-Based Design |  |
| Other |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 |
| :--- | :--- |
| MATH 1260 | Math Fundamentals for Games |

## Writing Requirement

| Code | Title |
| :--- | :--- |
| ENGW 3314 | Advanced Writing in the Arts, Media, <br> and Design |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Digital Art and Game Design Major Credit Requirement

97 semester hours required in the major

## Program Requirement

133 total semester hours required

## Plan of Study

Sample Five Years, Two Co-ops in Spring/Summer 1. Sample ZA Plan of Study Only


Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | :---: |
| ARTD 4570 | 4 Co-op | Co-op |  |
| ARTD 3472 | 4 |  |  |
| ARTH 2212 | 4 |  |  |
| Advanced | 4 |  |  |
| Writing <br> in the <br> Disciplines |  |  |  |


| EEAM 2000 | 1 |  |  |
| :---: | :---: | :---: | :---: |
| 17 | 0 | 0 |  |


| Fall | Hours Spring | Hours Summer 1 | Hours |
| :---: | :---: | :---: | :---: |
| GAME or A + <br> D elective | 4 Co-op | Co-op |  |
| GAME or A + <br> D elective | 4 |  |  |
| Elective | 4 |  |  |
| Elective | 4 |  |  |
|  | 16 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :---: | :---: | :---: |
| ARTD 4530 | 4 ARTD 4670 | 4 |
| ARTD 4575 | 4 Media arts elective | 4 |
| GAME or A + D elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

## Game Design and Music with concentration in Music Technology, 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Game Design Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Art + Design Required Foundation Courses |  |  |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing | 4 |
| ARTF 2223 | 5D Fundamentals: Experience and <br>  <br>  Drawing | 4 |

Required Games Courses

| GAME 1110 | Games and Society | 4 |
| :---: | :---: | :---: |
| GAME 1850 | Experimental Game Design | 4 |
| GAME 2500 | Foundations of Game Design | 4 |
| GAME 3700 | Rapid Idea Prototyping for Games | 4 |
| GAME 3800 | Game Concept Development and Production | 4 |
| Game Design Electives |  |  |
| Complete five of the following: |  | 20 |
| ARTG 2260 | Programming Basics |  |
| ARTG 3250 | Physical Computing |  |
| GAME 2010 | The Business of Games |  |
| GAME 2355 | Narrative for 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 4155 | Designing Imaginary Worlds |  |
| GAME 4700 | Game Design Capstone 1 |  |

## Music Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Music Theory and Composition |  |  |
| MUSC 1201 | Music Theory 1 | 4 |
| MUSC 1202 | Music Theory 2 | 4 |
| MUSC 3541 | Music Analysis Seminar | 4 |
| MUST 1301 | Introduction to Composition | 4 |
| Music in Context |  | 4 |
| MUSC 1001 | Music in Everyday Life |  |
| Contemporary |  | 4 |


| MUSC 2315 | History of Electronic Music |
| :--- | :--- |
| MUSC 2101 | Black Popular Music |
| MUSC 2310 | Popular Music Since 1945 |
| MUSC 2320 | 40,000 Years of Music Technology |
| MUSC 3560 | Topics in Music since 1900 |
| MUSI 3401 | Hip Hop in the Music Industry |
| Music Technology |  |
| MUST 1220 | Introduction to Music Technology |
| MUST 2431 | Computer Music Fundamentals |
| MUSC 2350 | Acoustics and Psychoacoustics of |

## Music Technology Electives

Complete two from the following:

| MUST 4520 | Interactive Music Programming |
| :--- | :--- |
| MUST 4610 | Composition for Electronic Instruments |
| MUST 3540 | Special Topics in Music Technology |

Integrative Requirement
Code Title Hours

MUST 1220 Introduction to Music Technology 4
Complete one of the following:

| MUST 4611 | Music Technology Capstone/Senior <br> Recital |
| :---: | :--- |
| GAME 4701 | Game Design Capstone 2 |

## Combined-Major Credit Requirement

Complete 90 semester hours in the major.

## Program Requirement

138 total semester hours required

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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

Art and Design at Northeastern
ARTF 1000 Art and Design at Northeastern 1
Art and Design Fundamentals
ARTF 1122 2D Fundamentals: Surface and Drawing 4 (with optional ARTF 1123)
ARTF 2220 4D Fundamentals: Sequence and 4
Drawing (with optional ARTF 2221)

## Art and Design History

ARTH $2210 \quad 4$
ARTH 2215 History of Graphic Design 4
Design

| 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 |
| Degree Project |  |  |
| ARTG 4550 | Design Degree Project 1 | 4 |
| Art and Design Elective |  |  |
| ARTG 4551 can count as an Art and Design elective as well as a capstone. |  |  |
| Complete one of the following: |  | 4 |
| ARTD 2360 | Photo Basics (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 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125 ) |  |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing (with optional ARTF 2224 ) |  |
| ARTG 2400 | Interaction Design 1: Responsive (with optinal ARTG 2401) |  |
| ARTG 3351 | Time-Based Design |  |
| ARTG 3450 | Graphic Design 2 |  |
| ARTG 3460 | Identity and Brand Design |  |
| ARTG 4551 | Design Degree Project 2 |  |
| ARTG 4552 | Information Design 2 |  |
| ARTG 4553 | Environmental Information Design |  |
| ARTG 4554 | Typography 3 |  |

## Mathematics Requirements

| Code <br> Math Reasoning | Title | Hours |
| :--- | :--- | ---: |
| MATH 1365 | Introduction to Mathematical <br> Reasoning | 4 |
| Calculus |  | 4 |
| A grade of C or higher is required: | 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 |
| Intermediate Math |  | 4 |
| MATH 2341 | Differential Equations and Linear | 4 |
| MATH 2331 | Algebra for Engineering | 4 |
| MATH 3081 | Probability and Statistics | 4 |

Advanced Elective
Complete one of the following:

| MATH 3150 | Real Analysis |
| :--- | :--- |
| MATH 3175 | Group Theory |
| MATH 3560 | Geometry |

## Mathematics Elective

MATH 4025 can count as an upper-level math elective as well as a capstone.
Complete one course in the following range:
4

## Integrative Requirement

Code Title

Hours
ARTG $3451 \quad$ Information Design 1
4

## Combined-Major Credit Requirement <br> Complete 80 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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
or ARTF 1000 Art and Design at Northeastern
Journalism Major Requirements
Code Title Hours Journalism Introductory Course
JRNL $1150 \quad$ Understanding Today's News 4

Journalism Foundations
Must receive a C or better in the following:
JRNL 1101 Journalism 1: Fundamentals of 5
and JRNL 1102 Reporting
and Journalist's Toolbox
JRNL 2201 Journalism 2: Intermediate Reporting 4
JRNL $2301 \quad$ Visual Storytelling in Journalism 4

| Law and Ethics |  |  |
| :--- | :--- | :--- |
| JRNL 3550 | The First Amendment and the Media | 4 |
| or JRNL 4650 | Ethics and Issues in Journalism |  |


| Journalism Electives | 12 |
| :--- | :--- |
| Take three JRNL courses |  |

## Art and Design Core

Code Title Hours

Art and Design Fundamentals

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| :--- | :--- | ---: |
| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224) | 4 |
|  | Art and Design History |  |
| Complete two of the following: |  |  |


| ARTH 1111 | Global Art and Design History: <br> Renaissance to Modern |  |
| :--- | :--- | :--- |
| ARTH 2210 | Modern Art and Design History |  |
| ARTH 2215 | History of Graphic Design |  |$\quad$ Hours


| Degree Project |
| :--- |
| Complete one of the following: |


| 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 | Photo Basics (with optional ARTD 2361) |  |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |  |
| ARTF 1120 | Observational Drawing |  |
| ARTF 1121 | Conceptual Drawing |  |
| ARTF 1124 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125) |  |
| ARTF 2220 | 4D Fundamentals: Sequence and Drawing (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 | Information Design 2 |  |


| ARTG 4553 | Environmental Information Design |
| :--- | :--- |
| ARTG 4554 | Typography 3 |

## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| JRNL 5311 | Design and Graphics | 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { JRNL } 1000 \\ & \text { or ARTF } \\ & 1000 \end{aligned}$ | 1 | JRNL 1101 <br> and JRNL 1102 | 5 | Elective | 4 | Vacation |  |
| JRNL 1150 |  | ARTF 2223 <br> (with optional ARTF 2224) | 4 | Elective | 4 |  |  |
| ENGW 1111 |  | ARTG 2250 <br> (with <br> optional <br> ARTG 2251) | 4 |  |  |  |  |
| ARTG 1250 | 4 | Elective | 4 |  |  |  |  |
| ARTF 1122 <br> (with optiional ARTF 1123) | 4 |  |  |  |  |  |  |
|  | 17 |  | 17 |  | 8 |  | 0 |

Year 2


Year 3


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| JRNL 3610 | 4 Co-op 3 | Co-op 3 | Vacation | 0 |
| Journalism <br> elective 2 | 4 |  |  |  |
| Art + design <br> history <br> elective 2 | 4 |  |  |  |
| ARTG 3700 | 4 |  |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| JRNL 5311 | 4 Journalism <br> elective 3 | 4 |
| JRNL 3550 <br> or 4650 | 4 ARTG 4551 <br> or 4701 | 4 |
| ARTG 3451 | 4 Art + design <br> elective | 4 |
| ARTG 4550 <br> or 4700 | 4 Elective | 4 |

Total Hours: 131

## Sample Five Years, Three Co-ops



Year 2
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { JRNL 2201 } & 4 \text { JRNL 2301 }\end{array} \quad \begin{array}{c}\text { Vacation }\end{array}\right]$

Year 3

| Fall <br> JRNL 3610 | Hours Spring <br> 4 Co-op 1 | Hours | Summer 1 <br> Co-op 1 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| 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 <br> elective 3 | 4 |
| ARTG 3451 | 4 ARTG 4551 <br> or 4701 | 4 |
| ARTG 4550 <br> 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and 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 |
| :---: | :---: | :---: |
| Introduction to Media Studies |  |  |
| MSCR 1220 | Media, Culture, and Society | 4 |
| Introduction to Screen Theory |  |  |
| MSCR 2220 | Understanding Media and Film | 4 |
| Advanced Theory |  |  |
| MSCR 4623 | Theories of Media and Culture | 4 |
| Media and Screen Electives |  |  |
| Complete four of the fo | following: | 16 |
| CINE 2160 | Narrative Filmmaking |  |
| CINE 2336 | American Film and Culture |  |
| CINE 3446 | Topics in Documentary Production |  |
| MSCR 1230 | Introduction to Film Production |  |
| MSCR 2302 | Advertising and Promotional Culture |  |
| MSCR 2325 | Global Media |  |
| MSCR 2895 | Film Analysis |  |
| MSCR 3210 | Special Topics in Media and Screen Studies |  |
| MSCR 3420 | Digital Media Culture |  |
| MSCR 3422 | Media Audiences |  |
| MSCR 3426 | Popular Music as Media Form |  |
| MSCR 3435 | Media Industries |  |
| MSCR 3437 | Media and Identity |  |
| Advanced Media and Screen Electives |  |  |
| Complete two of the fo | ollowing: | 8 |
| CINE 3389 | Screenwriting |  |
| CINE 3392 | Gender and Film |  |
| CINE 3500 | Film Theory |  |
| CINE 3920 | Topics in Film Studies |  |
| MSCR 4208 | TV History |  |
| MSCR 4602 | Media and Democracy |  |
| MSCR 4622 | Special Topics in Media and Screen Studies |  |
| MSCR 4992 | Directed Study |  |
| MSCR 4993 | Independent Study |  |

## Media Arts Courses

Code Title Hours
Art + Design at Northeastern
ARTF 1000 Art and Design at Northeastern
1
Art + Design Fundamentals

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| :--- | :--- | :--- |

ARTF 2220 4D Fundamentals: Sequence and
Drawing (with optional ARTF 2221)

## Drawing Fundamentals

| ARTF 1120 <br> or ARTF 1121 | Observational Drawing <br> Conceptual Drawing | 4 |
| :--- | :--- | :--- |
| Art + Design History |  | 4 |
| ARTH 2210 | Modern Art and Design History | 4 |
| ARTH 2212 | Survey of the Still and Moving Image |  |

## Degree Project

ARTD 4530 Media Arts Degree Project $1 \quad 4$
Media Arts Basic Electives
Complete two of the following sets: 8

| ARTD 2360 | Photo Basics (with optional <br>  <br> ARTD 2361) |
| :--- | :--- |
| ARTD 2370 | Animation Basics (with optional <br>  <br> ARTD 2371) |
| Art + Design Electives |  |
| Vomplete two of the following or any drawing fundamental |  |

elective/media arts basic elective not previously taken:

| ARTF 1124 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125) |
| :---: | :---: |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing (with optional ARTF 2224) |
| ARTD 3460 | Photography 1 |
| 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 2 |
| ARTD 3485 | Experimental Video |
| ARTD 4575 | Animation 3 |
| ARTD 4577 | Digital Sculpture and Model Making |
| ARTD 5582 | Collaborative Video and Community Engagement |
| ARTD 4660 | Studio Photography |
| ARTD 4661 | Alternative Photographic Processes |
| ARTD 4670 | Media Arts Degree Project 2 |
| ARTD 2100 | Narrative Basics |
| ARTG 2300 | Business Literacy for Design and Media |
| 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 1110 | Global Art and Design History: Ancient to Medieval |
| ARTH 1111 | Global Art and Design History: Renaissance to Modern |
| ARTH 2211 | Contemporary Art and Design History |
| ARTH 2213 | Nineteenth-Century Art |
| ARTH 5100 | Contemporary Art Theory and Criticism |
| ARTH 5200 | Issues in Contemporary Art |


| ARTH 5400 | Contemporary Visual Culture |
| :--- | :--- |
| ARTG 2250 | Typography 1 (with optional <br> ARTG 2251) |
| ARTS 2330 | Sculpture Basics |
| ARTS 2340 | Painting Basics |
| ARTS 2341 | Figure Drawing |
| ARTS 3449 | Drawing in Mixed Media |


| Integrative Courses |  |
| :--- | :--- |
| Code | Title |
| CINE 3500 | Film Theory |



| Year 4 |  |
| :--- | :--- | :--- |
| Fall | Hours Spring $\quad$ Hours Summer 1 Hours Summer 2 Hours |


| MSCR | 4 Co-op | Co-op | Vacation |
| :--- | :--- | :--- | :--- |
| advanced |  |  |  |
| elective |  |  |  |

## 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 <br> SAMPLE FIVE YEARS, TWO CO-OPS

Year 1
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \begin{array}{l}\text { ARTF 1000 } \\ \text { or MSCR } \\ \text { 1000 }\end{array} & 1 \text { MSCR 2220 }\end{array} \quad \begin{array}{c}4 \text { Elective }\end{array}\right)$

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MSCR <br> elective | 4 Co-op | Co-op | Elective | 4 |
| MSCR <br> elective | 4 |  |  |  |
| Media arts <br> basics <br> elective | 4 |  |  |  |
| Elective | 4 |  |  | 4 |
| EEAM 2000 | 1 | 0 | 0 |  |
|  | 17 |  |  |  |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MSCR <br> elective | 4 co-op | co-op | Elective | 4 |
| MSCR <br> elective | 4 |  |  |  |
| Media arts | 4 |  |  |  |
| basics <br> elective |  |  |  |  |


| Art + design <br> elective | 4 |  |  |  |
| :--- | ---: | ---: | :--- | :--- |
| Elective | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| MSCR | 4 MSCR 4623 | 4 |
| advanced <br> elective |  |  |
| ARTD 4530 | 4 CINE 3500 | 4 |
| Elective | 4 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 Requirements
Code
Title

| Code Title | Hours |
| :--- | :---: |
| Art and Design at Northeastern |  |

ARTF $1000 \quad$ Art and Design at Northeastern 1

Art and Design Foundations

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| :--- | :--- | ---: |
| ARTF 2220 | 4D Fundamentals: Sequence and <br> Drawing (with optional ARTF 2221) | 4 |
| Drawing Fundamentals |  |  |


| ARTF 1120 | Observational Drawing |
| :---: | :--- |
| or ARTF 1121 | Conceptual Drawing |


| Art and Design History |  |  |
| :--- | :--- | :--- |
| ARTH 2210 | Modern Art and Design History | 4 |
| ARTH 2212 | Survey of the Still and Moving Image | 4 |

Project Required Course
ARTD $4530 \quad$ Media Arts Degree Project 1

| Media Art Basics Electives |
| :--- |
| Complete two of the following: |


| ARTD 2370 | Animation Basics (with optinal <br> ARTD 2371) |
| :--- | :--- |
| ARTD 2360 | Photo Basics (with optional <br>  <br> ARTD 2361) |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |


| Art and Design Electives |  |  |
| :---: | :---: | :---: |
| Complete two of the following: |  | 8 |
| ARTF 1120 | Observational Drawing |  |
| ARTF 1121 | Conceptual Drawing |  |
| ARTF 1124 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125) |  |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing (with optional ARTF 2224) |  |
| ARTD 2100 | Narrative Basics |  |
| ARTG 2300 | Business Literacy for Design and Media |  |
| ARTE 2500 | Art and Design Abroad: Studio |  |
| ARTE 2501 | Art and Design Abroad: History |  |
| ARTE 4901 | Special Topics in Art and Design Studio |  |
| ARTE 3901 | Art and Design Special Topics |  |
| 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 2211 | Contemporary Art and Design History |  |
| ARTH 2213 | Nineteenth-Century Art |  |
| ARTH 5100 | Contemporary Art Theory and Criticism |  |
| ARTH 5200 | Issues in Contemporary Art |  |
| ARTH 5400 | Contemporary Visual Culture |  |
| ARTD 2360 | Photo Basics (with optional ARTD 2361) |  |
| ARTD 2370 | Animation Basics (with optional ARTD 2371) |  |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |  |


| COMM 3530 | Communication and Sexualities |
| :--- | :--- |
| COMM 3532 | Theories of Conflict and Negotiation |
| COMM 3610 | Communication, Politics, and Social <br> Change |
| COMM 4535 | Nonverbal Social Interaction |
| COMM 4605 | Youth and Communication Technology |
| COMM 4631 | Crisis Communication and Image <br> Management |
| Communication Studies Electives |  |
| Complete three COMM courses. |  |

## Integrative Requirement <br> Code Title Hours

## Bridge/Integrative Requirement

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 Five Years, Two Co-ops Plan of Study

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARTF 1000 <br> or COMM <br> 1000 |  | ARTF 2220 <br> (with <br> optional <br> ARTF 2221) | 4 | Comm elective | 4 | Vacation |  |
| ARTF 1122 <br> (With opitonal ARTF 1123 ) | 4 | ARTH 2212 | 4 | Elective | 4 |  |  |
| ARTH 2210 |  | COMM 1112 <br> or 2301 | 4 |  |  |  |  |
| COMM 1101 |  | Drawing elective | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Media arts <br> basics <br> elective | 4 Co-op |  | Elective | 4 |
| COMM <br> foundation <br> course | 4 |  |  |  |
| COMM <br> cluster <br> course | 4 |  |  | 4 |
| Elective | 4 |  |  |  |
| EEAM 2000 | 1 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Media arts basics elective | 4 Co-op | Co-op | Vacation |  |
| Art + design elective | 4 |  |  |  |
| COMM elective | 4 |  |  |  |
| COMM <br> writingintensive | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Art + design <br> elective | 4 Co-op | Co-op | Vacation |  |
| COMM <br> elective | 4 |  |  |  |
| COMM <br> writing- <br> intensive | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ARTD 4530 | 4 ARTD 4670 <br> (or COMM <br> Capstone) | 4 |
| COMM 3415 | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 130

## Theatre and Interaction Design, BA

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Theatre Requirements

A minimum grade of $C$ is required for all theatre courses.

| Code | Title | Hours | ARTG 2400 | Interaction Design 1: Responsive | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Foundational Stages |  |  | ARTG 2401 | Interaction Design Tools | 1 |
| THTR 1101 | Introduction to Theatre | 4 | ARTG 3350 | Typography 2 | 4 |
| THTR 1120 | Acting 1 | 4 | ARTG 3451 | Information Design 1 | 4 |
| THTR 1131 | Technical Theatre 1 | 4 | ARTG 3700 | Interaction Design 2: Mobile | 4 |
| THTR 1270 | Introduction to Theatrical Design | 4 | Design Project |  |  |
| THTR 2325 | From Script to Stage | 4 | Complete one of the following: |  | 4 |
| Making Theatre |  |  | ARTG 4550 | Design Degree Project 1 |  |
| THTR 1100 | Production Experience 1 | 1 | ARTG 4700 | Interaction Team Degree Project 1 |  |
| THTR 2000 | Production Experience 2 | 1 | Major Electives |  |  |
| THTR 4702 | Capstone Rehearsal and Performance | 4 | Art + Design History |  |  |
| Major Electives |  |  | Complete two of the following: |  | 8 |
| Complete one from the following: |  | 4 | ARTH 1111 | Global Art and Design History: |  |
| THTR 2300 | Classics of Global Theatre |  |  | Renaissance to Modern |  |
| THTR 2315 | Rebels of Modern Drama |  | ARTH 2210 | Modern Art and Design History |  |
| THTR 2320 | America Onstage: Dramatizing the |  | ARTH 2215 | History of Graphic Design |  |
|  | Dream |  | Art + Design Electives |  |  |
| THTR 2340 | Theatre and Society |  | Complete one of the following: |  | 4 |
| Intermediate/Advanced Electives |  |  | ARTD $2360 \quad$ Photo Basics |  |  |
| Complete two from the following: |  | 8 | ARTD 2380 | Video Basics |  |
| THTR 2300 | Classics of Global Theatre |  | ARTF 1120 | Observational Drawing |  |
| THTR 2310 | History of Musical Theatre |  | ARTF 1121 | Conceptual Drawing |  |
| THTR 2315 | Rebels of Modern Drama |  | ARTF 1124 | 3D Fundamentals: Structure and Drawing |  |
| THTR 2320 | America Onstage: Dramatizing the Dream |  |  |  |  |
|  |  |  | ARTF 2220 | 4D Fundamentals: Sequence and Drawing |  |
| THTR 2330 | Playwriting |  |  |  |  |
| THTR 2340 | Theatre and Society |  | ARTG 2252 | Graphic Design 1 |  |
| THTR 2342 | Acting 2 |  | ARTG 3250 | Physical Computing |  |
| THTR 2345 | Acting for the Camera |  | ARTG 3460 | Identity and Brand Design |  |
| THTR 2346 | Viewpoints |  | ARTG 3351 | Time-Based Design |  |
| THTR 2300 | Classics of Global Theatre |  | ARTG 4552 | Information Design 2 |  |
| THTR 2370 | Lighting Design |  | ARTG 4553 | Environmental Information Design |  |
| THTR 2380 | Costume Design |  | ARTG 4554 | Typography 3 |  |
| THTR 2400 | Scenic Design |  | Integrative Requirement |  |  |
| THTR 2500 | Breaking the Glass Ceiling: Women in Theatre |  | Code Title Hours |  |  |
| THTR 2600 | Voice and Speech for the Actor |  | THTR 4702 | Capstone Rehearsal and Performance | 4 |
| THTR 3450 | Acting 3-Playing Shakespeare |  | ARTG 4551 | Design Degree Project 2 | 4 |
| THTR 3550 | Directing for the Stage |  | or ARTG 4701 | Interaction Team Degree Project 2 |  |
| THTR 3570 | Musical Theatre Performance |  |  |  |  |
| Interaction Design Requirements |  |  | Requirement |  |  |
| Code | Title | Hours |  |  |  |  |  |
| Art + Design at Northeastern |  |  | Program Requirement |  |  |
| ARTF 1000 | Art and Design at Northeastern | 1 | 128 total semes | urs required |  |
| Art + Design Fundementals |  |  |  |  |  |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing | 4 | Theatre and Interaction Design, BS |  |  |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing |  | Program Requirements |  |  |
| Design |  |  | Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements. |  |  |
| ARTG 1250 | Design Process Context and Systems | 4 |  |  |  |  |  |
| ARTG 2250 | Typography 1 | 4 |  |  |  |  |  |
| ARTG 2251 | Type Tools | 1 |  |  |  |  |  |
| ARTG 2260 | Programming Basics | 4 |  |  |  |  |  |

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Theatre Requirements

A minimum grade of $C$ is required for all theatre courses.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Foundational Stages |  | 4 |
| 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 |  |
| Making Theatre |  | 1 |
| THTR 1100 | Production Experience 1 | 1 |
| THTR 2000 | Production Experience 2 | 4 |
| THTR 4702 | Capstone Rehearsal and Performance | 4 |
| Major Electives |  |  |
| Complete one from the following: |  |  |
| THTR 2300 | Classics of Global Theatre |  |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the |  |
| THTR 2340 | Dream | Theatre and Society |


| Intermediate/Advanced Electives <br> Complete two from the following: <br> THTR 2300 | Classics of Global Theatre <br> THTR 2310 |
| :--- | :--- |
| THTR 2315 | Ristory of Musical Theatre |
| THTR 2320 | America Onstage: Dramatizing the <br> Dream |
| 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 |
| THTR 2600 | Voice and Speech for the Actor |
| THTR 3450 | Acting 3-Playing Shakespeare |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |

## Interaction Design Requirements

Code Title Hours

## Art + Design at Northeastern

ARTF 1000
Art and Design at Northeastern

Art + Design Fundementals

| ARTF 1122 | 2D Fundamentals: Surface and Drawing | 4 |
| :---: | :---: | :---: |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing | 4 |
| Design |  |  |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 2250 | Typography 1 | 4 |
| ARTG 2251 | Type Tools | 1 |
| ARTG 2260 | Programming Basics | 4 |
| ARTG 2400 | Interaction Design 1: Responsive | 4 |
| ARTG 2401 | Interaction Design Tools | 1 |
| ARTG 3350 | Typography 2 | 4 |
| ARTG 3451 | Information Design 1 | 4 |
| ARTG 3700 | Interaction Design 2: Mobile | 4 |
| Design Project |  |  |
| Complete one of the following: |  | 4 |
| ARTG 4550 | Design Degree Project 1 |  |
| ARTG 4700 | Interaction Team Degree Project 1 |  |
| Major Electives |  |  |
| Art + Design History |  |  |
| 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 |  |
| Art + Design Electives |  |  |
| Complete one of | following: | 4 |


| ARTD 2360 | Photo Basics |
| :--- | :--- |
| ARTD 2380 | Video Basics |
| ARTF 1120 | Observational Drawing |
| ARTF 1121 | Conceptual Drawing |
| ARTF 1124 | 3D Fundamentals: Structure and <br> Drawing |
| ARTF 2220 | 4D Fundamentals: Sequence and <br> Drawing |
| ARTG 2252 | Graphic Design 1 |
| ARTG 3250 | Physical Computing |
| ARTG 3460 | Identity and Brand Design |
| ARTG 3351 | Time-Based Design |
| ARTG 4552 | Information Design 2 |
| ARTG 4553 | Environmental Information Design |
| ARTG 4554 | Typography 3 |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| THTR 4702 | Capstone Rehearsal and Performance | 4 |
| ARTG 4551 | Design Degree Project 2 | 4 |
| or ARTG 4701 | Interaction Team Degree Project 2 |  |

## Theatre and Interaction Design Combined-Major Credit Requirement

Complete 98 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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.

| Requirements for Non-Art and Design Majors <br> Code <br> Required Courses | Hours |  |
| :--- | :--- | ---: |
| ARTF 1120 | Observational Drawing | 4 |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| ARTF 2220 | 4D Fundamentals: Sequence and <br> Drawing (with optional ARTF 2221 ) | 4 |
| ARTD 2370 | Animation Basics (with optional <br> 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 |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ARTF 1120 | Observational Drawing | 4 |
| ARTD 2370 | Animation Basics (with optional ARTD 2371 ) | 4 |
| ARTD 3470 | Animation 1 | 4 |
| Electives |  |  |
| Complete two o | 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 |  |
| ARTD 4570 | Animation 2 |  |
| ARTD 4575 | Animation 3 |  |
| ARTD 4577 | Digital Sculpture and Model Making |  |
| 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.

## Requirements for Non-Art and Design Majors

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\end{aligned}
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Art Required Courses

| ARTF 1120 | Observational Drawing | 4 |
| :--- | :--- | :--- |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing | 4 |
|  | (with optional ARTF 1123 ) |  |

Art Elective Courses
Complete three of the following: 12

| ARTF 1121 | Conceptual Drawing |
| :--- | :--- |
| ARTF 1124 | 3D Fundamentals: Structure and <br>  <br> Arawing (with optional ARTF 1125 ) |
| ARTF 2220 | 4D Fundamentals: Sequence and <br> Drawing (with optional ARTF 2221 ) |
| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224 ) |
| ARTS 2330 | Sculpture Basics |
| ARTS 2340 | Painting Basics |
| ARTS 2341 | Figure Drawing |
| ARTS 3449 | Drawing in Mixed Media |
| ARTE 2500 | Art and Design Abroad: Studio |
| ARTE 2501 | Art and Design Abroad: History |
| ARTE 3901 | Photo Basics (with optional <br> ARTD 2360 |
| ARTD 2361 ) |  |

## 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 <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| ARTF 1120 | Observational Drawing |  |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123 ) | 4 |
| Elective Courses |  |  |
| Complete three of the following: |  |  |
| ARTS 2330 | Sculpture Basics |  |
| ARTS 2340 | Painting Basics |  |
| ARTS 2341 | Figure Drawing |  |
| ARTS 3449 | Drawing in Mixed Media |  |
| ARTE 2500 | Art and Design Abroad: Studio |  |
| ARTE 2501 | Art and Design Abroad: History |  |
| ARTE 3901 | Art and Design Special Topics |  |
| ARTD 2360 | Photo Basics (with optional <br> ARTD 2361 ) |  |
| ARTD 2370 | Animation Basics (with optional <br> ARTD 2371 ) |  |
| ARTD 2380 | Video Basics (with optional <br> ARTH 1110 | ARTD 2381 ) |
| Alobal Art and Design History: Ancient |  |  |
| to Medieval |  |  |

## 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.

Note: This minor is not available to students in the BA in art program or any art combined major.

## Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| Complete five of | 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 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 5200 | Issues in Contemporary Art |  |
| ARTH 5400 | Contemporary Visual Culture |  |
| ARTH 5902 | Special Topics in Art and Design History |  |

## GPA Requirement

2.500 GPA required in the minor

## 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.

## Requirements for Non-Art and Design Majors

Code Title Hours

## Required Courses

| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224) | 4 |
| :--- | :--- | ---: |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 3462 | Experience Design 1 | 4 |
| Electives |  | 8 |
| Complete two of the following: |  |  |
| ARTD 2100 | Narrative Basics |  |
| ARTE 3901 | Art and Design Special Topics |  |
| ARTF 1124 | 3D Fundamentals: Structure and <br> Drawing (with optional ARTF 1125) |  |
| ARTG 2400 | Interaction Design 1: Responsive (with <br> optional ARTG 2401) |  |
| ARTG 2260 | Programming Basics |  |
| ARTG 3250 | Physical Computing |  |
| ARTG 3463 | Experience Design 2 |  |
| GE 1110 | Engineering Design |  |


| GE 1111 | Engineering Problem Solving and <br> Computation |
| :--- | :--- |
| IE 2310 | Introduction to Industrial Engineering |
| and IE 2311 | 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 <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 3462 | Experience Design 1 | 4 |
| ARTG 3463 | Experience Design 2 | 4 |
| Electives |  | 8 |
| Complete two of the following: | 8 |  |
| ARTD 2100 | Narrative Basics |  |
| ARTE 3901 | Art and Design Special Topics |  |
| ARTG 2260 2400 | Programming Basics |  |
| ARTG 3250 | Interaction Design 1: Responsive (with |  |
| optional ARTG 2401 ) | 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 nextgeneration 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.

Requirements for Non-Art + Design Majors

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| ARTD 2370 | Animation Basics (with optional | 4 |
|  | ARTD 2371) | 4 |
| ARTF 1120 | Observational Drawing | 4 |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| ARTF 2220 | 4D Fundamentals: Sequence and | 4 |
| Elective Course | Drawing (with optional ARTF 2221) |  |

Complete one of the following:

| ARTD 3471 | Virtual Environment Design |
| :---: | :--- |
| ARTD 3472 | Character Design for Animation |
| ARTD 3473 | Animation for Games |

## 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 <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| ARTD 2370 | Animation Basics (with optional <br> ARTD 2371) | 4 |
| ARTF 1120 | Observational Drawing | 4 |
| Additional Courses | 8 |  |
| Complete two of the following: | 8 |  |
| ARTD 3471 | Virtual Environment Design |  |
| ARTD 3472 | Character Design for Animation |  |
| ARTD 3473 | Animation for Games |  |
| Elective Course |  | 4 |
| Complete one of the following: |  |  |
| ARTD 2100 | Narrative Basics |  |
| ARTD 3470 | Animation 1 |  |
| ARTD 4577 | Digital Sculpture and Model Making |  |
| 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 BFA in games, game art and animation, and computer science in 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.

## Foundations of Game Design

| Code | Title | Hours |
| :--- | :--- | ---: |
| GAME 2500 | Foundations of Game Design | 4 |

## Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete five of the following: | $20-21$ |  |
| Any GAME courses |  |  |
| ARTD 2100 | Narrative Basics |  |
| ARTG 3250 | Physical Computing |  |
| IS 4300 | Human Computer Interaction |  |


| IE 4522 | Human-Machine Systems |
| :--- | :--- |
| and IE 4523 | and Lab for IE 4522 |

## 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.

## Requirements for Non-Art and Design Majors

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing (with optional ARTF 1123 ) | 4 |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 2250 | Typography 1 (with optional ARTG 2251 ) | 4 |
| Electives |  |  |
| Complete two of | following: | 8 |
| ARTE 3901 | Art and Design Special Topics |  |
| ARTF 2220 | 4D Fundamentals: Sequence and Drawing (with optional ARTF 2221 ) |  |
| ARTH 2215 | History of Graphic Design |  |
| ARTG 2252 | Graphic Design 1 |  |
| ARTG 3350 | Typography 2 |  |
| ARTG 3351 | Time-Based Design |  |
| 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 <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 2250 | Typography 1 (with optional <br> ARTG 2251 ) | 4 |
| Electives |  | 12 |
| Complete three of the following: |  |  |
| ARTE 3901 | Art and Design Special Topics |  |
| ARTG 2252 | Graphic Design 1 |  |
| ARTG 3250 | Physical Computing |  |
| ARTG 3350 | Typography 2 |  |
| ARTG 3351 | Time-Based Design |  |
| ARTG 3450 | Graphic Design 2 |  |


| ARTG 3460 | Identity and Brand Design |
| :--- | :--- |
| ARTG 4554 | Typography 3 |
| ARTH 2215 | History of Graphic Design |

## 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.

## Requirements for Non-Art and Design Majors

Code Title Hours

## Required Courses

| ARTF 2223 | 5D Fundamentals: Experience and Drawing (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 |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 |  |
| Elective |  |  |
| Complete one of the following: |  | 4 |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing (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 |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 2250 | Typography 1 (with optional <br> ARTG 2251 ) | 4 |
| ARTG 2400 | Interaction Design 1: Responsive (with <br> optional ARTG 2401) | 4 |

## Electives

Complete two of the following:

| ARTE 3901 | Art and Design Special Topics |
| :--- | :--- |
| ARTG 2260 | Programming Basics |
| ARTG 3451 | Information Design 1 |

```
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.

## Requirements for Non-Art + Design Majors Code Title Hours

## Required Courses

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with opitonal ARTF 1123 ) | 4 |
| :--- | :--- | ---: |
| ARTD 2360 | Photo Basics (with optional <br> ARTD 2361 ) | 4 |
| ARTD 3460 | Photography 1 |  |
| Elective Courses |  | 4 |
| Complete two of the following: | 8 |  |
| ARTD 4565 | Photography 2 |  |
| ARTD 4660 | Studio Photography |  |
| ARTD 4661 | Alternative Photographic 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 <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| ARTD 2360 | Photo Basics (with optional |  |
|  | ARTD 2361) |  |$\quad 4$


| 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.

## Required Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Photography Foundation |  |  |
| Complete one of the following: |  | 4 |
| ARTE 2500 | Art and Design A |  |
| ARTD 2360 | Photo Basics (with ARTD 2361) |  |
| ARTD 2350 | Photo Basics for |  |
| Photography Requirement |  |  |
| ARTD 3460 | Photography 1 | 4 |
| Integrative |  |  |
| JRNL 5310 | Photojournalism | 4 |
| Electives |  |  |
| Complete one | llowing: | 4 |
| JRNL 2301 | Visual Storytelling |  |
| JRNL 5314 | Video News Repo |  |

## 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.

## Requirements for Non-Art + Design Majors

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| ARTF 2220 | 4D Fundamentals: Sequence and <br> Drawing (with optional ARTF 2221 ) | 4 |
| ARTD 2380 | Video Basics (with optional <br> ARTD 2381 ) | 4 |
| ARTD 3480 | Video: Sound and Image | 4 |
| Electives |  | 8 |
| Complete two of the following: |  |  |
| ARTD 3485 | Experimental Video |  |
| ARTD 5582 | Collaborative Video and Community |  |
| ARTE 2500 | Engagement |  |
| ARTE 3901 and Design Abroad: Studio | 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 <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| ARTD 2380 | Video Basics (with optional <br> ARTD 2381 ) | 4 |
| ARTD 3480 | Video: Sound and Image | 4 |
| ARTD 3485 | Experimental Video | 4 |
| Electives |  | 8 |
| Complete two of the following: | Collaborative Video and Community |  |
| ARTD 5582 | Engagement |  |
| 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/commstudies)
Dale A. Herbeck, PhD
Professor and Chair

212A Lake Hall
617.373.5517
617.373 .8533 (fax)

Angela Chin, Administrative Officer, 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.

## 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 communication 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.

## Preapproved Template Program in Communication Studies

The Department of Communication Studies offers a preapproved template program that may be paired with another preapproved template program to create a combined major; to see a list of current preapproved template programs, visit the combined majors webpage (https:// registrar.northeastern.edu/article/combined-majors).

Students may request admission to such a combined major via the Combined Major Approval form (http://www.northeastern.edu/ registrar/form-maj-comb.pdf), which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on preapproved template programs, see "Student-Requested Combined Major (p. 33)." For template program requirements, visit the myNortheastern web portal (http://my.northeastern.edu), click on the "Self-Service" tab, then on "My Degree Audit."

## Media and Screen Studies

Website (https://camd.northeastern.edu/mscr)

Dale A. Herbeck, PhD
Professor and Chair
212A Lake Hall
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 BA 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. Students may also petition for new combinations, making use of the half-major template in media and screen studies.

## Academic Progression Standards

For media and screen studies, majors must maintain at least a 2.500 grade-point average (GPA) in their overall program of studies and a minimum of 3.000 in the following two required courses:

| Code | Title | Hours |
| :--- | :--- | ---: |
| MSCR 1220 | Media, Culture, and Society | 4 |
| MSCR 2220 | Understanding Media and Film | 4 |

## Preapproved Template Program in Media and Screen Studies

Media and screen studies offers a preapproved template program that may be paired with another preapproved template program to create a combined major; to see a list of current preapproved template programs, visit the combined majors webpage (https://registrar.northeastern.edu/ article/combined-majors).

Students may request admission to such a combined major via the Combined Major Approval form (http://www.northeastern.edu/ registrar/form-maj-comb.pdf), which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on preapproved template programs, see "Student-Requested Combined Major (p. 33)." For template program requirements, visit the myNortheastern web portal (http://my.northeastern.edu), click on the "Self-Service" tab, then on "My Degree Audit."

## Programs

## Bachelor of Arts (BA)

- Communication Studies (p. 111)
- Communication Studies and Graphic and Information Design (p. 87)
- Communication Studies and Media and Screen Studies (p. 118)
- Communication Studies and Sociology (p. 120)
- Communication Studies and Theatre (p. 123)
- English and Communication Studies (p. 127)
- Human Services and Communication Studies (p. 130)
- Linguistics and Communication Studies (p. 131)
- Media Arts and Communication Studies (p. 100)
- Media and Screen Studies (p. 113)
- Media and Screen Studies and English (p. 134)
- Media and Screen Studies and History (p. 137)
- Media and Screen Studies and Journalism (p. 139)
- Media and Screen Studies and Media Arts (p. 98)
- Media and Screen Studies and Philosophy (p. 142)
- Media and Screen Studies and Political Science (p. 144)
- Media and Screen Studies and Sociology (p. 146)
- Media and Screen Studies and Theatre (p. 148)
- Political Science and Communication Studies (p. 154)


## Bachelor of Science (BS)

- Computer Science and Communication Studies (p. 125)
- Media and Screen Studies and Theatre (p. 149)
- Music and Communication Studies with Concentration in Music Industry (p. 151)
- Political Science and Communication Studies (p. 156)


## Minors

- Cinema Studies (p. 158)
- Communication Studies (p. 158)
- Film Production (p. 158)
- Human Communication (p. 159)
- Media Production (p. 159)
- Media and Screen Studies (p. 159)
- Oratory and Public Speaking (p. 160)
- Political Communication (p. 160)
- Professional Presentation (p. 160)
- Rhetoric (p. 161)
- Social Activism (p. 161)
- Sports, Media, and Communication (p. 161)


## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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.



## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| MSCR 1000 | Media and Screen Studies at <br>  <br>  <br>  <br> Nertheastern | 1 |
| MSCR 1220 | Media, Culture, and Society | 4 |
| MSCR 1320 | Media and Social Change | 4 |
| MSCR 1420 | Media History | 4 |

Foundation Course (Production or Theory)
Complete one of the following:

| MSCR 1230 | Introduction to Film Production |
| :--- | :--- |
| MSCR 2220 | Understanding Media and Film |

Diversity or Globalization Course
Complete one of the following:

| CINE 3392 | Gender and Film |
| :--- | :--- |
| MSCR 2325 | Global Media |
| MSCR 2505 | Digital Feminisms |
| MSCR 3437 | Media and Identity |

Writing-Intensives

| Complete two of the following: | 8 |
| :--- | :--- |
| CINE 3500 | Film Theory |
| MSCR 3420 | Digital Media Culture |
| MSCR 3422 | Media Audiences |
| MSCR 4208 | TV History |

Capstone (Production or Theory)
Complete one of the following:

| MSCR 4623 | Theories of Media and Culture |
| :--- | :--- |
| ARTD 5582 | Collaborative Video and Community <br> Engagement |

Media and Screen Studies Electives
Complete five courses from the following list or media and screen studies courses not used to satisfy requirements above:

| ARTD 2380 | Video Basics (with optional ARTD 2381) |
| :--- | :--- |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |
| CINE 2160 | Narrative Filmmaking |
| CINE 2336 | American Film and Culture |
| CINE 3389 | Screenwriting |
| CINE 3446 | Topics in Documentary Production |
| CINE 3920 | Topics in Film Studies |


| COMM 2450 | Sound Production for Digital Media |
| :--- | :--- |
| COMM 3550 | Television Field Production |
| COMM 3650 | Television Studio Production |
| COMM 3750 | Special Effects and Postproduction for <br> Television |
| COMM 4650 | Digital Editing for TV |

## 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 <br> Sample Five Years, Three Co-ops in Summer 2/Fall

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MSCR 1000 | 1 | MSCR 1320 | $4$ | Media and screen studies elective | 4 | Vacation | 0 |
| MSCR 1220 | 4 | ENGW 1111 | 4 | Elective | 4 |  |  |
| Elective |  | Foreign language core course | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
| Foreign language core requirement | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |

Year 2

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MSCR 1420 |  | Media and screen studies elective | 4 Vacation | 0 Co-op | 0 |
| MSCR 1230 or 2220 |  | Media and screen studies diversity/ globalization course | 4 |  |  |
| Foreign language core course | 4 | Elective | 4 |  |  |
| Elective | 4 | Elective | 4 |  |  |
|  |  | EEAM 2000 | 1 |  |  |
|  | 16 |  | 17 | 0 | 0 |

Year 3

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | :---: | ---: | Hours



Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: |
| Co-op | 0 MSCR 4623 |  |
|  | or ARTD | 4 |
|  | 5582 |  |
|  | 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 |
| :--- | :---: | :---: | :---: | ---: |
| MSCR 1000 | 1 ENGW 1111 | 4 Media and <br> screen <br> studies <br> elective | 4 Vacation | 0 |
| MSCR 1220 | 4 MSCR 1320 | 4 Elective | 4 |  |
| Elective | 4 Elective | 4 |  |  |
| Foreign <br> language <br> core course | 4 Foreign <br> language <br> core course | 4 |  |  |
| Elective | 4 | 16 | 8 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | ---: | ---: | Hours


| Elective | 4 |  |  |  |
| :--- | ---: | ---: | :--- | :--- |
| EEAM 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Media and <br> screen | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| studies |  |  |  |  |
| writing- <br> intensive |  |  |  |  |
| Media and <br> screen <br> studies <br> diversity/ <br> globalizaton <br> course | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 0 |
| Elective | 4 | 16 |  |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Media and screen studies elective | 4 Co-op | 0 Co-op | 0 Vacation |  |
| Media and screen studies writingintensive | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |

## Year 5

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| Media and screen studies elective |  | MSCR 4623 <br> or ARTD 5582 | 4 |
| Media and screen studies elective | 4 | Elective | 4 |
| Elective | 4 | Elective | 4 |
| Elective | 4 | Elective | 4 |
| 16 |  |  | 16 |

Total Hours: 130

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

NUpath requirements 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), 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
Communication Studies Common Requirements

| COMM 1101 | Introduction to Communication Studies | 4 |
| :--- | :--- | :--- |
| COMM 1112 | Public Speaking | 4 |
| or COMM 2301 | Communication Research Methods |  |
| Foundation Course |  | 4 |

Complete one of the following: 4

| COMM 1210 | Persuasion and Rhetoric |
| :--- | :--- |
| COMM 1225 | Communication Theory |
| COMM 1231 | Principles of Organizational <br> Communication |
| COMM 1255 | Communication in a Digital Age |
| Cluster Course | 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: |  |
| COMM 3200 | Mobile Communication |
| COMM 3201 | Health Communication |
| COMM 3230 | Interpersonal Communication |
| COMM 3304 | Communication and Inclusion |
| COMM 3320 | Political Communication |
| COMM 3330 | Argumentation Theory |
| COMM 3400 | Rhetoric of Science |

\(\left.$$
\begin{array}{lll}\hline \text { COMM 3414 } & \begin{array}{l}\text { Great Speakers and Speeches 2, 1930- } \\
\text { Present }\end{array}
$$ <br>
\hline COMM 3415 \& Communication Criticism <br>

COMM 3445 \& Public Relations Principles\end{array}\right]\)| COMM 3501 | Free Speech: Law and Practice |
| :--- | :--- |
| COMM 3530 | Communication and Sexualities |

## Graphic and Information Design Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introduction to Art and Design |  |  |
| ARTF 1000 | Art and Design at Northeastern | 1 |

Art and Design Fundamentals
$\left.\begin{array}{llc}\text { ARTF } 1122 & \text { 2D Fundamentals: Surface and Drawing } & 4 \\ \text { (with optional ARTF 1123) }\end{array}\right]$

| Art and Design History | 4 |  |
| :--- | :--- | ---: |
| ARTH 2210 | Modern Art and Design History | 4 |
| ARTH 2215 | History of Graphic Design |  |
| Design |  | 4 |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 2250 | Typography 1 (with optional |  |
| ARTG 2252 | ARTG 2251) | 4 |
| ARTG 3350 | Typaphic Design 1 | 4 |
| ARTG 3451 | Information Design 1 | 4 |

Degree Project
ARTG 4550 Design Degree Project 14

Graphic and Information Design Elective
Complete one course with the corresponding tools course, if 4
indicated, from the following:

| ARTD 2360 | Photo Basics (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 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125) |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing (with optional ARTF 2224) |
| ARTG 2400 | Interaction Design 1: Responsive (with optional ARTG 2401) |
| ARTG 3351 | Time-Based Design |
| ARTG 3450 | Graphic Design 2 |
| ARTG 3460 | Identity and Brand Design |


| ARTG 4552 | Information Design 2 |  |
| :--- | :--- | :--- |
| ARTG 4553 | Environmental Information Design |  |
| ARTG 4554 | Typography 3 |  |
| Integrative Requirement <br> Code <br> Integrative Course | Title | Hours |
| COMM 4602 <br> or ARTG 4551 | Contemporary Rhetorical Theory <br> Design Degree Project 2 | 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 Five Years, Three Co-ops in Summer 2/Fall


Year 3

| Fall | Hours | Spring Ho | Hours | Summer 1 Ho | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | Communication studies elective | $\text { on } 4$ | Communication studies elective | n 4 | Co-op | 0 |
|  |  | ARTH 2215 | 4 | Elective | 4 |  |  |
|  |  | ARTG 3350 | 4 |  |  |  |  |
|  |  | ENGW 3314 or 3315 | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 4

| Fall | HoursSpring <br> Co-op | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
|  | Communication <br> studies <br> writing- <br> intensive | 4 Vacation | 0 Co-op | 0 |
|  | Elective | 4 |  |  |
| ARTG 3451 | 4 |  | 0 |  |
|  | ARTG 4550 | 4 | 0 | 0 |

Year 5


Total Hours: 130

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

Year 1

| Fall | Hours | Spring Hour | Hours | Summer 1 Ho | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARTF 1000 <br> or COMM $1000$ | 1 | Communication studies foundation course | $4$ | Communication <br> studies <br> elective | 4 | Vacation | 0 |
| COMM 1101 | 4 | ENGW 1111 |  | Foreign language elective | 4 |  |  |
| ARTG 1250 |  | ARTF 2220 <br> (with optional ARTF 2221) | 4 |  |  |  |  |
| ARTF 1122 <br> (with optional ARTF 1123) | 4 | COMM 1112 or 2301 | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |

## Year 2

| Fall Hour | Hours Spring | Hours Summer 1 |  | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Communication studies <br> cluster <br> course | 4 Co-op | 0 Co-op | 0 | Communication studies elective | 4 |
| Foreign language core course | 4 |  |  | Communicatic studies writingintensive | 4 |
| Elective | 4 |  |  |  |  |
| EEAM 2000 | 1 |  |  |  |  |
| ARTG 2250 <br> (with optional ARTG 2251) | 4 |  |  |  |  |
|  | 17 | 0 | 0 |  | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Communication <br> studies | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| elective |  |  |  |  |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Elective | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| ARTH 2210 | 4 |  |  |  |
| ENGW 3314 <br> or 3315 | 4 |  |  |  |
| ARTG 3350 | 4 |  |  | 0 |
|  | 16 | 0 | 0 |  |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Communication <br> studies | COMM 4602 <br> or ARTG | 4 |
| writing- <br> intensive | 4551 |  |
| ARTG 3451 | 4 <br> Graphic and <br> information <br> design <br> elective | 4 |
| Elective | 4 Elective | 4 |
| ARTG 4550 | 4 Elective | 4 |
|  | 16 | 16 |

## Total Hours: 130

## Communication Studies and Media and Screen Studies, BA

The Department of Communication Studies offers majors in communication studies and in media studies. The integrated major allows students to combine courses from both majors into a degree that integrates theory and practice. Students completing the combined major
have the knowledge necessary to engage the complex and dynamic relationship between communication, culture, and 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

NUpath requirements 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), 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.

## Media and Screen Studies Requirements

| Code $\quad$ Title | Hours |  |
| :--- | :--- | ---: |
| Introduction to Media Studies |  |  |
| MSCR 1220 | Media, Culture, and Society | 4 |
| Introduction to Screen Theory |  |  |
| MSCR 2220 | Understanding Media and Film | 4 |


| Advanced Theory |  |
| :--- | :--- | :--- |
| MSCR 4623 | Theories of Media and Culture |

Media and Screen Electives
Complete five of the following: 20

| MSCR 1230 | Introduction to Film Production |
| :--- | :--- |
| MSCR 1310 | Introduction to Digital Media Culture |
| MSCR 2302 | Advertising and Promotional Culture |
| MSCR 2325 | Global Media |
| MSCR 2895 | Film Analysis |
| MSCR 3210 | Special Topics in Media and Screen <br> Studies |
| MSCR 3422 | Media Audiences |
| MSCR 3426 | Popular Music as Media Form |
| MSCR 3435 | Media Industries |
| MSCR 3437 | Media and Identity |
| CINE 2160 | Narrative Filmmaking |
| CINE 3389 | Screenwriting |
| CINE 3392 | Gender and Film |
| CINE 3446 | Topics in Documentary Production |
| CINE 3920 | Topics in Film Studies |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |


| ARTH 2212 | Survey of the Still and Moving Image |
| :--- | :--- |
| Advanced Media and Screen Electives |  |
| Complete two of the following: |  |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen <br> Studies |
| MSCR 4992 | Directed Study |
| MSCR 4993 | Independent Study |
| CINE 3389 | Screenwriting |

## Communication Studies Requirements

Code Title Hours
Introduction to College

| COMM 1000 | Communication Studies at |
| :--- | :--- |
|  | Northeastern |

Communication Studies Common Requirements

| COMM 1101 | Introduction to Communication Studies | 4 |
| :--- | :--- | :--- |
| COMM 1112 | Public Speaking | 4 |
| or COMM 2301 | Communication Research Methods |  |
| Foundation Course |  | 4 |
| Complete one of the following: |  |  |
| COMM 1210 | Persuasion and Rhetoric |  |
| COMM 1231 | Principles of Organizational <br> Communication |  |
| COMM 1225 | Communication Theory |  |


| 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: |  |
| COMM 3200 | Mobile Communication |
| COMM 3201 | Health Communication |
| COMM 3230 | Interpersonal Communication |
| COMM 3304 | Communication and Inclusion |
| COMM 3320 | Political Communication |
| COMM 3330 | Argumentation Theory |
| COMM 3400 | Rhetoric of Science |
| COMM 3414 | Great Speakers and Speeches 2, 1930Present |
| 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 | Communication, Politics, and Social Change |
| COMM 4535 | Nonverbal Social Interaction |
| COMM 4605 | Youth and Communication Technology |

COMM 4631 Crisis Communication and Image Management

## Communication Electives

Complete three COMM courses.

## Integrative Requirement

| Code <br> Integrative Course | Title | Hours |
| :--- | :--- | ---: |
| COMM 4602 | Contemporary Rhetorical Theory | 4 |
| or CINE 3500 | Film Theory |  |

## 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.

1 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 Five Years, Three Co-ops in Spring/Summer 1

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMM 1000 | 1 | MSCR 2220 | 4 | Elective | 4 | Vacation |  |
| MSCR 1220 | 4 | COMM 1112 or 2301 | 4 | Elective | 4 |  |  |
| COMM 1101 | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |


| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MSCR elective | 4 | Co-op |  | Co-op |  | Elective | 4 |
| MSCR elective | 4 |  |  |  |  | Elective | 4 |
| COMM <br> foundation course | 4 |  |  |  |  |  |  |
| COMM cluster course | 4 |  |  |  |  |  |  |
| EEAM 2000 | 1 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| MSCR <br> elective | 4 Co-op | Co-op | Vacation |  |
| COMM <br> elective | 4 |  |  |  |
| COMM | 4 |  |  |  |
| writing- <br> intensive |  |  |  |  |


| MSCR <br> elective | 4 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 16 | 0 |  | 0 |  | 0 |
| Year 4 |  |  |  |  |  |  |
| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| COMM elective | 4 Co-op |  | Co-op |  | Vacation |  |
| COMM <br> writingintensive | 4 |  |  |  |  |  |
| MSCR <br> advanced elective | 4 |  |  |  |  |  |
| MSCR elective | 4 |  |  |  |  |  |
|  | 16 | 0 |  | 0 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| COMM 4602 <br> or CINE 3500 | 4 MSCR 4623 |  |$\quad 4$

Total Hours: 130

## Sample Four Years, No Co-ops

| Year 1 | Hours Spring | Hours |
| :--- | :---: | ---: |
| Fall | 1 MSCR 2220 | 4 |
| COMM 1000 | 4 COMM 1112 or |  |
| MSCR 1220 | 2301 | 4 |
| COMM 1101 | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 | 16 |
|  | 17 | 4 |


| Year 2 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| MSCR elective | 4 COMM cluster |  |
|  | course | 4 |
| MSCR elective | 4 MSCR elective | 4 |
| COMM foundation <br> course | 4 MSCR elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

## Year 3

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| COMM elective | 4 COMM elective | 4 |
| COMM writing- | 4 COMM writing- |  |
| intensive | 4 MSCR advanced |  |
| MSCR elective | elective | 4 |


| Elective | 4 Elective | 4 |
| :--- | :---: | ---: |
|  | 16 | 16 |
| Year 4 | Hours Spring | Hours |
| Fall | 4 MSCR 4623 | 4 |
| COMM 4602 or | 4 Elective |  |
| CINE 3500 | 4 Elective | 4 |
| COMM elective | 4 Elective | 4 |
| MSCR advanced 16 4 <br> Elective  16 |  |  |

Total Hours: 129

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Communication Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Communication Studies Common Requirements |  |  |
| COMM 1000 | Communication Studies at <br> Northeastern | 1 |
| 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 |$\quad$| Persuasion and Rhetoric |
| :--- |
| COMM 1225 |$\quad$| Communication Theory |
| :--- |
| COMM 1231 |$\quad$| Principles of Organizational |
| :--- |
| Communication |

## Communication Studies Electives

Complete three COMM courses.

## Sociology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Sociology | Courses |  |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2320 | Statistical Analysis in Sociology | 4 |
| SOCL 2321 | Research Methods in Sociology | 4 |

## Introductory Electives

Complete two of the following:

| SOCL 1120 | Society and Health |
| :--- | :--- |
| SOCL 1220 | Sociology of Boston |
| SOCL 1228 | Social Problems |
| SOCL 1241 | Sociology of Violence |
| SOCL 1245 | Sociology of Poverty |
| SOCL 1255 | Sociology of the Family |


| SOCL 1260 | Gender in a Changing Society |
| :--- | :--- |
| SOCL 1275 | Social Stratification |
| SOCL 1285 | Deviant Behavior and Social Control |
| SOCL 1290 | Juvenile Delinquency |
| SOCL 1295 | Drugs and Society |

Intermediate-Level Elective
Complete one of the following:

| SOCL 2205 | Law and Social Justice |
| :--- | :--- |
| SOCL 2268 | Social Movements |
| SOCL 2270 | Race and Ethnic Relations |
| SOCL 2358 | Current Issues in Cities and Suburbs |
| SOCL 2450 | Class, Power, and Social Change |
| SOCL 3440 | Sociology of Human Service <br> Organizations |
| SOCL 3408 | Sociology of Organizations |
| SOCL 3441 | Sociology of Health and Illness |
| SOCL 3465 | Globalization and the Evolution of <br> Human Societies |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 3487 | Applied Sociology: Practice and Theory |

Advanced-Level Elective
Complete one of the following:

| SOCL 4514 | "The Wire" and the Study of Urban <br> Inequalities |
| :--- | :--- |
| SOCL 4518 | Law and Society in a Digital World |
| SOCL 4520 | Race, Class, and Gender |
| SOCL 4523 | Sexualities |
| SOCL 4528 | Computers and Society |
| SOCL 4580 | Special Topics in Sociology |
| SOCL 4992 | Directed Study |

## Capstone and Integrative Requirements

Code Title Hours
Integrative Course
Complete one of the following: 4
COMM 3320 Political Communication
COMM 3532 Theories of Conflict and Negotiation
SOCL 1246 Environment and Society
Capstone/Senior Seminar Option
Complete one of the following two options: 8
Communications Capstone Option
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
Sociology Senior Seminar Option
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.

## Program Requirement

128 total semester hours required

## Plan of Study

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

| Year 1 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Fall | 4 ENGW 1111 | 4 Communication <br> studies <br> elective | 4 Vacation | 0 |


| Year 2 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Ho |  | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Communication studies <br> cluster <br> course | 4 | Elective | 4 | Vacation | 0 | Co-op | 0 |
| Foreign language core course | 4 | Communicati studies elective | 4 |  |  |  |  |
| Introductory sociology elective | 4 | Foreign language core course | 4 |  |  |  |  |
| Elective |  | Introductory sociology elective | 4 |  |  |  |  |
|  |  | EEAM 2000 | 1 |  |  |  |  |
| 16 |  |  | 17 |  | 0 |  | 0 |




| EEAM 2000 | 1 |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
| Elective | 4 |  |  |  |
|  | 17 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Communication | 4 Co-op | 0 Co-op | 0 Vacation | 0 |

## studies

writing-
intensive

| Communicatí <br> studies <br> elective | 4 |  |  |  |
| :--- | :---: | :---: | :--- | :--- |
| Foreign <br> language <br> core course | 4 |  |  |  |
| Intermediate <br> sociology <br> elective | 4 | 0 | 0 | 0 |

Year 4

| Fall Ho | Hours Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Communication studies elective | 4 Co-op | 0 | Co-op | 0 Vacation | 0 |
| Elective | 4 |  |  |  |  |
| Advanced sociology elective | 4 |  |  |  |  |
| Advanced writing in the disciplines course | 4 |  |  |  |  |
|  | 16 | 0 |  | 0 | 0 |

Year 5

| Fall | HoursSpring$\quad$ Hours |  |
| :--- | :---: | ---: |
| Communication | 4 Communication | 4 |
| studies | studies or <br> sociology <br> capstone |  |
| writing- <br> intensive | 4 Communicatio <br> studies or <br> sociology <br> capstone <br> elective | 4 |
| Integrative <br> requirement | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 16 | 16 |

Total Hours: 130

## Communication Studies and Theatre, BA

The Department of Communication Studies and the Department of Sociology offer an interdisciplinary combined major in communication studies and theatre. The combined major integrates the study of communication skills and processes with the study of theater history, playwriting, acting, and directing, as well as costume design, lighting, and scenery.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :--- | :--- | :--- |
| Communication Studies Common Requirements |  |  |
| COMM 1000 | Communication Studies at <br> Northeastern | 1 |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking |  |
| or COMM 2301 | Communication Research Methods | 4 |
| Foundation Course |  | 4 |
| Complete one of the following: |  |  |


| COMM 1210 | Persuasion and Rhetoric |
| :--- | :--- |
| COMM 1231 | Principles of Organizational <br> Communication |
| COMM 1225 | Communication Theory |
| COMM 1255 | Communication in a Digital Age |

Cluster Course
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 |
| Writing-Intensive Courses |  |
| 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 3330 | Argumentation Theory |
| COMM 3400 | Rhetoric of Science |


| COMM 3414 | Great Speakers and Speeches 2, 1930- <br> Present |
| :--- | :--- |
| 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 | Communication, Politics, and Social <br> Change |
| COMM 4535 | Nonverbal Social Interaction |
| COMM 4605 | Youth and Communication Technology <br> COMM 4631Crisis Communication and Image |

## Communication Studies Electives

Complete three COMM courses.

## Theatre Requirements

A minimum grade of $C$ is required in all theatre courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 |  |  |
| Choose one of the follow | owing: | 4 |
| THTR 2300 | Classics of Global Theatre |  |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the Dream |  |
| THTR 2340 | Theatre and Society |  |

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 3200 Queer <br> Theatre) |
| THTR 2400 | Scenic Design |
| THTR 3200 | Queer Theatre and Performance |
| THTR 3300 | Devised Theatre Project: Collaborative <br> Performance |
| THTR 3400 | Designing Combat for the Stage |
| THTR 3550 3550 | Acting 3-Playing Shakespeare |
| THTR 3570 | Directing for the Stage |
| Making Theatre | Production Experience 1 Theatre Performance |
| THTR 1100 | Production Experience 2 |
| THTR 2000 | Capstone Rehearsal and Performance |

## Integrative Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Theatre Capstone |  |  |
| THTR 4702 | Capstone Rehearsal and Performance | 4 |
| Communication Studies Integrative Course |  |  |
| Complete one o | following: | 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 Five Years, Three Co-ops in Spring/Summer 1
Year 1

| Fall | Hours | Spring | Hours | Summer 1 H | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMM 1000 <br> or THTR <br> 1000 |  | COMM 1112 <br> or 2301 |  | Communicaton studies foundation course | $4$ | Vacation |  |
| COMM 1101 | 4 | THTR 1131 |  | Communicato studies elective | 4 |  |  |
| THTR 1101 | 4 | Foreign language course | 4 |  |  |  |  |
| THTR 1120 | 4 | ENGW 1111 | 4 |  |  |  |  |
| Foreign language elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |

Year 2

| Fall H | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Communicaton studies cluster course | $\text { n } 4 \text { Co-op }$ | Co-op | Vacation |  |
| Communicatc studies elective | 4 |  |  |  |
| THTR 2325 | 4 |  |  |  |
| EEAM 2000 | 1 |  |  |  |
| Theatre text and context elective | 4 |  |  |  |
|  | 17 | 0 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :--- |
| Intermediate | 4 Co-op | Co-op | Communication | 4 |
| or advanced |  |  | studies |  |
| THTR |  | writing- |  |  |
| technique |  |  | intensive |  |
| course |  |  |  |  |


| Foreign <br> language <br> culture <br> course | 4 | Communicati <br> studies <br> elective | 4 |  |
| :--- | :---: | :--- | :--- | :--- |
| ENGW 3314 <br> or 3315 | 4 |  |  |  |
| THTR 1270 | 4 | 0 | 0 | 8 |
|  | 16 |  |  |  |

## Year 4

| Fall Hou | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Communication studies writingintensive | 4 Co-op |  | Co-op |  | Vacation |  |
| Intermediate or advanced technique elective | 4 |  |  |  |  |  |
| THTR 1100 | 1 |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |
|  | 7 | 0 |  | 0 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| THTR 4702 | 4 Elective | 4 |
| Communicati <br> studies <br> integrative <br> course | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 THTR 2000 | 1 |
|  | Elective | 4 |
|  | 16 | 17 |

Total Hours: 132

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- <br> $\quad$ op | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 | Object-Oriented Design | 4 |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 | 4 |
| CS 4550 | Web Development | 4 |

Presentation Requirement
THTR $1170 \quad$ The Eloquent Presenter 1

Computer Science Elective Courses
With advisor approval, directed study, research, project study,
and appropriate graduate-level courses may also be taken as upper-division electives.
Complete 12 credits of CS, IS, or DS classes that are not
already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
DS 2000 or higher, except DS 4900
IS 2000 or higher, except IS 4900

## Communication Studies Courses

Code Title Hours

| Communication Studies Common Requirements |  |  |
| :--- | :--- | ---: |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking | 4 |
| or COMM 2301 | Communication Research Methods |  |
| Foundation Course |  | 4 |


| COMM 1210 | Persuasion and Rhetoric |
| :--- | :--- |
| COMM 1225 | Communication Theory |
| COMM 1231 | Principles of Organizational <br> Communication |
| COMM 1255 | Communication in a Digital Age |
| Cluster Course | 4 |
| 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 |
| Writing-Intensive |  |


| 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 3330 | Argumentation Theory |
| COMM 3400 | Rhetoric of Science |
| COMM 3414 | Great Speakers and Speeches 2, 1930- <br> COMM 3415 |
| 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 | Communication, Politics, and Social <br> Change |
| COMM 4535 | Nonverbal Social Interaction <br> COMM 4605 |
| Youth and Communication Technology |  |

Communication Studies Electives
Complete three courses in the following range: ${ }^{1} \quad 12$

## COMM 1131 to COMM 4996

1 Special Topics in Communication Studies (COMM 4912), and Junior/ Senior Honors Project 1 (COMM 4970) are excluded.

## Supporting Courses

## Code Title

Hours

| Mathematics |  |  |
| :---: | :---: | :---: |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| Computing and Social Issues |  |  |
| Complete one of the following: |  | 4 |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| IA 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 21 st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |


| Writing Requirements |  |  |
| :--- | ---: | ---: |
| Code Title | Hours |  |
| College Writing |  | 4 |
| ENGW 1111 | First-Year Writing |  |

Advanced Writing in the Disciplines
Complete one of the following:

ENGW 3302 Advanced Writing in the Technical Professions

| Communicatiı <br> studies <br> foundation <br> course | 4 |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
| 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 |
| CS elective | 4 |  | Elective | 4 |
| Communication <br> studies <br> cluster <br> course | 4 |  |  |  |
| Communicatir <br> studies <br> writing- <br> intensive <br> course | 4 |  |  |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Advanced | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| writing | 4 |  | Elective | 4 |
| Communicatir <br> studies <br> elective |  |  |  |  |
| CS elective | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 8 |

Year 5

| Fall Hours Spring |  | Hours |
| :---: | :---: | :---: |
| Communication studies writingintensive course | 4 CS 4000 |  |
| Communicatil studies elective | 4 CS 4500 | 4 |
| CS elective | $\begin{aligned} & 4 \text { CS } 4550 \\ & \text { and CS } 4501 \end{aligned}$ | 4 |
| Computing and social issues | 4 Communicatis studies elective | 4 |
|  | Elective | 4 |
|  | 16 | 17 |

Total Hours: 134

## 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 <br> CS 2510 <br> and CS 2511 | 5 CS 3500 | 4 Vacation | 0 |


| ENGW 1111 | 4 Elective | 4 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| COMM 1101 | 4 |  |  |  |
|  | 19 | 17 | 8 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| CS 1210 | 1 Co-op | 0 Co-op | 0 Elective | 4 |
| Communicati، <br> studies <br> foundation <br> course | 4 |  | Elective | 4 |
| CS elective | 4 |  |  |  |
| CS 3000 | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
|  | 17 | 0 | 0 | 8 |

Year 3

| Fall H | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| THTR 1170 | 1 Co-op | 0 Co-op | 0 Elective | 4 |
| Communicatil studies cluster course | 4 |  | ENGW 3302 <br> or 3315 | 4 |
| Communication studies writingintensive course | O 4 |  |  |  |
| CS elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 17 | 0 | 0 | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | ---: |
| CS elective | 4 CS 4500 <br> and CS 4501 | 4 Elective | 4 |

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## English Requirements

Code Title Hours

## 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 |
| :--- | :--- | :--- |

## Foundational Courses

| ENGL 1400 | Introduction to Literary Studies | 4 |
| :--- | :--- | :--- |
| ENGL 1160 | Introduction to Rhetoric | 4 |

or ENGL 1410 Introduction to Writing Studies

## Diversity

Complete one of the following courses. This course may also 4
be used to fulfill an additional English requirement below:

| ENGL 2150 | Literature and Digital Diversity |
| :--- | :--- |
| ENGL 2296 | Early African-American Literature |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2760 | Writing in Global Contexts |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in <br> ENGL 3678 |
| Bible and the Origins of Sex, Gender, |  |
| ENGL/JWSS 3685 | Modern and Contemporary Jewish <br> Literature |
| Pre-Nineteenth-Century Literature |  |

Complete one of the following:

| ENGL 1600 | Introduction to Shakespeare |
| :--- | :--- |
| ENGL 1700 | Global Literature to 1500 |


| ENGL 2240 | 17th-Century British Literature |
| :--- | :--- |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following: 4

| ENGL 2260 | Romantic Poetry |
| :--- | :--- |
| ENGL 2330 | The American Renaissance |
| ENGL 2340 | American Realism |
| ENGL 3619 | Emerson and Thoreau |
| ENGL 3720 | 19th-Century Major Figure |
| ENGL 4040 | Topics in 19th-Century Literatures |
| ENGL 2301 | The Graphic Novel |
| ENGL 2410 | Contemporary American Literature |
| ENGL 2440 | The Modern Bestseller |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2610 | Contemporary Israeli Literature and Art <br> (Abroad) |

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
ENGL 3730 20th- and 21 st-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 Writing Studies |
| 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 |
| ENGL 3700 | Writing |
| ENGL 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and |
| LING 2350 | Linguistics |
| 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 $1120 \quad$ Trouble in Utopia
ENGL 1130 Animals, Objects, Humans
ENGL 1450 Reading and Writing in the Digital Age

| ENGL 1500 | British Literature to 1800 |  |
| :---: | :---: | :---: |
| ENGL 1502 | American Literature to 1865 |  |
| ENGL 1503 | American Literature 1865 to Present |  |
| ENGL 2150 | Literature and Digital Diversity |  |
| ENGL 2370 | The Modern Short Story |  |
| ENGL 2380 | The Modern Novel |  |
| ENGL 2400 | Modern Poetry |  |
| ENGL 2420 | Contemporary Poetry |  |
| ENGL 2430 | Contemporary Fiction |  |
| ENGL 2450 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2510 | Horror Fiction |  |
| ENGL 2520 | Science Fiction |  |
| ENGL 2600 | Irish Literary Culture (Abroad) |  |
| ENGL 2620 | What Is Nature? (Abroad) |  |
| ENGL 2690 | Boston in Literature |  |
| ENGL 3427 | The Literature of Science |  |
| ENGL 3487 | Film and Text (Abroad) |  |
| ENGL 3582 | Children's Literature |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| ENGL 4070 | Topics in Genre |  |
| Writing |  |  |
| Complete one of th | following: | 4 |
| ENGL 2700 | Creative Writing |  |
| ENGL 2710 | Style and Editing |  |
| ENGL 2730 | Digital Writing |  |
| 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 | Topics in Writing |  |
| 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 |

COMM 1112
or COMM 2301
Foundation Course
Complete one of the following:

| COMM 1210 | Persuasion and Rhetoric |
| :--- | :--- |
| COMM 1231 | Principles of Organizational <br> Communication |
| COMM 1225 | Communication Theory |
| COMM 1255 | Communication in a Digital Age |
| Cluster Course |  |
| 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 |

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 3330 | Argumentation Theory |
| COMM 3400 | Rhetoric of Science |
| COMM 3414 | Great Speakers and Speeches 2, 1930- |
| 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 | Communication, Politics, and Social |
| COMM 4535 | Change |
| COMM 4605verbal Social Interaction |  |
| COMM 4631 | Youth and Crisis Communication Technology |

## Communication Studies Electives

Complete three additional COMM courses. 12

## Integrative Requirement

Code Title
Hours
Integrative English Course
Complete one of the following:

| ENGL 3325 | Rhetoric of Law |
| :--- | :--- |
| ENGL 3340 | Technologies of Text |
| ENGL 3381 | The Practice and Theory of Teaching <br>  |

## Integrative Communication Studies Course

| COMM 3415 | Communication Criticism | 4 |
| :---: | :--- | :--- |
| or COMM 4602 | Contemporary Rhetorical Theory |  |

Public Speaking
Communication Research Methods
Code Title Hours

## Communication Studies Grade Requirements

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

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Human Services Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| Human Services Overview |  |  |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and | 4 |
|  | Social Change | 4 |
| HUSV 3700 | Research Methods for Human Services | 4 |
| HUSV 3900 | Introduction to Social Policy | 4 |
| Organization |  |  |


| SOCL 3440 | Sociology of Human Service <br> Organizations | 4 |
| :--- | :--- | :---: |
| Internship Human Services Internship <br> HUSV 4994 Human Services Electives <br> Complete two additional HUSV courses. 8 l |  |  |

## Communication Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Communication Studies Common Requirements |  |  |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking | 4 |
| or COMM 2301 Communication Research Methods |  |  |
| Foundation Course |  | 4 |
| Complete one of the following: |  |  |


| COMM 1210 | Persuasion and Rhetoric |
| :--- | :--- |
| COMM 1225 | Communication Theory |
| COMM 1231 | Principles of Organizational <br> Communication |
| COMM 1255 | Communication in a Digital Age |
| Cluster Course |  |
| 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 |

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 3330 | Argumentation Theory |
| COMM 3400 | Rhetoric of Science |
| COMM 3414 | Great Speakers and Speeches 2, 1930- <br> Present |
| 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 | Communication, Politics, and Social <br> Change |
| COMM 4535 | Nonverbal Social Interaction <br> COMM 4605Youth and Communication Technology |
| COMM 4631 | Crisis Communication and Image <br> Management |

## Communication Studies Electives

Complete three of the following:
COMM 1331 Legal Argumentation, Advocacy, and Citizenship
COMM 1412 Social Movement Communication
COMM 1511 Communication and Storytelling

| COMM 1990 | Elective |
| :--- | :--- |
| COMM 2105 | Social Networks |
| COMM 2350 | Producing for the Entertainment <br> Industry |
| COMM 2450 | Sound Production for Digital Media |
| COMM 2990 | Elective |
| COMM 3306 | International Communication Abroad |
| COMM 3409 | Advocacy Writing |
| COMM 3451 | Advertising Practices |
| COMM 3534 |  |
| COMM 3550 | Television Field Production |
| COMM 3650 | Television Studio Production |
| COMM 3990 | Elective |
| COMM 4650 | Digital Editing for TV |
| COMM 4940 | Special Topics in Media Production |
| COMM 4990 | Elective |
| COMM 4992 | Directed Study |
| COMM 4993 | Independent Study |
| COMM 4994 | Internship in Communication |

## Capstone

| Code | Title | Hours |
| :--- | ---: | ---: |
| Communications Capstone Option |  |  |
| Complete one of the following: | 4 |  |
| COMM 4102 | Health Communication Campaigns |  |
| COMM 4530 | Communication and Quality of Life |  |
| COMM 4625 | Online Communities | 4 |
| Complete one additional HUSV elective. | 4 |  |


| Human Services Capstone Option |  |
| :--- | :--- |
| HUSV 4700 | Senior Seminar in Human Services |
| Complete one course in the following range: | 4 |

COMM 3000 to COMM 4999
Integrative Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| HUSV 3590 | Nonprofit Communications | 4 |

## Program Requirement

128 total semester hours required

## Linguistics and Communication Studies, BA

In the combined major in linguistics and communication studies, students have an opportunity to 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Linguistics Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Linguistics Courses |  |  |
| LING 1150 | Introduction to Language and Linguistics | 4 |
| LING 2350 | Linguistic Analysis | 4 |
| LING 3412 | Language and Culture | 4 |
| LING 3422 | Phonology | 4 |
| LING 3450 | Syntax | 4 |
| LING 3424 or LING 3452 | Morphology Semantics | 4 |
| Linguistics Electives |  |  |
| Complete two of the linguistics required | following, not used to fulfill the ourses above: | 8 |
| DEAF 2700 | ASL Linguistics |  |
| LING 3420 | Phonetics |  |
| 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 4654 | Seminar in Linguistics |  |
| LING 4891 <br> or LING 4970 <br> or LING 4971 <br> or LING 4991 | Research Seminar in Linguistics Junior/Senior Honors Project 1 Junior/Senior Honors Project 2 Directed Study Research |  |
| PSYC 3464 | Psychology of Language |  |
| PSYC 4610 | Laboratory in Psycholinguistics |  |
| PSYC 4658 | Seminar in Psycholinguistics |  |

## Communication Studies Requirements

Code Title Hours
Communication Studies Required Courses

| 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 3330 | Argumentation Theory |  |
| COMM 3400 | Rhetoric of Science |  |
| COMM 3414 | Great Speakers and Speeches 2, 1930Present |  |
| 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 | Communication, Politics, and Social Change |  |
| 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 |

## Linguistics and Communication Studies Combined-Major Credit Requirement

Complete 76 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All $B A$ students are required to complete the $B A$ language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Art and Design at Northeastern |  |  |
| ARTF 1000 | Art and Design at Northeastern | 1 |

Art and Design Foundations

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| :--- | :--- | :--- |
| ARTF 2220 | 4D Fundamentals: Sequence and <br> Drawing (with optional ARTF 2221) | 4 |
| Drawing Fundamentals | Observational Drawing |  |
| ARTF 1120 | Conceptual Drawing |  |
| or ARTF 1121 Modern Art and Design History |  |  |
| ARTH 2210 | Survey of the Still and Moving Image | 4 |
| ARTH 2212 | Sistory | 4 |

Project Required Course

| ARTD 4530 | Media Arts Degree Project 1 |
| :--- | :--- |
| Media Art Basics Electives |  |
| Complete two of the following: |  |
| ARTD 2370 | Animation Basics (with optinal |
| ARTD 2371) |  |
| ARTD 2360 | Photo Basics (with optional <br> ARTD 2380 |
| ARTD 2361) |  |

$\begin{array}{ll}\text { ARTS 2341 } & \text { Figure Drawing } \\ \text { ARTS 3449 } & \text { Drawing in Mixed Media }\end{array}$

## Communication Studies Courses

Code Title Hours
Communication Studies Common Requirements
COMM $1101 \quad$ Introduction to Communication Studies
COMM $1112 \quad$ Public Speaking 4
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 <br> Communication |
| COMM 1255 | Communication in a Digital Age |
| Cluster Course |  |
| 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 |

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 3330 | Argumentation Theory |
| COMM 3400 | Rhetoric of Science |
| COMM 3414 | Great Speakers and Speeches 2, 1930- |
|  | Present |
| 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 | Communication, Politics, and Social <br> Change |
| COMM 4535 | Nonverbal Social Interaction |
| COMM 4605 | Youth and Communication Technology |
| COMM 4631 | Crisis Communication and Image |

Communication Studies Electives
Complete three COMM courses.

## Integrative Requirement

Code Title Hours
Bridge/Integrative Requirement
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 Five Years, Two Co-ops Plan of Study
Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARTF 1000 <br> or COMM $1000$ |  | ARTF 2220 <br> (with optional ARTF 2221) | 4 | Comm elective | 4 Vacation |  |
| ARTF 1122 <br> (With opitonal ARTF 1123 ) | 4 | ARTH 2212 | 4 | Elective | 4 |  |
| ARTH 2210 | 4 | COMM 1112 <br> or 2301 | 4 |  |  |  |
| COMM 1101 | 4 | Drawing elective | 4 |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 | 0 |

## Year 2

| Fall | Hours Spring | Hours Summer 1 |
| :--- | :---: | :---: | :---: | ---: |
| Media arts <br> basics <br> elective | 4 Co-op |  |$\quad$| Hours Summer 2 |
| :---: |
| Co-op |$\quad$ Hours

## Year 3



Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Art + design <br> elective | 4 Co-op | Co-op | Vacation |  |
| COMM | 4 |  |  |  |
| elective |  |  |  |  |


| COMM <br> writing- <br> intensive | 4 |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Elective | 4 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ARTD 4530 | 4 ARTD 4670 <br> (or COMM <br> Capstone) | 4 |
|  | Clective | 4 |
| COMM 3415 | 4 Elive | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 16 |
|  | 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

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 |  |  | Diversity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Introduction to College |  |  | be used to fulfill an additional English requirement below: |  | 4 |
| MSCR 1000 | Media and Screen Studies at Northeastern | 1 | ENGL 2150 | Literature and Digital Diversity |  |
|  |  |  | ENGL 2296 | Early African-American Literature |  |
| Introduction to Media Studies |  |  | ENGL 2450 | Postcolonial Literature |  |
| MSCR 1220 | Media, Culture, and Society | 4 | ENGL 2451 | Postcolonial Women Writers |  |
| Introduction to Screen Theory |  |  | ENGL 2455 | American Women Writers |  |
| MSCR 2220 | Understanding Media and Film | 4 | ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| Media and Screen History |  |  | ENGL 2470 | Asian-American Literature |  |
| MSCR 4208 | TV History | 4 | ENGL 2760 | Writing in Global Contexts |  |
| Advanced Theory |  |  | ENGL 3663 | The African-American Novel |  |
| MSCR 4623 | Theories of Media and Culture | 4 | ENGL 3676 | Representing Gender and Sexuality in |  |
| Media and Screen Electives |  |  |  | Literature |  |
| Complete three of the following: |  | 12 | ENGL 3678 | Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity |  |
| CINE 3389 | Screenwriting |  |  |  |  |
| CINE 3392 | Gender and Film |  |  |  |  |
| CINE 3446 | Topics in Documentary Production |  | ENGL/JWSS 3685 | Modern and Contemporary Jewish Literature |  |
| CINE 3920 | Topics in Film Studies |  | Pre-Nineteenth-Century Literature |  |  |
| MSCR 1230 | Introduction to Film Production |  | Complete one of the following: |  | 4 |
| MSCR 1310 | Introduction to Digital Media Culture |  | ENGL 1600 | Introduction to Shakespeare |  |
| MSCR 2302 | Advertising and Promotional Culture |  | ENGL 1700 | Global Literature to 1500 |  |
| MSCR 2325 | Global Media |  | ENGL 2240 | 17th-Century British Literature |  |
| MSCR 2895 | Film Analysis |  | ENGL 2296 | Early African-American Literature |  |
| MSCR 3210 | Special Topics in Media and Screen Studies |  | ENGL 3618 | Milton |  |
| MSCR 3422 | Media Audiences |  | ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity |  |
| MSCR 3426 | Popular Music as Media Form |  |  |  |  |
| MSCR 3435 | Media Industries |  | ENGL 4000 | Topics in Early Literatures |  |
| MSCR 3437 | Media and Identity |  | ENGL 4010 | Topics in Shakespeare |  |
| ARTD 3480 | Video: Sound and Image |  | ENGL 4020 | Topics in 17th- and 18th-Century |  |
| ARTD 3485 | Experimental Video |  |  | Literatures |  |
| ARTH 2212 | Survey of the Still and Moving Image |  | Nineteenth-, Twentieth-, and Twenty-First-Century Literature |  |  |
| Advanced Media and Screen Electives |  |  | Complete one of the following: |  | 4 |
| Complete two of the following: |  | 8 | ENGL 2260 Romantic Poetry |  |  |
| CINE 3500 | Film Theory |  | ENGL 2330 | The American Renaissance |  |
| MSCR 4208 | TV History |  | ENGL 2340 | American Realism |  |
| MSCR 4602 | Media and Democracy |  | ENGL 3619 | Emerson and Thoreau |  |
| MSCR 4622 | Special Topics in Media and Screen Studies |  | ENGL 4040 | 19th-Century Major Figure |  |
|  |  |  |  | Topics in 19th-Century Literatures |  |
| MSCR 4992 | Directed Study |  | ENGL 2301 | The Graphic Novel |  |
| MSCR 4993 | Independent Study |  | ENGL 2410 | Contemporary American Literature |  |
| English Requirements |  |  | ENGL 2440 | The Modern Bestseller |  |
|  |  |  | ENGL 2600 | Irish Literary Culture (Abroad) |  |
| English Course-Level Requirement Hours |  | Hours | ENGL 2610 | Contemporary Israeli Literature and Art (Abroad) |  |
| In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000-4999. |  |  | ENGL/JWSS 3685 | Modern and Contemporary Jewish Literature |  |
| Introduction to College |  |  | ENGL 3730 | 20th- and 21 st-Century Major Figure |  |
| ENGL 1000 | English at Northeastern | 1 | Theories and Methods |  |  |
| Foundational Courses |  |  | Complete one of the following: |  | 4 |
| ENGL 1400 | Introduction to Literary Studies | 4 | ENGL 1140 | Grammar. The Architecture of English |  |
| ENGL 1160 | Introduction to Rhetoric | 4 | ENGL 1160 | Introduction to Rhetoric |  |
| or ENGL 1410 | Introduction to Writing Studies |  | ENGL 1410 | Introduction to Writing Studies |  |



| Year 2 |  |  |  | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hour |
| Media and <br> screen <br> elective | 4 Co-op |  |  |  |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL <br> theories and methods elective | 4 | Advanced <br> MSCR <br> elective | 4 | Vacation | 0 | Co-op |  |
| ENGL elective | 4 | ENGL comparative elective | 4 |  |  |  |  |
| Advanced <br> MSCR <br> elective | 4 | Elective | 4 |  |  |  |  |
| Elective |  | ENGL 1450 or 3340 | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

Year 4

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | ENGL writing elective | 4 Vacation | Vacation |  |
|  |  | CINE 3500 | 4 |  |  |
|  |  | Elective | 4 |  |  |
|  |  | Elective | 4 |  |  |
|  | 0 |  | 16 | 0 | 0 |

Year 5

| Fall | Hours |
| :--- | ---: |
| MSCR 4623 | 4 |
| ENGL 4710 4 <br> or 4720 4 <br> ENGL 4 <br> elective 16 |  |

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

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 |  |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| MSCR 1000 | Media and Screen Studies at | 1 |


| Introduction to Media Studies | 4 |  |
| :--- | :--- | ---: |
| MSCR 1220 | Media, Culture, and Society |  |
| Introduction to Screen Theory | 4 |  |
| MSCR 2220 | Understanding Media and Film |  |

## Advanced Theory

MSCR 4623 Theories of Media and Culture 4

Media and Screen Electives
Complete four courses from the following:

| CINE 2160 | Narrative Filmmaking |
| :--- | :--- |
| CINE 2336 | American Film and Culture |
| CINE 3446 | Topics in Documentary Production |
| MSCR 1230 | Introduction to Film Production |
| MSCR 2302 | Advertising and Promotional Culture |
| MSCR 2325 | Global Media |
| MSCR 2895 | Film Analysis |
| MSCR 3210 | Special Topics in Media and Screen <br> Studies |
| MSCR 3422 | Media Audiences |
| MSCR 3420 | Digital Media Culture |
| MSCR 3426 | Popular Music as Media Form |
| MSCR 3435 | Media Industries |

MSCR 3437 Media and Identity

## Advanced Media and Screen Electives

| Complete two courses from the following: |  |
| :--- | :--- |
| CINE 3389 | Screenwriting |
| CINE 3392 | Gender and Film |
| CINE 3500 | Film Theory |
| CINE 3920 | Topics in Film Studies |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen <br> MSCR 4992 |
| MSCR 4993 | Directed Study |

$\begin{array}{ll}\text { History Requirements } \\ \text { Code } & \text { Title Hours }\end{array}$

| 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: 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 1218 | Pirates, Planters, and Patriots: Making <br> the Americas, 1492-1804 |
| :--- | :--- |
| HIST 1252 | Japanese Literature and Culture |
| HIST 1270 | Ancient Greece |
| HIST 1271 | Ancient Rome |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 2330 | Colonial and Revolutionary America |

Intermediate/Advanced History Cluster
Complete three courses in the following range:

| HIST 2303-HIST 5999 |
| :--- |
| Advanced History |
| Complete one course in the following range: |
| HIST 3000-HIST 5999 <br> HIST $4701 \quad$ Capstone Seminar <br> Capstone |

## Integrative Requirement

| Code | Title |
| :--- | :--- |
| HIST 1279 | History of the American Film Industry |

## 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

130 total semester hours required

## Plan of Study

Year 1
$\left.\begin{array}{lrcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { MSCR 1000 } & 1 \text { MSCR 2220 }\end{array} \quad \begin{array}{c}4 \text { Elective }\end{array}\right)$

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| MSCR <br> elective | 4 Co-op | Co-op | Elective | 4 |
| MSCR <br> elective | 4 |  | Elective | 4 |
| HIST 2301 | 4 |  |  |  |
| HIST 2302 | 1 |  |  |  |
| Elective | 4 |  |  | 8 |
| EEAM 2000 | 1 | 0 | 0 |  |
|  | 18 |  |  |  |

Year 3
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \begin{array}{l}\text { MSCR } \\ \text { elective }\end{array} & 4 \text { Co-op }\end{array} \quad \begin{array}{l}\text { Vacation }\end{array}\right]$

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Advanced <br> MSCR <br> elective | Vacation | 0 |  |  |
| Intermediate/ <br> advanced <br> history <br> elective 2 | elective | Intermediate/ <br> advanced <br> history <br> elective 3 | 4 | Vacation |

Year 5

| Fall | Hours |
| :--- | ---: |
| MSCR 4623 | 4 |
| HIST | 4 |
| capstone |  |
| Elective | 4 |


| Elective | 4 |
| :--- | ---: |
| 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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


| MSCR 1230 | Introduction to Film Production |
| :--- | :--- |
| MSCR 1310 | Introduction to Digital Media Culture |
| MSCR 2302 | Advertising and Promotional Culture |
| MSCR 2325 | Global Media |
| MSCR 2895 | Film Analysis |
| MSCR 3210 | Special Topics in Media and Screen <br>  <br> Studies |
| MSCR 3420 | Digital Media Culture |
| MSCR 3422 | Media Audiences |
| MSCR 3426 | Popular Music as Media Form |
| MSCR 3435 | Media Industries |
| MSCR 3437 | Media and Identity |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |
| ARTH 2212 | Survey of the Still and Moving Image |


| Advanced Media and Screen Electives |
| :--- |
| Complete two of the following: |


| CINE 3500 | Film Theory |
| :--- | :--- |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen <br>  <br> MSCR 4992 |
| Studies |  |
| MSCR 4993 | Indected Study |

## Journalism Requirements

Code Title Hours

Journalism Foundations

| JRNL 1101 | Journalism 1: Fundamentals of <br> and JRNL 1102 | Reporting <br> and Journalist's Toolbox (A grade of C <br> or higher is required) |
| :--- | :--- | :--- |
|  | Understanding Today's News |  |
| JRNL 1150 | Journalism 2: Intermediate Reporting <br> JRNL 2201 | 4 |
|  | (A grade of C or higher is required) |  |

Journalism and Advanced Writing

| JRNL 2301 | Visual Storytelling in Journalism (A <br> grade of C or higher is required) | 4 |
| :--- | :--- | :--- |

Television News

| JRNL 5314 | Video News Reporting and Producing | 4 |
| :--- | :--- | :--- |
| Ethics and Issues |  | 4 |
| JRNL 4650 | Ethics and Issues in Journalism | 4 |

Journalism Elective
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
Integrative Course
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

128 total semester hours required

## Plan of Study

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

Year 1
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { MSCR 1000 } & \begin{array}{l}\text { JRNL 1101 } \\ \text { and }\end{array} & \begin{array}{c}5 \text { Foreign } \\ \text { language }\end{array} & 4 \text { Vacation }\end{array}\right]$

| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| JRNL 2201 | 4 Co-op | Co-op | Elective | 4 |
| EEAM 2000 | 1 |  | Elective | 4 |
| MSCR <br> elective | 4 |  |  |  |
| MSCR <br> elective | 4 |  |  |  |
| Foreign <br> language <br> core course | 4 |  |  | 8 |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| JRNL 2301 | 4 Co-op | Co-op | Vacation |  |
| JRNL 5307 | 4 |  |  |  |
| MSCR <br> elective | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
|  | 16 | 0 | 0 | 0 |


| Year 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| JRNL 5314 | 4 | Co-op |  | Co-op |  | Vacation |  |
| JRNL elective | 4 |  |  |  |  |  |  |
| MSCR <br> advanced elective | 4 |  |  |  |  |  |  |
| MSCR <br> elective | 4 |  |  |  |  |  |  |
|  | 16 |  | 0 |  | 0 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| JRNL 4650 | 4 MSCR 4623 | 4 |
| JRNL 5309 | 4 Elective | 4 |


| MSCR <br> advanced <br> elective | 4 Elective | 4 |
| :--- | :---: | ---: |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 131

## Sample Four Years, No Co-ops

Year 1

| Fall | Hours Spring | Hours |
| :---: | :---: | :---: |
| MSCR 1000 or | 1 JRNL 1101 | 5 |
| JRNL 1000 | and JRNL 1102 |  |
| JRNL 1150 | 4 MSCR 2220 | 4 |
| MSCR 1220 | 4 Elective | 4 |
| ENGW 1111 | 4 Foreign language core course | 4 |
| MATH 1215 | 4 |  |
|  | 17 | 17 |

## Year 2

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| JRNL 2201 | 4 JRNL 2301 | 4 |
| MSCR elective | 4 JRNL 5307 | 4 |
| MSCR elective | 4 MSCR elective | 4 |
| Foreign language <br> core course | 4 Foreign language <br> core course | 4 |
|  | 16 | 16 |

## Year 3

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| JRNL 5314 | 4 JRNL 4650 | 4 |
| MSCR elective | 4 JRNL 5309 | 4 |
| Elective | 4 MSCR advanced |  |
|  | elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| JRNL elective | 4 MSCR 4623 | 4 |
| MSCR advanced | 4 Elective | 4 |
| elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 16 | 16 |
|  |  |  |

Total Hours: 130

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and 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 Introduction to Media Studies

| MSCR 1220 | Media, Culture, and Society | 4 |
| :--- | :--- | :--- |
| Introduction to Screen Theory |  |  |
| MSCR 2220 | Understanding Media and Film | 4 |

Advanced Theory
MSCR 4623 Theories of Media and Culture 4

Media and Screen Electives
Complete four of the following:

| CINE 2160 | Narrative Filmmaking |
| :--- | :--- |
| CINE 2336 | American Film and Culture |
| CINE 3446 | Topics in Documentary Production |
| MSCR 1230 | Introduction to Film Production |
| MSCR 2302 | Advertising and Promotional Culture |
| MSCR 2325 | Global Media |
| MSCR 2895 | Film Analysis |
| MSCR 3210 | Special Topics in Media and Screen <br> Studies |
| MSCR 3420 | Digital Media Culture <br> MSCR 3422Media Audiences |
| MSCR 3426 | Popular Music as Media Form <br> MSCR 3435Media Industries <br> MSCR 3437Media and Identity <br> Advanced Media and Screen Electives <br> Complete two of the following: <br> CINE 3389 <br> SINE 3392Screenwriting <br> GINE 3500Film Theory |


| CINE 3920 | Topics in Film Studies |
| :--- | :--- |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen |
| Studies |  |

## Media Arts Courses

| Code | Title | Hours |
| :--- | :---: | ---: |
| Art + Design at Northeastern |  |  |
| ARTF 1000 | Art and Design at Northeastern | 1 |

Art + Design Fundamentals

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| :--- | :--- | :--- |
| ARTF 2220 | 4D Fundamentals: Sequence and <br> Drawing (with optional ARTF 2221) | 4 |
|  | Drent |  |

## Drawing Fundamentals

| ARTF 1120 <br> or ARTF 1121 | Observational Drawing <br> Conceptual Drawing | 4 |
| :--- | :--- | ---: |
| Art + Design History |  | 4 |
| ARTH 2210 | Modern Art and Design History | 4 |
| ARTH 2212 | Survey of the Still and Moving Image | 4 |
| Degree Project |  | 4 |
| ARTD 4530 | Media Arts Degree Project 1 | 4 |

Media Arts Basic Electives
Complete two of the following sets: 8

| ARTD 2360 | Photo Basics (with optional <br> ARTD 2361) |  |
| :--- | :--- | :--- |
| ARTD 2370 | Animation Basics (with optional <br> ARTD 2371) |  |
| ARTD 2380 |  | Video Basics (with optional ARTD 2381) |


| ARTF 1124 | 3D Fundamentals: Structure and <br> Drawing (with optional ARTF 1125) |
| :--- | :--- |
| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224) |
| ARTD 3460 | Photography 1 |
| 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 2 |
| ARTD 3485 | Experimental Video |
| ARTD 4575 | Animation 3 |
| ARTD 4577 | Digital Sculpture and Model Making |
| ARTD 5582 | Collaborative Video and Community |
| Engagement |  |
| ARTD 4660 | Studio Photography |
| ARTD 4661 | Alternative Photographic Processes |
| ARTD 4670 | Media Arts Degree Project 2 |
| ARTD 2100 | Narrative Basics |


| ARTG 2300 | Business Literacy for Design and Media |
| :--- | :--- |
| 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 1110 | Global Art and Design History: Ancient <br> to Medieval |
| ARTH 1111 | Global Art and Design History: <br> Renaissance to Modern |
| ARTH 2211 | Contemporary Art and Design History |
| ARTH 2213 | Nineteenth-Century Art |
| ARTH 5100 | Contemporary Art Theory and Criticism |
| ARTH 5200 | Issues in Contemporary Art |
| ARTH 5400 | Contemporary Visual Culture |
| ARTG 2250 | Typography 1 (with optional <br> ARTG 2251) |
| ARTS 2330 2340 | Sculpture Basics |
| ARTS 2341 | Fainting Basics |
| ARTS 3449 | Drawing in Mixed Media |

## Integrative Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| CINE 3500 | 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 FIVE YEARS, TWO CO-OPS
Year 1
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \begin{array}{l}\text { ARTF 1000 } \\ \text { or MSCR }\end{array} & 1 \text { MSCR 2220 } \\ \text { 1000 }\end{array} \quad \begin{array}{c}4 \text { Elective }\end{array}\right)$

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MSCR | 4 Co-op | Co-op | Elective | 4 |
| elective |  |  |  |  |
| MSCR | 4 |  |  |  |


| Media arts <br> basics <br> elective | 4 |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Elective | 4 |  |  |  |
| EEAM 2000 | 1 | 0 |  | 4 |
|  | 17 |  |  |  |
| Year 3 |  |  |  |  |

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

NUpath requirements Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), 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), Analyzing and Using Data (AD), and Difference and Diversity (DD), may be met through electives in the major.

## Media and Screen Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| MSCR 1000 | Media and Screen Studies at Northeastern | 1 |
| Introduction to Media Studies |  |  |
| MSCR 1220 | Media, Culture, and Society | 4 |
| Introduction to Screen Theory |  |  |
| MSCR 2220 | Understanding Media and Film | 4 |
| Advanced Theory |  |  |
| MSCR 4623 | Theories of Media and Culture | 4 |
| Media and Screen Electives |  |  |
| Complete four | following: | 16 |
| MSCR 1230 | Introduction to Film Production |  |
| MSCR 1310 | Introduction to Digital Media Culture |  |
| MSCR 2302 | Advertising and Promotional Culture |  |
| MSCR 2325 | Global Media |  |
| MSCR 2895 | Film Analysis |  |
| MSCR 3210 | Special Topics in Media and Screen Studies |  |
| MSCR 3420 | Digital Media Culture |  |
| MSCR 3422 | Media Audiences |  |
| MSCR 3426 | Popular Music as Media Form |  |
| MSCR 3435 | Media Industries |  |
| MSCR 3437 | Media and Identity |  |
| CINE 2160 | Narrative Filmmaking |  |
| CINE 2336 | American Film and Culture |  |
| CINE 3389 | Screenwriting |  |
| CINE 3392 | Gender and Film |  |
| CINE 3446 | Topics in Documentary Production |  |
| ARTD 3480 | Video: Sound and Image |  |
| ARTD 3485 | Experimental Video |  |
| ARTH 2212 | Survey of the Still and Moving Image |  |


| Advanced Media and Screen Electives |
| :--- |
| Complete two of the following:  <br> MSCR 4208 TV History <br> MSCR 4602 Media and Democracy <br> MSCR 4622 Special Topics in Media and Screen <br> Studies <br> MSCR 4992 Directed Study <br> MSCR 4993 Independent Study <br> CINE 3500 Film Theory <br> CINE 3920 Topics in Film Studies |

Philosophy Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Philosophy Required Courses |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL 2325 | Ancient Philosophy and Political | 4 |
| or POLS 2325 | Thought | Ancient Philosophy and Political Thought |

Restricted Philosophy Electives
Complete three of the following with at least one course at 12
the 4000 or 5000 level:

| PHIL 3343 | Existentialism |
| :--- | :--- |
| PHIL 3435 | Moral Philosophy |
| PHIL 3460 | Philosophy and Literature |
| PHIL 4390 | Cults and Sects |
| PHIL 4510 | Philosophy of Science |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4515 | Advanced Logic |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar: Theories and Methods in |
|  | Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |

Philosophy Electives
Complete three additional electives from the philosophy 12
department.

## Integrative Requirement

Code Title Hours

CINE 3500 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.

## Program Requirement

128 total semester hours required

## Plan of Study

Year 1


Year 2

| Fall | Hours Spring | Hours Summer 1 |
| :--- | :---: | :---: | :---: | :---: | | Hours Summer 2 |
| :---: | Hours

## Year 3


$\left.\begin{array}{lcccc}\text { Year 4 } & & & & \\ \text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \text { MSCR 4623 } & 4 & \text { Vacation } & \text { Vacation }\end{array}\right]$

| Year 5 |  |
| :--- | ---: |
| Fall | Hours |
| Elective | 4 |
| Elective | 4 |
| Elective | 4 |
| Elective | 4 |
|  | 16 |

[^2]
## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Analyzing and Using Data (AD) 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) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

## Media Studies Requirements

| Code <br> Introduction to College | Title | Hours |
| :--- | :--- | ---: |
| MSCR 1000 | Media and Screen Studies at <br> Northeastern | 1 |
| Required Courses <br> MSCR 1220 | Media, Culture, and Society | 4 |
| MSCR 2220 | Understanding Media and Film | 4 |
| MSCR 4623 | Theories of Media and Culture | 4 |
| Elective Courses |  | 46 |
| Complete four of the following: |  |  |
| CINE 2160 | Narrative Filmmaking |  |
| CINE 3389 | Screenwriting |  |
| CINE 3392 | Gender and Film |  |
| CINE 3446 | Topics in Documentary Production |  |
| CINE 3920 | Topics in Film Studies |  |
| MSCR 1230 | Introduction to Film Production |  |


| MSCR 1310 | Introduction to Digital Media Culture |
| :--- | :--- |
| MSCR 2302 | Advertising and Promotional Culture |
| MSCR 2325 | Global Media |
| MSCR 2895 | Film Analysis |
| MSCR 3210 | Special Topics in Media and Screen <br> Studies |
| MSCR 3420 | Digital Media Culture |
| MSCR 3422 | Media Audiences |
| MSCR 3426 | Popular Music as Media Form |
| MSCR 3435 | Media Industries |
| MSCR 3437 | Media and Identity |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |
| ARTH 2212 | Survey of the Still and Moving Image |
| Advanced Elective Courses |  |

Advanced Elective Courses
Complete two of the following: 8

| CINE 3500 | Film Theory |
| :--- | :--- |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen <br> Studies |
| MSCR 4992 | Directed Study |
| MSCR 4993 | Independent Study |


| Political Science Requirements |  |
| :--- | :--- | :--- |
| Code | Title Hours |

## Required Courses

| POLS 1150 | American Government | 4 |
| :--- | :--- | :--- |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |
| POLS 2400 | Quantitative Techniques | 4 |

Political Thought
Complete one of the following:

| POLS 2328 | Modern Political Thought |
| :--- | :--- |
| POLS 2330 | American Political Thought |
| POLS 2332 | Contemporary Political Thought |

## Politics in Media/Art

| Complete two courses. Consult academic advisor for | 8 |
| :--- | :--- |
| additional courses. |  |


| POLS 2368 | Music and Politics in America and <br> Abroad |
| :--- | :--- |
| Elective Courses |  |
| Complete two POLS courses or complete a concentration. | 8 |

## 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. 145).

- Identity, Culture, and Politics (p. )
- Law and Legal Studies (p. )


## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| MSCR 4602 | Media and Democracy | 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

## Program Requirement

128 total semester hours required

## Concentrations

CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Course |  |  |
| POLS 3418 | Nationalism | 4 |
| Electives |  | 12 |


| POLS 2360 | Politics of Poverty |  |
| :--- | :--- | :--- |
| POLS 2368 | Music and Politics in America and <br> Abroad |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |  |
| POLS 3324 | Law and Society | Hours |
| CONCENTRATION IN LAW AND LEGAL STUDIES |  |  |
| Code | Title | 16 |
| 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 4500 | U.S. Constitutional Law |  |
| POLS 4505 | U.S. Civil Liberties |  |

## Plan of Study

Year 1
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { MSCR 1000 } & 1 \text { MSCR 2220 }\end{array} \begin{array}{c}4 \text { MSCR } \\ \text { elective }\end{array}\right)$

| Year 2 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| $\begin{aligned} & \text { POLS } 1160 \\ & \text { and } \\ & \text { POLS } 1161 \end{aligned}$ | 4 Co-op |  | Co-op |  | Elective | 4 |
| POLS 2400 | 4 |  |  |  | Elective | 4 |
| MSCR <br> elective | 4 |  |  |  |  |  |
| Advanced MSCR elective | 4 |  |  |  |  |  |
| EEAM 2000 | 1 |  |  |  |  |  |
|  | 17 | 0 |  | 0 |  | 8 |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Political thought elective | 4 | MSCR <br> elective | 4 | Vacation | 0 | Co-op |  |
| Advanced MSCR elective | 4 | Politics in media/art elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

## Year 4

| Fall | HoursSpring <br> Politics in <br> media/art <br> elective | Hours Summer | Hours Summer 2 | Hacation |
| :--- | :--- | :---: | :---: | :---: |

## Year 5

| Fall | Hours |
| :--- | ---: |
| MSCR 4623 | 4 |
| POLS 3320 | 4 |
| POLS | 4 |
| elective | 4 |
| Elective | 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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  <br> Code Title | Hours |  |
| :--- | ---: | ---: |
| Introduction to College  <br> MSCR 1000 Media and Screen Studies at | 1 |  |
|  | Northeastern |  |

Introduction to Media Studies
MSCR 1220 Media, Culture, and Society 4

Introduction to Screen Theory

| MSCR 2220 | Understanding Media and Film | 4 |
| :--- | :--- | ---: |
| Advanced Theory |  | 4 |
| MSCR 4623 | Theories of Media and Culture |  |
| Media and Screen Electives |  |  |
| Complete four of the following: | 16 |  |


| MSCR 1230 | Introduction to Film Production |
| :--- | :--- |
| MSCR 1310 | Introduction to Digital Media Culture |
| MSCR 2302 | Advertising and Promotional Culture |
| MSCR 2325 | Global Media |
| MSCR 2895 | Film Analysis |
| MSCR 3210 | Special Topics in Media and Screen |
| Studies |  |
| MSCR 3422 | Media Audiences |
| MSCR 3426 3435 | Popular Music as Media Form |
| MSCR 3437 | Media Industries |
| CINE 2160 | Marrative Filmmaking |
| CINE 3389 | Screenwriting |
| CINE 3392 | Gender and Film |
| CINE 3446 | Topics in Documentary Production |
| CINE 3920 | Topics in Film Studies |
| ARTD 3480 | Video: Sound and Image |


| ARTD 3485 | Experimental Video |
| :---: | :--- |
| ARTH 2212 | Survey of the Still and Moving Image |
| Advanced Media and Screen Electives |  |
| Complete two of the following: |  |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen <br> MSCR 4992 |
| MSCR 4993 | Directed Study |
| CINE 3389 | Independent Study |
| CINE 3392 | Screenwriting |
| CINE 3500 | Gender and Film |

## Sociology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Sociology |  |  |
| ANTH 1101 | Peoples and Cultures | 4 |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2320 | Statistical Analysis in Sociology | 4 |
| SOCL 2321 | Research Methods in Sociology | 4 |
| SOCL 4600 | Senior Seminar | 4 |
| Foundational Competency-Courses Numbered SOCL 1200 to |  |  |
| SOCL 2900 |  | 8 |
| Complete two of the following: |  |  |


| SOCL 1228 | Social Problems |
| :--- | :--- |
| SOCL 1245 | Sociology of Poverty |
| SOCL 1260 | Gender in a Changing Society |
| SOCL 1275 | Social Stratification |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 2205 | Law and Social Justice |
| SOCL 2268 | Social Movements |
| SOCL 2270 | Race and Ethnic Relations |
| SOCL 2450 | Class, Power, and Social Change |

Foundational Competency-Courses Numbered 3000 to 4999
Complete one of the following:

| Complete one of the following: |  |
| :--- | :--- |
| ANTH 3120 | Consumer Cultures |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| ANTH 4580 | Special Topics in Anthropology |
| SOCL 3465 | Globalization and the Evolution of <br>  <br> 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 |  | 4 |
| MSCR 3437 | Media and Identity | 4 |
| SOCL 1246 | Environment and Society | 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.

## Program Requirement

128 total semester hours required

## Plan of Study

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MSCR 1000 | 1 | MSCR 2220 | $4$ | Foreign language core course | 4 | Vacation |  |
| MSCR 1220 | 4 | MSCR elective | 4 | Elective | 4 |  |  |
| SOCL 1101 | 4 | Foreign language core course | 4 |  |  |  |  |
| ANTH 1101 | 4 | SOCL 2300 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MSCR elective | 4 Co-op | Co-op |  | Elective | 4 |
| Advanced <br> 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 | Co-op | Vacation |  |
| SOCL <br> foundational <br> competency <br> elective 1 | 4 |  |  |  |
| MSCR <br> elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | ---: |
| SOCL | 4c MSCR 3437 | 4 Vacation | Vacation | 0 |
| foundational |  |  |  |  |
| competency |  |  |  |  |
| elective 2 |  |  |  |  |


| Advanced <br> MSCR <br> elective | 4 SOCL <br> foundational <br> competency <br> elective | 4 |  |  |
| :--- | ---: | ---: | ---: | ---: |
| SOCL 1246 | 4 Elective | 4 | 0 | 0 |

Year 5

| Fall | Hours |
| :--- | ---: |
| SOCL 4600 | 4 |
| Elective | 4 |
| Elective | 4 |
| Elective | 4 |
|  | 16 |

Total Hours: 126-130

## 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, writing, and design with related studies in screenwriting, media technology, and media production. Students develop a personalized technique for the practices of making theatre, film (documentary and fiction), 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), 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 |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| MSCR 1000 | Media and Screen Studies at | 1 |
|  | Northeastern |  |

Introduction to Media Studies

| MSCR $1220 \quad$ Media, Culture, and Society | 4 |
| :--- | ---: |
| Introduction to Screen Studies |  |
| MSCR 2220 | Understanding Media and Film |
| Advanced Theory | 4 |
| MSCR 4623 $\quad$ Theories of Media and Culture | 4 |
| Media and Screen Studies Electives |  |
| Complete four of the following: | 16 |


| CINE 2160 | Narrative Filmmaking |
| :--- | :--- |
| CINE 3389 | Screenwriting |

CINE 3392 Gender and Film

| CINE 3446 | Topics in Documentary Production |
| :--- | :--- |
| CINE 3920 | Topics in Film Studies |
| MSCR 1230 | Introduction to Film Production |
| MSCR 1310 | Introduction to Digital Media Culture |
| MSCR 2302 | Advertising and Promotional Culture |


| MSCR 2325 | Global Media |
| :--- | :--- |
| MSCR 2895 | Film Analysis |


| MSCR 3210 | Special Topics in Media and Screen <br> Studies |
| :--- | :--- |


| MSCR 3420 | Digital Media Culture |
| :--- | :--- |
| MSCR 3422 | Media Audiences |
| MSCR 3426 | Popular Music as Media Form |
| MSCR 3435 | Media Industries |
| MSCR 3437 | Media and Identity |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |
| ARTH 2212 | Survey of the Still and Moving Image |

Advanced Media and Screen Electives
Complete two of the following:

| CINE 3500 | Film Theory |
| :--- | :--- |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen <br> Studies |
| MSCR 4992 | Directed Study |
| MSCR 4993 | Independent Study |

## Theatre Requirements

Code Title Hours

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 2300 | Classics of Global Theatre |
| :--- | :--- |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the |
|  | Dream |
| 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 | America Onstage: Dramatizing the Dream |  |
| 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 3200 | Queer Theatre and Performance (Queer Theatre - to be added) |  |
| THTR 3300 | Devised Theatre Project: Collaborative Performance |  |
| THTR 3400 | Designing Combat for the Stage (Designing Combat for the Stage - to be added) |  |
| THTR 3450 | Acting 3-Playing Shakespeare |  |
| THTR 3550 | Directing for the Stage |  |
| THTR 3570 | Musical Theatre Performance |  |


| Integrative Requirement |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| Media and Screen Studies Capstone |  |  |
| MSCR 4623 | Theories of Media and Culture | 4 |
| Theatre Capstone |  |  |
| THTR 4702 | Capstone Rehearsal and Performance | 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

130 total semester hours required

## Plan of Study

| Year 1 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| MSCR 1000 | 1 MSCR 2220 | 4 Elective | 4 Vacation |  |
| MSCR 1220 | MSCR <br> elective | 4 Elective | 4 |  |
| THTR 1101 | 4 THTR 1131 | 4 |  |  |
| THTR 1120 | 4 THTR 1270 | 4 |  |  |
| ENGW 1111 | 4 |  | 8 | 0 |
|  | 17 | 16 | 8 |  |



Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MSCR | 4 Co-op | Co-op | Vacation | 0 |

elective

| Advanced <br> MSCR <br> elective | 4 |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Intermediate <br> or advanced <br> technique <br> elective | 4 |  |  |  |
| Foreign <br> language <br> core course | 4 | 0 | 0 | 0 |
| THTR 2000 | 1 | 0 | 0 |  |
|  | 17 |  |  |  |

Year 4
Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours
$\begin{array}{llll}\text { MSCR } & 4 \text { MSCR } 4623 & 4 \text { Vacation } & 0 \text { Vacation } \\ \text { elective } & & \end{array}$

| Intermediate <br> or advanced <br> technique <br> elective | 4 Elective | 4 |  |  |
| :--- | :---: | :---: | :--- | :--- |
| Foreign <br> language <br> core course | 4 Elective | 4 |  |  |
|  | 4 Elective | 4 | 0 | 0 |

Year 5

| Fall | Hours |
| :--- | ---: |
| THTR 4702 | 4 |
| Elective | 4 |
| Elective | 4 |
| Elective | 4 |
|  | 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, writing, and design with related studies in screenwriting, media technology, and media production. Students develop a personalized technique for the practices of making theatre, film (documentary and fiction), 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), 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 |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| MSCR 1000 | Media and Screen Studies at Northeastern | 1 |
| Introduction to Media Studies |  |  |
| MSCR 1220 | Media, Culture, and Society | 4 |
| Introduction to Screen Studies |  |  |
| MSCR 2220 | Understanding Media and Film | 4 |
| Advanced Theory |  |  |
| MSCR 4623 | Theories of Media and Culture | 4 |
| Media and Screen Studies Electives |  |  |
| Complete four of | following: | 16 |
| CINE 2160 | Narrative Filmmaking |  |
| CINE 3389 | Screenwriting |  |
| CINE 3392 | Gender and Film |  |
| CINE 3446 | Topics in Documentary Production |  |
| CINE 3920 | Topics in Film Studies |  |
| MSCR 1230 | Introduction to Film Production |  |
| MSCR 1310 | Introduction to Digital Media Culture |  |
| MSCR 2302 | Advertising and Promotional Culture |  |
| MSCR 2325 | Global Media |  |
| MSCR 2895 | Film Analysis |  |
| MSCR 3210 | Special Topics in Media and Screen Studies |  |
| MSCR 3420 | Digital Media Culture |  |
| MSCR 3422 | Media Audiences |  |


| MSCR 3426 | Popular Music as Media Form |
| :--- | :--- |
| MSCR 3435 | Media Industries |
| MSCR 3437 | Media and Identity |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |
| ARTH 2212 | Survey of the Still and Moving Image |
| Advanced Media and Screen Electives |  |
| Complete two of the following: |  |
| CINE 3500 | Film Theory |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen |
| MSCR 4992 | Studies |
| MSCR 4993 | Independent Study |

## Theatre Requirements

Code Title Hours

## Foundational Stages

THTR 1101 Introduction to Theatre 4
THTR 1120 Acting 1 4
THTR 1131 Technical Theatre $1 \quad 4$
THTR 1270 Introduction to Theatrical Design 4
THTR $2325 \quad$ From Script to Stage 4

Theatre Texts and Context
Complete one of the following: 4

| THTR 2300 | Classics of Global Theatre |
| :--- | :--- |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the <br>  <br> DHeam |


| Making Theatre |  |
| :--- | :--- |
| THTR 1100 | Production Experience 1 |

THTR $2000 \quad$ Production Experience 2 1

## Intermedate or Advanced Technique

Complete two of the following:

| THTR 2300 | Classics of Global Theatre |
| :--- | :--- |
| THTR 2310 | History of Musical Theatre |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the <br> Dream |
| 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 3300 | Devised Theatre Project: Collaborative <br> Performance |
| :--- | :--- |
| THTR 3400 | Designing Combat for the Stage <br> (Designing Combat for the Stage - to be <br> added) |
| THTR 3450 | Acting 3-Playing Shakespeare |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |

## Integrative Requirement

Code Title Hours

| Media and Screen Studies Capstone |  |  |
| :--- | :--- | ---: |
| MSCR 4623 | Theories of Media and Culture | 4 |
| Theatre Capstone |  | 4 |
| THTR 4702 | Capstone Rehearsal and Performance | 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

130 total semester hours required

## Plan of Study

$\left.\begin{array}{lcccc}\text { Year 1 } & & & & \\ \text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { MSCR 1000 } & 1 \text { MSCR 2220 }\end{array} \quad \begin{array}{c}\text { 4 Elective }\end{array}\right)$

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| MSCR <br> elective | 4 Co-op | Co-op | Elective | 4 |
| Advanced MSCR elective | 4 |  | Elective | 4 |
| THTR 2325 | 4 |  |  |  |
| THTR texts and context elective | 4 |  |  |  |
| THTR 1100 | 1 |  |  |  |
| EEAM 2000 | 1 |  |  |  |
|  | 18 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| MSCR | 4 Co-op | Co-op | Vacation |  |
| elective |  |  |  |  |
| Advanced | 4 |  |  |  |
| MSCR <br> elective |  |  |  |  |



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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| MUSC 1000 | Music at Northeastern | 1 |
| Music Core |  |  |
| MUSC 1001 | Music in Everyday Life | 4 |

Music Theory Placement
All students must take a theory placement exam. Students
who do not place into MUSC 1201 must first take the
following:
MUSC $1119 \quad$ Fundamentals of Western Music Theory 4

| Music Theory Requirement |  |  |
| :--- | :--- | :--- |
| MUSC 1201 | Music Theory 1 | 4 |

Introductory Music Industry
MUSI 1230 Introduction to Music Industry 4
Music in Context
Choose one course from traditional, ethnomusicology, or
contemporary categories.
Traditional

| MUSC 2311 | Historical Traditions: America |
| :---: | :--- |
| MUSC 2312 | Historical Traditions: Classical |
| MUSC 3470 | War and Music |
| MUSC 3550 | Historical Traditions: Special Topics |
| Ethnomusicology |  |
| MUSC 2101 | Black Popular Music |
| MUSC 2130 | Music of Asia |
| MUSC 2313 | Historical Traditions: World |
| MUSC 3550 | Historical Traditions: Special Topics |
| Contemporary |  |
| MUSC 2101 | Black Popular Music |
| MUSC 2315 | History of Electronic Music |
| MUSC 2317 | Punk Rock |
| MUSC 3560 | Topics in Music since 1900 |
| MUSI 3401 | Hip Hop in the Music Industry |

Music Industry Electives
Complete three of the following:

| MUSI 1204 | Analyzing Popular Genres |
| :--- | :--- |
| MUSI 2101 | Demo Production for Songwriters |
| MUSC 2210 | Introduction to Songwriting |
| MUSI 2231 | Music Licensing for Media |
| MUSI 2232 | Music Recording 1 |


| MUSI 2233 | Music in the Online and Mobile <br> Environment |
| :--- | :--- |
| 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 3335 | Copyright Law for Musicians |
| MUSI 3338 | Music Industry Marketing and <br> Promotion |
| MUSI 3340 | Concert Promotion and Venue <br> Management |
| MUSI 3401 | Hip Hop in the Music Industry |
| MUSI 4530 | Music Entrepreneurship |
| MUSI 4601 | Seminar in Music Industry |
| MUST 1220 | Introduction to Music Technology |
| MUST 3421 | Digital Audio Processing |
| Business Course | Financial Accounting and Reporting |
| ACCT 1209 | P |

## Communication Studies Requirements

Code Title Hours

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
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 3330 Argumentation Theory
COMM $3400 \quad$ Rhetoric of Science
COMM 3414 Great Speakers and Speeches 2, 1930Present
COMM 3415 Communication Criticism
COMM $3445 \quad$ Public Relations Principles
COMM $3501 \quad$ Free Speech: Law and Practice
COMM 3530 Communication and Sexualities

| COMM 3532 | Theories of Conflict and Negotiation |
| :--- | :--- |
| COMM 3610 | Communication, Politics, and Social <br> Change |
| COMM 4535 | Nonverbal Social Interaction |
| COMM 4605 | Youth and Communication Technology |
| COMM 4631 | Crisis Communication and Image <br> Management |
| Communication Studies Electives | 12 |
| Complete three COMM courses. |  |

## Integrative Requirement

Code Title

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 |

## 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.

## 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 H | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MUSC 1000 <br> or COMM 1000 | 1 | ENGW 1111 | 4 | 4 Elective | 4 | Vacation |  |
| MUSC 1001 | 4 | MUSI 1230 | 4 | Elective | 4 |  |  |
| MUSC 1201 |  | Communication studies foundational course | n 4 | 4 |  |  |  |
| COMM 1101 |  | Music in context elective | 4 | 4 |  |  |  |
| COMM 1112 <br> or 2301 | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |

Year 2

| Fall | Hours | Spring Hour | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Communicatio studies cluster course |  | Communicatio studies elective | on $4$ | Vacation |  | Co-op |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
| Music industry elective | 4 | Music industry elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  |  | EEAM 2000 | 1 |  |  |  |  |
|  | 16 |  | 17 |  | 0 |  | 0 |
| Year 3 |  |  |  |  |  |  |  |
| Fall | Hours | Spring Hour | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | $\begin{aligned} & \text { ENGW } 3314 \\ & \text { or } 3315 \end{aligned}$ | 4 | Communicat studies elective | on 4 | Co-op |  |
|  |  | Communicatis studies elective | 4 | Communicat studies writingintensive | ir 4 |  |  |
|  |  | ACCT 1209 | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 4
Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours
Communication 4 Vacation Co-op studies writingintensive

| Music <br> industry <br> elective | 4 |  |  |
| :--- | :---: | :---: | :---: |
| Integrative <br> course | 4 | 4 | 0 |
| Elective | 4 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | Capstone | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
|  | 0 | 16 |

Total Hours: 130

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



| COMM 1101 | 4Music in <br> context <br> elective | 4 |  |
| :--- | :--- | :--- | :--- |
| COMM 1112 <br> or 2301 | 4 |  | 8 |

Year 2

|  | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Communication studies cluster course | $4 \text { Co-op }$ |  | Co-op |  | Vacation |  |
| Music industry elective | 4 |  |  |  |  |  |
| Communication studies elective | - 4 |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |
| EEAM 2000 | 1 |  |  |  |  |  |
|  | 17 | 0 |  | 0 |  | 0 |



Year 4

| Fall H | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Communicaton <br> studies <br> writing- <br> intensive | $4 \text { Co-op }$ | Co-op | Vacation |  |
| Music industry elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |


| Year 5 |  |  |
| :--- | ---: | ---: |
| Fall | Hours Spring | Hours |
| Music <br> industry <br> elective | 4 Capstone | 4 |
| Integrative <br> requirement | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 130

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses in Political Science |  |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 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 |  |
| Methodology |  |  |
| $\begin{aligned} & \text { POLS } 2399 \\ & \text { or COMM } 2301 \end{aligned}$ | Research Methods in Political Science Communication Research Methods | 4 |
| Political Science Upper-Division Electives |  |  |
| Complete two courses in the following range: |  | 8 |
| POLS 3300 to POLS 5999 |  |  |
| Political Science Electives |  |  |
| Complete two cour | s 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. 155).

- American Political Institutions (p. 155)
- Campaigns and Elections (p. 155)
- Identity, Culture, and Politics (p. 155)
- Law and Legal Studies (p. 156)
- Public Policy (p. 156)


## Communication Studies Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Political Communication |  |  |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking | 4 |
| COMM 1210 | Persuasion and Rhetoric | 4 |

Communication Studies Electives
Complete six of the following:

| COMM 1231 | Principles of Organizational Communication |
| :---: | :---: |
| COMM 1331 | Legal Argumentation, Advocacy, and Citizenship |
| COMM 1412 | Social Movement Communication |
| COMM 2301 | Communication Research Methods |
| COMM 2303 | Global and Intercultural Communication |
| COMM 2501 | Communication Law |
| COMM 2551 | Free Speech in Cyberspace |
| COMM 3201 | Health Communication |
| COMM 3304 | Communication and Inclusion |
| COMM 3409 | Advocacy Writing |
| COMM 3414 | Great Speakers and Speeches 2, 1930Present |
| COMM 3415 | Communication Criticism |
| COMM 3451 | Advertising Practices |
| COMM 3501 | Free Speech: Law and Practice |
| COMM 3532 | Theories of Conflict and Negotiation |
| COMM 3610 | Communication, Politics, and Social Change |
| COMM 4102 | Health Communication Campaigns |
| COMM 4602 | Contemporary Rhetorical Theory |
| COMM 4625 | Online Communities |
| COMM 4631 | Crisis Communication and Image Management |
| COMM 4992 | Directed Study |
| COMM 4994 | Internship in Communication |

## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative Courses |  |  |
| POLS 3320 | Politics and Mass Media | 4 |
| or COMM 3320 | Political Communication | 4 |
| POLS 2333 |  | 4 |
| Capstone Requirement |  |  |

Complete one of the following. This course also counts
toward the political science or communication studies elective requirement:

| COMM 4102 | Health Communication Campaigns |
| :--- | :--- |
| COMM 4530 | Communication and Quality of Life |
| COMM 4602 | Contemporary Rhetorical Theory |
| COMM 4625 | Online Communities |
| POLS 4701 | Political Science Senior Capstone |
| POLS 4703 | Senior Thesis |

## Political Science and Communication Studies CombinedMajor Credit Requirement

Complete 72 semester hours in the major.

## Program Requirement

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 3305 | The American Presidency |
| POLS 3307 | Public Policy and Administration |
| POLS 3310 | Public Opinion, Voting, and Elections |

## CONCENTRATION IN CAMPAIGNS AND ELECTIONS

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Required Courses |  |
| With advisor approval, a co-op or internship may be <br> substituted in place of POLS 4947: |  |
| POLS 3160 Campaign Strategy | 4 |
| POLS 4947 | 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 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |

CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS
Code Title Hours

Core Course
POLS $3418 \quad$ Nationalism 4
Electives
Complete three of the following:

| POLS 2368 | Music and Politics in America and Abroad |  |
| :---: | :---: | :---: |
| POLS 2370 | Religion and Politics |  |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |  |
| POLS 3324 | Law and Society |  |
| CONCENTRATION IN LAW AND LEGAL STUDIES |  |  |
| Code | Title | Hours |
| Complete four | 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 4500 | U.S. Constitutional Law |  |
| POLS 4505 | U.S. Civil Liberties |  |
| CONCENTRATION IN PUBLIC POLICY |  |  |
| Code | Title | Hours |
| Core Requirem |  |  |
| POLS 3307 | Public Policy and Administration | 4 |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| POLS 2334 | Bureaucracy and Government Organizations |  |
| 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 |  |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

Code Title Hours

Core Courses in Political Science

| POLS 1150 | American Government | 4 |
| :--- | :--- | :--- |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |
| POLS 2400 | Quantitative Techniques | 4 |

## Political Thought

Complete one of the following: 4

| POLS 2325 | Ancient Philosophy and Political <br> Thought |
| :---: | :--- | :--- |
| POLS 2328 | Modern Political Thought |

Political Science Upper-Division Electives
Complete two courses in the following range: 8
POLS 3300 to POLS 5999
Political Science Electives
Complete two courses in the following range:
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. 157).

- American Political Institutions (p. 157)
- Campaigns and Elections (p. 157)
- Identity, Culture, and Politics (p. 157)
- Law and Legal Studies (p. 157)
- Public Policy (p. 157)


## Communication Studies Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Political Communication |  |  |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking | 4 |
| COMM 1210 | Persuasion and Rhetoric | 4 |
| Communication Studies Electives |  |  |
| Complete six of the following: | 24 |  |
| COMM 1231 | Principles of Organizational <br> Communication |  |
| COMM 1331 | Legal Argumentation, Advocacy, and <br> Citizenship | Social Movement Communication |


| COMM 2301 | Communication Research Methods |
| :--- | :--- |
| COMM 2303 | Global and Intercultural Communication |
| COMM 2501 | Communication Law |
| COMM 2551 | Free Speech in Cyberspace |
| COMM 3201 | Health Communication |
| COMM 3304 | Communication and Inclusion |
| COMM 3409 | Advocacy Writing |
| COMM 3414 | Great Speakers and Speeches 2, 1930- Present |
| COMM 3415 | Communication Criticism |
| COMM 3451 | Advertising Practices |
| COMM 3501 | Free Speech: Law and Practice |
| COMM 3532 | Theories of Conflict and Negotiation |
| COMM 3610 | Communication, Politics, and Social <br> Change |
| COMM 4102 | Health Communication Campaigns |
| COMM 4602 | Contemporary Rhetorical Theory |
| COMM 4625 | Online Communities |
| COMM 4631 | Crisis Communication and Image |
| Management |  |
| COMM 4992 | Directed Study |

## Integrative Requirements

| Code <br> Integrative Courses | Title | Hours |
| :--- | :--- | ---: |
| POLS 3320 <br> or COMM 3320 | Politics and Mass Media <br> Political Communication | 4 |
| POLS 2333 |  | 4 |
| Capstone Requirement | 4 |  |
| Complete one of the following. This course also counts <br> toward the political science or communication studies <br> elective requirement: <br> COMM 4102 | Health Communication Campaigns |  |

## Political Science and Communication Studies CombinedMajor Credit Requirement

Complete 72 semester hours in the major.

## 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 3305 | The American Presidency |  |


| POLS 3307 | Public Policy and Administration |
| :--- | :--- |
| POLS 3310 | Public Opinion, Voting, and Elections |

CONCENTRATION IN CAMPAIGNS AND ELECTIONS
Code Title Hours

## Required Courses

With advisor approval, a co-op or internship may be substituted in place of POLS 4947:
POLS 3160 Campaign Strategy 4
POLS 4947 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 $2345 \quad$ Urban Policies and Politics
POLS 2355
POLS $3310 \quad$ Public Opinion, Voting, and Elections
POLS 3162 Local Campaigns and Elections
POLS $3320 \quad$ Politics and Mass Media
POLS 3402
POLS 3304

## CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Course |  |  |
| POLS 3418 | Nationalism | 4 |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| POLS 2360 | Politics of Poverty |  |
| POLS 2368 | Music and Politics in America and Abroad |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |  |
| POLS 3324 | Law and Society |  |
| CONCENTRATION IN LAW AND LEGAL STUDIES |  |  |
| Code | Title | Hours |
| Complete four | following: | 16 |

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 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
Electives
Complete three of the following: 12

| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| POLS 2335 | Budgeting and Taxation |
| POLS 2340 | Business and Government <br> POLS 2345 |
| Urban Policies and Politics |  |

The interdisciplinary cinema studies minor is intended for students who wish to augment 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. The minor also includes filmrelated courses from art, English, history, and music.

## 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 |
| :--- | :--- | ---: |
| MSCR 2895 | Film Analysis | 4 |
| CINE 3500 | Film Theory | 4 |

## Elective Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete three of the following: | 12 |  |
| ARTH 2212 | Survey of the Still and Moving Image |  |
| CINE 2336 | American Film and Culture |  |
| CINE 3392 | Gender and Film |  |
| ENGL 4080 | Topics in Film |  |
| HIST 1279 | History of the American Film Industry |  |
| MUSC 1113 | Film Music |  |

## GPA Requirement

2.000 GPA required in the minor

## Communication Studies, Minor

The communication studies minor is for students who seek to acquire the practical skills necessary to succeed in the modern workplace. The minor consists of two common requirements-Introduction to Communication Studies (COMM 1101) and Public Speaking (COMM 1112)-a foundational course, and three electives.

## Minor Requirements

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

Communication Studies Minor Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking | 4 |
| 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 |  |
| Communication Studies Electives |  |  |
| Complete three | following: | 12 |


| COMM 1131 | Sex, Relationships, and Communication |
| :--- | :--- |
| COMM 1210 | Persuasion and Rhetoric <br> COMM 1225 |
| Communication Theory |  |
| COMM 2350 | Producing for the Entertainment <br> Industry |
| COMM 2501 | Communication Law |
| COMM 2450 | Sound Production for Digital Media |
| COMM 1331 to COMM 2304 |  |
| COMM 2531 to COMM 4799 |  |
| COMM 4910 to COMM 4914 |  |

The following courses may not be used to satisfy this requirement:

| COMM 1511 | Communication and Storytelling |
| :--- | :--- |
| COMM 3501 | Free Speech: Law and Practice |
| COMM 3550 | Television Field Production |
| COMM 3650 | Television Studio Production |
| COMM 4650 | Digital Editing for TV |

## GPA Requirement

2.000 GPA required in the minor

## Film Production, Minor

The interdisciplinary film production minor provides students with basic skills in media production. In addition to a foundational course in film production, students take electives dealing with documentary production, film analysis, screenwriting, storytelling, and video.

## 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

MSCR 1230 Introduction to Film Production 4

## Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete four of the following: | 16 |  |
| ARTD 3480 | Video: Sound and Image |  |
| ARTD 3485 | Experimental Video |  |


| ARTD 5582 | Collaborative Video and Community <br> Engagement |
| :--- | :--- |
| CINE 3389 | Screenwriting |
| CINE 3446 | Topics in Documentary Production |
| MSCR 2895 | Film Analysis |
| THTR 2345 | Acting for the Camera |

## GPA Requirement

2.000 GPA required in the minor

## Human Communication, Minor

The human communication minor is for students who are interested in studying the role of interpersonal communication in relationships, including romantic relationships, friendships, and relationships in groups or in organizations. The goal for students who complete the minor is to 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 will aid students in better 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.

Foundational Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete two of the following: | 8 |  |
| COMM 1131 | Sex, Relationships, and Communication |  |
| COMM 1231 | Principles of Organizational <br> Communication |  |
| COMM 2131 | Dark Side of Interpersonal <br> Communication |  |
| COMM 2303 | Global and Intercultural Communication |  |
| COMM 2304 | Communication and Gender |  |

## 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

## Media and Screen Studies, Minor

The media and screen studies minor provides students with the analytical skills necessary for the rigorous analysis of media within the humanities and social science. The minor focuses on how media shape society and prepares students for careers in arts and industry, politics, and popular culture.

## Minor Requirements

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

Note: Courses used in the major may not be used in the minor in media and screen studies.

## Required Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| MSCR 1220 | Media, Culture, and Society | 4 |
| MSCR 2220 | Understanding Media and Film | 4 |

## Elective Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete three of the following: | 12 |  |
| MSCR 2000 to MSCR 5999 |  |  |
| CINE 3500 | Film Theory |  |
| CINE 3920 | Topics in Film Studies |  |

## GPA Requirement

2.000 GPA required in the minor

## Media Production, Minor

The media production minor is for students interested in learning the hands-on techniques of producing and directing for the entertainment industry. The technical aspects of camera operation, audio design, lighting design, digital editing, and live broadcast are also covered.

## Minor Requirements

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

Note: Restricted to communication studies majors. An overall 3.000 grade-point average (GPA) is required for the minor. Only three courses from this minor also count toward communication studies major electives; additional courses taken for this minor do not count toward communication studies major requirements.

## Required Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| COMM 2350 | Producing for the Entertainment | 4 |
|  | Industry | 4 |
| COMM 2450 | Sound Production for Digital Media | 4 |
| COMM 3550 | Television Field 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 3750 | Special Effects and Postproduction for <br>  <br> COMM 4650 |  |


| COMM 4755 | Production Capstone |
| :--- | :--- |
| COMM 4940 | Special Topics in Media Production |

## GPA Requirement

3.000 GPA required in the minor

## Oratory and Public Speaking, Minor

The oratory and public speaking minor is for students seeking to develop exemplary oral communication skills. While many universities recognize the importance of writing in their curricula, oratory and public speaking skills are often ignored.

## Minor Requirements

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

## Public Speaking

| Code | Title | Hours |
| :--- | :--- | ---: |
| COMM 1112 | Public Speaking | 4 |
| Elective Courses |  |  |
| Code |  |  |
| Complete four of the following: | Hours |  |
| COMM 1113 | Business and Professional Speaking | 16 |
| COMM 1210 | Persuasion and Rhetoric |  |
| COMM 1331 | Legal Argumentation, Advocacy, and <br> Citizenship |  |
| COMM 1511 | Communication and Storytelling |  |
| COMM 2100 | Elements of Debate |  |
| COMM 3330 | Argumentation Theory |  |
| 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 focus of the minor is on the electoral process, political 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.

## Minor Requirements

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

## Introductory Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete two of the following: | 8 |  |
| COMM 1210 | Persuasion and Rhetoric |  |
| COMM 1331 | Legal Argumentation, Advocacy, and <br>  <br> COMM 1412 |  |
|  | Citizenship |  |


| 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 16 course must be taken from each department:

## Communication Studies

| COMM 3320 | Political Communication |
| :---: | :--- |
| COMM 3409 | Advocacy Writing |
| COMM 3610 | Communication, Politics, and Social <br> Change <br> Contemporary Rhetorical Theory |
| Cournalism 4602 The History of Journalism: How the <br> JRNL 2350 News Became the News |  |
| JRNL 3550 | The First Amendment and the Media |
| Political Science | Public Opinion, Voting, and Elections |
| POLS 3310 |  |

## GPA Requirement

2.000 GPA required in the minor

## Professional Presentation, Minor

Whether you are speaking at a meeting, engaging an audience, pitching a new idea, or energizing your team, effective presentation skills are essential to professional success. This dynamic, interdisciplinary minor is designed to help you become a more confident, creative, and compelling communicator. Uniting the acting training of theatre with practical techniques of communications studies, develop an individualized course of study that will empower your voice and speech, cultivate your onstage persona, and develop high-impact presentation skills to enhance your career prospects.

## Minor Requirements

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

## Presentation Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete two of the following: | 8 |  |
| COMM 1112 | Public Speaking |  |
| COMM 1113 | Business and Professional Speaking |  |
| COMM 1210 | Persuasion and Rhetoric |  |
| COMM 1511 | Communication and Storytelling |  |

## Performance Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete two of the following: | 8 |  |
| THTR 1125 | Improvisation |  |
| THTR 1130 | Introduction to Acting |  |
| THTR 1135 | Introduction to Acting Abroad |  |
| THTR 1160 | The Professional Voice |  |
| THTR 1165 | The Professional Voice Abroad |  |
| THTR 2345 | Acting for the Camera |  |

## GPA Requirement

2.000 GPA required in minor

## Rhetoric, Minor

The rhetoric minor offers students the opportunity to acquire competence in the history, theory, and criticism of civic discourse and cultural practices. It brings together courses from both the communication studies and English departments, from which students may learn about the nature and function of rhetoric in politics, the professions, and the media.

## Minor Requirements

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

## Required Elective

| Code | Title |
| :--- | :--- |
| ENGL 1160 | Introduction to Rhetoric |
| or COMM 1210 | Persuasion and 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 o | following: | 16 |
| COMM 1331 | Legal Argumentation, Advocacy, and Citizenship |  |
| COMM 3414 | Great Speakers and Speeches 2, 1930Present |  |
| 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 |  |

## GPA Requirement

2.000 GPA required in the minor

## Social Activism, Minor

Students who minor in social activism will learn a variety of perspectives and practical approaches to social activism. Students interested in activism will have opportunities to explore social movements, advocacy, and citizenship in a wide array of situations. These opportunities arise from the wealth of advocacy organizations in Boston; the access Northeastern University students have to co-op experiences nationally and internationally; and Northeastern University's Service-Learning Program. Course work in a variety of departments will enable students to successfully apply different skill sets and knowledge bases to future work 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.

## Introductory Courses

Code Title
Hours
Only one course may be taken from each department/ program.
Complete two of the following:
Communication Studies

| COMM 1412 | Social Movement Communication |
| :---: | :--- |
| Political Science |  |
| POLS 1150 | American Government |
| Sociology |  |
| SOCL 1228 | Social Problems |
| SOCL 1246 | Environment and Society |
| Theatre |  |
| THTR 1215 | Activism and Performance |

## Intermediate/Advanced Courses



## Service-Learning

Code Title Hours

POLS $2360 \quad$ Politics of Poverty 4
GPA Requirement
2.000 GPA required in the minor

## Sports, Media, and Communication, Minor

## 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 |
| :---: | :---: | :---: |
| COMM 2110 | Sports, Media, and Communication | 4 |
| Electives |  |  |
| Code | Title | Hours |
| Sports Elective |  |  |
| Complete one of the following: |  | 4 |
| COMM 2700 | Sports Promotion in the 21st Century |  |
| JRNL 3455 | Sports Writing |  |
| Intermediate Elective |  |  |
| Complete one o | ollowing: | 4 |


| ANTH 2365 | Sport, Culture, and Society |
| :--- | :--- |
| COMM 2350 | Producing for the Entertainment <br> Industry |
| COMM 2450 | Sound Production for Digital Media |
| COMM 3451 | Advertising Practices |
| COMM 3550 | Television Field Production |
| COMM 3650 | Television Studio Production |
| ECON 3481 | Economics of Sports |
| Advanced Elective |  |
| Complete one of the following: |  |
| COMM 4631 | Crisis Communication and Image |
| 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 minor

## School of Journalism

Website (http://camd.northeastern.edu/journalism)
Jonathan Kaufman, MA
Professor and Director
102 Lake Hall
617.373 .3236
617.373 .8773 (fax)

Susan Conover, Academic Coordinator, s.conover@northeastern.edu
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 may enroll in a four- or five-year cooperative education program or a four-year program without co-op. 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.

## Preapproved Template Program in Journalism

The School of Journalism offers a preapproved template program that may be paired with another preapproved template program to create a combined major; to see a list of current preapproved template programs, visit the combined majors webpage (https://registrar.northeastern.edu/ article/combined-majors).

Students may request admission to such a combined major via the Combined Major Approval form (http://www.northeastern.edu/
registrar/form-maj-comb.pdf), which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on preapproved template programs, see "Student-Requested Combined Major (p. 33)." For template program requirements, visit the myNortheastern web portal (http://my.northeastern.edu), click on the "Self-Service" tab, then on "My Degree Audit."

## Programs <br> Bachelor of Arts (BA)

- Journalism (p. 162)
- Journalism and English (p. 164)
- Journalism and Political Science (p. 166)
- Media and Screen Studies and Journalism (p. 139)


## Bachelor of Science (BS)

- Computer Science and Journalism (p. 170)
- Information Science and Journalism (p. 173)
- Journalism and Interaction Design (p. 96)


## Minors

- Journalism Practice (p. 177)
- Journalism Studies (p. 177)
- Photojournalism (p. 109)


## Journalism, BA

Website (https://camd.northeastern.edu/journalism/academic-programs/ba-journalism)

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| Introduction to College |  |  |
| JRNL 1000 | Journalism at Northeastern | 1 |
| 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 |  | 4 |
| :--- | :--- | :--- |
| JRNL 1150 | Understanding Today's News | 4 |
| JRNL 2350 | The History of Journalism: How the |  |
|  | News Became the News |  |


| Journalism Electives |  |
| :--- | :--- |
| Complete three journalism electives. | 12 |

Journalism-Related Requirement
HIST 1130 Introduction to the History of the United 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 Five Years, Three Co-ops in Summer 2/Fall


| Elective | 4 |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | 17 | 17 | 0 | 0 |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| JRNL 2201 | 4 JRNL 2301 | 4 Vacation | 0 Co-op | 0 |
| Foreign <br> language <br> core course | 4 JRNL 2350 | 4 |  |  |
| Elective | 4 Foreign <br> language <br> core course | 4 |  |  |
| Elective | 4 Elective | 4 |  | 0 |
|  | EEAM 2000 | 1 | 0 | 0 |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 JRNL 3550 | 4 Elective | 4 Co-op | 0 |
|  | JRNL 3610 | 4 Elective | 4 |  |
|  | Elective | 4 |  |  |
|  | Elective | 4 |  | 0 |


| Year 4 | Hours Spring |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall |  |  |  |  |
| Co-op | Journalism <br> elective 1 | 4 Upper- <br> division <br> elective | Hours Summer 2 | Hours |
|  | Journalism <br> elective 2 | 4 Elective | 0 |  |

Total Hours: 131

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

| Year 1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| JRNL 1000 |  | JRNL 1101 and JRNL 1102 | 5 | Vacation | 0 | Vacation | 0 |
| JRNL 1150 |  | Foreign language core course | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| HIST 1130 | 4 | Elective | 4 |  |  |  |  |


| Elective | 4 |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | 17 | 17 | 0 | 0 |


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| JRNL 2201 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Foreign <br> language <br> core course | 4 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| EEAM 2000 | 1 |  |  | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| JRNL 2301 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| JRNL 2350 | 4 |  | Elective | 4 |
| Foreign <br> language <br> core course | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| JRNL 3550 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| JRNL 3610 | 4 |  |  |  |
| Upper- <br> division <br> elective | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
|  | 16 | 0 | 0 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Journalism <br> elective 1 | 4 JRNL 4650 | 4 |
| Journalism <br> elective 2 | 4 Journalism <br> elective 3 | 4 |
| Elective | 4 Upper- <br> division <br> elective | 4 |
| Upper- <br> division <br> elective | 4 Elective | 4 |

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

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 |  | Hours |
| :---: | :---: | :---: |
| Journalism Introductory Course |  |  |
| JRNL 1150 | Understanding Today's News | 4 |
| 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 |

Journalism Electives
Take three JRNL courses

## English Requirements

Code Title Hours
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 $1000 \quad$ English at Northeastern 1
Foundational Courses

| ENGL 1400 | Introduction to Literary Studies | 4 |
| :--- | :--- | :--- |
| ENGL 1160 | Introduction to Rhetoric | 4 |

or ENGL 1410 Introduction to Writing Studies

| Diversity |
| :--- |
| Complete one of the following courses. This course may also <br> be used to fulfill an additional English requirement below: |
| ENGL 2150 | | Literature and Digital Diversity |
| :--- |


| Complete one of the following: |  |
| :--- | :--- |
| ENGL 1600 | Introduction to Shakespeare |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| 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:
ENGL 2260 Romantic Poetry

ENGL 2330 The American Renaissance
ENGL 2340 American Realism
ENGL 3619 Emerson and Thoreau
ENGL 3720 19th-Century Major Figure
ENGL 4040 Topics in 19th-Century Literatures
ENGL 2301 The Graphic Novel
ENGL 2410 Contemporary American Literature
ENGL 2440 The Modern Bestseller
ENGL 2600 Irish Literary Culture (Abroad)
ENGL $2610 \quad$ Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
ENGL $3730 \quad$ 20th- and 21 st-Century Major Figure
Theories and Methods
Complete one of the following:

| ENGL 1140 | Grammar. The Architecture of English |
| :--- | :--- |
| ENGL 1160 | Introduction to Rhetoric |


| ENGL 1410 | Introduction to Writing Studies |
| :--- | :--- |
| 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 <br>  <br> Writing |
| ENGL 3700 | Narrative Medicine |
| ENGL 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| 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 3458 | Language and Gender |

## Comparative Literature

Complete one of the following: 4
ENGL 1120 Trouble in Utopia
ENGL 1130 Animals, Objects, Humans
ENGL 1450 Reading and Writing in the Digital Age
ENGL 1500 British Literature to 1800
ENGL 1502 American Literature to 1865
ENGL 1503 American Literature 1865 to Present
ENGL 2150 Literature and Digital Diversity
ENGL 2370 The Modern Short Story
ENGL 2380 The Modern Novel
ENGL 2400 Modern Poetry
ENGL 2420 Contemporary Poetry
ENGL 2430 Contemporary Fiction
ENGL 2450 Postcolonial Literature
ENGL 2451 Postcolonial Women Writers
ENGL 2455 American Women Writers
ENGL 2460 Multiethnic Literatures of the U.S.
ENGL 2470 Asian-American Literature
ENGL 2510 Horror Fiction
ENGL 2520 Science Fiction
ENGL 2600 Irish Literary Culture (Abroad)
ENGL 2620 What Is Nature? (Abroad)
ENGL $2690 \quad$ Boston in Literature
ENGL 3427 The Literature of Science
ENGL $3487 \quad$ Film and Text (Abroad)
ENGL 3582 Children's Literature
ENGL 3663 The African-American Novel
ENGL 3676 Representing Gender and Sexuality in Literature
ENGL $4070 \quad$ Topics in Genre

## Writing

4 Complete one of the following: 4
ENGL $2700 \quad$ Creative Writing
ENGL 2710 Style and Editing

| ENGL 2730 | Digital Writing |
| :--- | :--- |
| 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 <br> Practice |
| ENGL 3375 | Writing Boston |
| ENGL 3376 | Creative Nonfiction |
| ENGL 3377 | Poetry Workshop |
| ENGL 3378 | Fiction Workshop |
| ENGL 3380 | Topics in Writing |
| ENGL 3382 | Publishing in the 21 st Century |
| ENGL 3384 | The Writer's Marketplace |
| Capstone |  |
| ENGL 4710 | Capstone Seminar |
| or ENGL 4720 | Capstone Project |
| English Electives |  |

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 |  |

## Program Requirement

129 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 ENGL 1000 | 1 | JRNL 1101 and JRNL 1102 | 5 | Elective | 4 | Vacation | 0 |
| JRNL 1150 |  | ENGL 1160 or 1410 | 4 | Elective | 4 |  |  |
| ENGW 1111 |  | English diversity requirement | 4 |  |  |  |  |
| ENGL 1400 |  | Pre- <br> nineteenth- <br> century <br> literature <br> requirement | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 17 |  | 8 |  | 0 |

## 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 | 1 |  | Elective | 4 |
| or EESH <br> 2000 |  |  |  |  |



Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| JRNL 2301 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| Journalism <br> elective 1 | 4 |  |  |  |
| Comparative <br> literature <br> requirement | 4 |  |  |  |
| English <br> writing <br> requirement | 4 |  |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| JRNL 3610 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| Journalism <br> elective 2 | 4 |  |  |  |
| English <br> elective 1 | 4 |  |  |  |
| ENGL 2740 <br> or 2850 | 4 |  |  | 0 |
|  | 16 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| JRNL 3550 <br> or 4650 | 4 <br> Journalism <br> elective 3 | 4 |
| JRNL 3630 | 4 ENGL 4710 <br> or 4720 | 4 |
| English <br> elective 2 | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 131

## Journalism and Political Science, BA

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Journalism Major Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Journalism Introductory Course |  |  |
| JRNL 1150 | Understanding Today's News | 4 |
| 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 |
| Ethics |  |  |
| JRNL 4650 | Ethics and Issues in Journalism | 4 |
| Journalism Electives |  |  |
| Take three JRNL | rses. | 12 |

## Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Political Science Foundation Courses |  |  |
| 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 |  |  |
| POLS 2325 | Ancient Philosophy and Political | 4 |
| POLS 2328 | Thought |  |
| POLS 2330 | Modern Political Thought | 4 |
| POLS 2332 | American Political Thought | 4 |
| Contemporary Political Thought | 4 |  |

Political Science Capstone or Thesis
Complete one of the following:

| POLS 4701 | Political Science Senior Capstone |
| :--- | :--- |
| POLS 4703 | Senior Thesis |

## Political Science Electives

Complete two upper-division POLS courses or complete a
concentration from the following list:

```
POLS 2300 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. 167).

- American political institutions (p. 167)
- Campaigns and elections (p. 167)
- Comparative politics (p. 168)
- Identity, culture, and politics (p. 168)
- International relations and diplomacy (p. 168)
- Law and legal studies (p. 168)
- Public policy (p. 168)
- Security studies (p. 168)


## 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.
Program Requirement
128 total semester hours required


| POLS 3310 | Public Opinion, Voting, and Elections |  | POLS 4938 | Dialogue of Civilizations: International Politics Abroad |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| POLS 3162 | Local Campaigns and Elections |  |  |  |  |
| POLS 3320 | Politics and Mass Media |  | Core Courses |  |  |
| POLS 3402 |  |  | Complete three of the following: |  | 12 |
| POLS 3304 |  |  | POLS 3405 | International Political Economy |  |
|  |  |  | POLS 3406 | International Law |  |
| CONCENTRATION IN COMPARATIVE POLITICS |  |  | POLS 3407 | International Organizations |  |
| Code | Title | Hours | POLS 3408 | International Security |  |
| Theoretical Requirement |  |  | POLS 3435 | Politics and Governance of Europe and |  |
| Complete one of the following: |  | 4 |  | the European Union |  |
| POLS 2370 | Religion and Politics |  | POLS 3470 | Arab-Israeli Conflict |  |
| POLS 3418 | Nationalism |  |  |  |  |
| POLS 3427 | Civil-Military Relations |  | CONCENTRATIO | AW AND LEGAL STUDIES |  |
| POLS 3487 | Politics of Developing Nations |  | Code | Title | Hours |
| Regional Requirements |  |  | Complete four of the following: |  | 16 |
| Complete two of the following: |  | 8 | POLS 2330 | American Political Thought |  |
| POLS 3435 | Politics and Governance of Europe and the European Union |  | POLS 3300 | The U.S. Congress |  |
|  |  |  | POLS 3302 | Judicial Process and Behavior |  |
| POLS 3445 |  |  | POLS 3324 | Law and Society |  |
| POLS 3450 |  |  | POLS 3406 | International Law |  |
| POLS 3460 |  |  | POLS 4500 | U.S. Constitutional Law |  |
| POLS 3465 | Government and Politics in the Middle East |  | POLS 4505 | U.S. Civil Liberties |  |
| POLS 3475 |  |  | CONCENTRATIO | UBLIC POLICY |  |
| POLS 3480 |  |  | Code | Title | Hours |
| POLS 3485 |  |  | Core Requirem |  |  |
| Experiential/Pra | m Requirement |  | POLS 3307 | Public Policy and Administration | 4 |
| Complete one o | following: | 4 | Electives |  |  |
| POLS 4915 | Model Arab League |  | Complete three | following: | 12 |
| POLS 4918 | Model NATO |  | POLS 2334 | Bureaucracy and Government |  |
| POLS 4937 | Dialogue of Civilizations: Government and Politics Abroad |  |  | Organizations |  |
|  |  |  | POLS 2335 | Budgeting and Taxation |  |
|  |  |  | POLS 2340 | Business and Government |  |
| CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS |  |  | POLS 2345 | Urban Policies and Politics |  |
| Code | Title | Hours | POLS 2350 | State and Local Politics |  |
| Core Course |  |  | POLS 2357 | Growth and Decline of Cities and |  |
| POLS 3418 | Nationalism | 4 |  | Suburbs |  |
| Electives |  |  | POLS 2390 | Science, Technology, and Public Policy |  |
| Complete three of the following: |  | 12 | POLS 2395 | Environmental Politics and Policy |  |
| POLS 2360 | Politics of Poverty |  | POLS 3425 | U.S. Foreign Policy |  |
| POLS 2368 | Music and Politics in America and Abroad |  | CONCENTRATION IN SECURITY STUDIES |  |  |
| POLS 2370 | Religion and Politics |  | Code | Title | Hours |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |  | Complete four | following: | 16 |
|  |  |  | POLS 3408 | International Security |  |
| POLS 3324 | Law and Society |  | POLS 3420 | U.S. National Security Policy |  |
|  |  |  | POLS 3423 | Terrorism and Counterterrorism |  |
| CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY |  |  | POLS 3425 | U.S. Foreign Policy |  |
| Code | Title | Hours | POLS 3427 | Civil-Military Relations |  |
| Experiential/Practicum Requirement |  |  | POLS 3430 | Revolution, Civil War, and Insurrection |  |
| Complete one of the following: |  | 4 | POLS 3470 | Arab-Israeli Conflict |  |
| POLS 4910 | Model United Nations |  | POLS 3487 | Politics of Developing Nations |  |
| POLS 4915 | Model Arab League |  | POLS 4918 | Model NATO |  |
| POLS 4918 | Model NATO |  |  |  |  |

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :--- | :--- | ---: |
| Introduction to College |  |  |$\quad 1$


| MSCR 2895 | Film Analysis |
| :--- | :--- |
| MSCR 3210 | Special Topics in Media and Screen <br> Studies |
| MSCR 3420 | Digital Media Culture |
| MSCR 3422 | Media Audiences |
| MSCR 3426 | Popular Music as Media Form |
| MSCR 3435 | Media Industries |
| MSCR 3437 | Media and Identity |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |
| ARTH 2212 | Survey of the Still and Moving Image |
| Advanced Media and Screen Electives |  |
| Complete two of the following: |  |
| CINE 3500 | Film Theory |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen |
| MSCR 4992 | Studies |
| MSCR 4993 | Independent Study |

## Journalism Requirements

Code Title Hours

## Journalism Foundations

| JRNL 1101 <br> and JRNL 1102 | Journalism 1: Fundamentals of <br> Reporting <br> and Journalist's Toolbox (A grade of C <br> or higher is required) | 5 |
| :--- | :--- | ---: |
|  | Understanding Today's News | 4 |
| JRNL 1150 2201 | Journalism 2: Intermediate Reporting <br> (A grade of C or higher is required) | 4 |
| JRNL 20 |  |  |

Journalism and Advanced Writing

| JRNL 2301 | Visual Storytelling in Journalism (A <br> grade of C or higher is required) | 4 |
| :--- | :--- | :--- |

Television News
JRNL 5314 Video News Reporting and Producing 4

Ethics and Issues
JRNL $4650 \quad$ Ethics and Issues in Journalism 4

Journalism Elective
Complete three courses in the following range:
JRNL 2000-JRNL 5999

## Integrative Requirement

The following course also counts toward the media and screen studies requirements above.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative Course |  | 4 |
| 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

128 total semester hours required

## Plan of Study

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

Year 1
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { MSCR 1000 } & \begin{array}{l}\text { JRNL 1101 } \\ \text { and JRNL }\end{array} & \begin{array}{c}\text { 5 Foreign } \\ \text { language }\end{array} & 4 \text { Vacation }\end{array}\right]$

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| JRNL 2201 | 4 Co-op | Co-op | Elective | 4 |
| EEAM 2000 | 1 |  | Elective | 4 |
| MSCR <br> elective | 4 |  |  |  |
| MSCR <br> elective | 4 |  |  |  |
| Foreign <br> language <br> core course | 4 |  |  |  |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| JRNL 2301 | 4 Co-op | Co-op | Vacation |  |
| JRNL 5307 | 4 |  |  |  |
| MSCR <br> elective | 4 |  |  | 0 |
| Elective | 4 | 0 | 0 |  |
|  | 16 |  |  |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| JRNL 5314 | 4 Co-op | Co-op | Vacation |  |
| JRNL <br> elective | 4 |  |  |  |
| MSCR <br> advanced <br> elective | 4 |  |  |  |
| MSCR <br> elective | 4 |  |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| JRNL 4650 | 4 MSCR 4623 | 4 |
| JRNL 5309 | 4 Elective | 4 |
| MSCR <br> advanced <br> elective | 4 Elective | 4 |

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science | Overview |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- <br> op | 1 |
|  |  |  |
| Computer Science | Fundamental Courses |  |

Computer Science Fundamental Courses
A grade of C - or higher is required in computer science

## fundamental courses:

| CS 1800 | Discrete Structures |  |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |


| Computer Science Required Courses |  |
| :--- | :--- |
| CS $3000 \quad$ Algorithms and Data | 4 |

CS 3200 Database Design 4
CS 3500 Object-Oriented Design 4
CS $4500 \quad$ Software Development $\quad 4$

| Presentation Requirement |  |
| :--- | :--- |
| THTR 1170 | The Eloquent Presenter |

## Computer Science Elective Courses

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 CS, IS, or DS classes that are not
already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900
At least one of these must be from the following list:

| IS 4200 | Information Retrieval |
| :--- | :--- |
| IS 4300 | Human Computer Interaction |

## 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 |
| :---: | :---: | :---: |
| 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 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 J | courses. | 8 |
| Journalism-Related Requirement |  |  |
| HIST 1130 | Introduction to the History of the United States | 4 |
| Supporting Courses |  |  |
| Code | Title | Hours |
| Mathematics Requirement |  |  |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| Computing and Social Issues |  |  |
| Complete one of | following: | 4 |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| IA 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 21st-Century Workplace |  |
| SOCL 4528 | Computers and Society |  |
| SOCL 3485 | Environment, Technology, and Society |  |

## Writing Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  |  |
| ENGW 1111 | First-Year Writing | 4 |

Advanced Writing in the Disciplines
JRNL 2301 Visual Storytelling in Journalism 4

## Required General Electives

Code Title
Hours
Complete seven 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.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS, IS, and JRNL courses

## Program Requirement

134 total semester hours required

## Plan of Study

## Sample Pattern, Five Years, Three Co-ops in Spring/Summer

 1| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 |  | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 3200 | 4 |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ |  | JRNL 1101 and JRNL 1102 | 5 | 5 |  |  |
| JRNL 1150 | 4 | HIST 1130 | 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 |  |
| CS 350cation | 0 |  |  |  |
| JRNL 2201 | 4 |  |  |  |
| MATH 1341 | 4 |  |  | 0 |
| Elective | 4 |  | 0 | 0 |
|  | 17 | 0 |  |  |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| JRNL 2301 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| CS 3000 | 4 |  | Elective | 4 |
| Computer <br> science <br> elective | 4 |  |  |  |
| Elective | 4 |  |  | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| JRNL 2350 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| JRNL 3610 | 4 |  | Elective | 4 |
| Computer <br> science <br> elective | 4 |  |  |  |


| Elective | 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 16 |  | 0 | 0 | 8 |
| Year 5 |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |
| JRNL 3550 | 4 | CS 4000 | 1 |  |  |
| Journalism elective |  | $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 |  |  |
| Computer science elective | 4 | JRNL 4650 | 4 |  |  |
| Computer science elective |  | Journalism elective | 4 |  |  |
|  |  | Computing and social issues | 4 |  |  |


| 16 | 17 |
| :--- | :--- |
| Total Hours: 135 |  |

## 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 |  | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | JRNL 1101 <br> and <br> JRNL 1102 | 5 | MATH 1341 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | CS 3200 | 4 |  |  |  |  |
| JRNL 1150 | 4 | HIST 1130 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 18 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: | ---: |
| CS 1210 | 1 Co-op | Co-op | Elective | 4 |
| JRNL 2201 | 4 |  | Elective | 4 |
| CS 3000 | 4 |  |  |  |
| Computer <br> science <br> elective | 4 |  |  |  |
| Elective | 4 |  |  | 8 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Computer science elective | 4 | Co-op |  | Co-op |  | Elective | 4 |
| Computer science elective | 4 |  |  |  |  | Elective | 4 |
| JRNL 2301 | 4 |  |  |  |  |  |  |
| JRNL 2350 | 4 |  |  |  |  |  |  |
| THTR 1170 | 1 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 8 |

Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 | JRNL 4650 | 4 | Elective | 4 |  |  |
| JRNL 3610 |  | Computing and social issues | 4 | Elective | 4 |  |  |
| JRNL 3550 |  | Journalism elective | 4 |  |  |  |  |
| CS elective | 4 | Journalism elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 8 |  | 0 |

Total Hours: 135

## Information Science and Journalism, BS

The information science and journalism combined major is similar to the computer science and journalism degree, with a greater focus on the journalism profession's information science needs. Information science combines concepts and skills from computer science, behavioral and social science, and system design into an integrated, people-centered curriculum. Both degrees provide a strong foundation in the principles, practices, and responsibilities of journalism as well as 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Information Science Courses

Code Title Hours

## Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- <br> op | 1 |
|  |  |  |
| Computer Science Fundamental Courses |  |  |


| A grade of C-or higher is required in computer science |  |
| :--- | :--- |
| fundamental courses. |  |
| CS 1800 Discrete Structures <br> and CS 1802 and Seminar for CS 1800 |  |
| CS 2500 Fundamentals of Computer Science 1 <br> and CS 2501 and Lab for CS 2500 <br> CS 2510 Fundamentals of Computer Science 2 <br> and CS 2511 and Lab for CS 2510 5 |  |


| Computer Science Required Courses |  |  |
| :--- | :--- | :--- |
| CS 3000 | Algorithms and Data | 4 |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |

## Information Science Required Courses

| IS 2000 | Principles of Information Science |
| :--- | :--- |
| IS 3500 | Information System Design and <br> Development |
| IS 4800 | Empirical Research Methods |
| IS 4900 | Information Science Senior Project |
| Information Science Elective (Integrative) | 4 |
| Complete one of the following: 5 <br> IS 4200 Information Retrieval <br> IS 4300 Human Computer Interaction | 4 |

## 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
Journalism Courses
A grade of $C$ or higher is required:

| JRNL 1101 <br> and JRNL 1102 | Journalism 1: Fundamentals of <br> Reporting <br> 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 | 4 |

News Became the News

| 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 4 States

Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Statistics |  |  |
| ECON 2350 | Statistics | 4 |
| Calculus |  | 4 |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| Psychology |  | 4 |
| PSYC 1101 | Foundations of Psychology |  |

Computing and Social Issues
Complete one of the following: 4
ANTH 3418 Wired/Unwired: Cybercultures and Technopolitics
IA $5240 \quad$ Cyberlaw: Privacy, Ethics, and Digital
Rights

| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| :--- | :--- |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

## Writing Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  |  |
| ENGW 1111 | First-Year Writing | 4 |

Advanced Writing in the Disciplines
JRNL $2301 \quad$ Visual Storytelling in Journalism

## Required General Electives

Code Title

Complete five general electives.
Hours
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
- 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.


## Major GPA Requirement

Minimum 2.000 GPA required in all CS, IS, and JRNL courses

## Program Requirement

134 total semester hours required

## Plan of Study <br> 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 <br> CS 2510 <br> and CS 2511 | 5 Vacation | 0 Vacation | 0 |


| Year 2 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CS 3500 | 4 | CS 1210 | 1 | Vacation | 0 | Co-op | 0 |
| IS 2000 (*) | 4 | IS 3500 (*) | 4 |  |  |  |  |
| JRNL 2201 | 4 | Elective | 4 |  |  |  |  |
| PSYC 1101 | 4 | JRNL 2301 | 4 |  |  |  |  |
|  |  | CS 3000 | 4 |  |  |  |  |
|  | 16 |  | 17 |  | 0 |  | 0 |
| Year 3 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | JRNL 3610 | 4 | Elective | 4 | Co-op | 0 |
|  |  | JRNL 2350 | 4 | Elective | 4 |  |  |
|  |  | MATH 1341 | 4 |  |  |  |  |
|  |  | ECON 2350 | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 4

| Fall <br> Co-op | Hours | Spring <br> JRNL 3550 | Hours 4 | Summer 1 <br> Elective | Hours 4 | Summer 2 <br> Co-op | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | IS 4800 (*) | 4 | Elective | 4 |  |  |
|  |  | Journalism elective | 4 |  |  |  |  |
|  |  | Information science elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |
| Year 5 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |  |
| Co-op | 0 | IS 4900 (*) | 5 |  |  |  |  |
|  |  | JRNL 4650 | 4 |  |  |  |  |
|  |  | Journalism elective | 4 |  |  |  |  |
|  |  | Computing and social issues | 4 |  |  |  |  |
|  | 0 |  | 17 |  |  |  |  |

Total Hours: 135
*Indicates course must be taken in the term listed.

## 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 3200 | 4 | MATH 1341 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | JRNL 1101 <br> and <br> JRNL 1102 | 5 |  |  |  |  |
| JRNL 1150 | 4 | ECON 2350 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 18 |  | 8 |  | 0 |
| Year 2 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| IS 2000 (*) | 4 | CS 1210 | 1 | HIST 1130 | 4 | Co-op | 0 |


| Elective | 4 IS 3500 (*) | 4 Elective | 4 |  |
| :--- | :--- | :--- | :--- | :--- |
| JRNL 2201 | 4 CS 3000 | 4 |  |  |
| PSYC 1101 | 4 JRNL 2350 | 4 |  |  |
|  | JRNL 2301 | 4 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 IS 4800 | 4 Journalism <br> elective | 4 Co-op | 0 |
|  | Information <br> science <br> elective | 4 Elective | 4 |  |
|  | JRNL 3610 | 4 |  |  |
|  | Journalism <br> elective | 4 | 8 | 0 |
| 0 | 16 |  |  |  |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | ---: |
| Co-op | 0 IS 4900 | 5 Elective | 4 |
|  | JRNL 4650 | 4 Elective | 4 |
|  | JRNL 3550 | 4 |  |
|  | Computing <br> and social <br> issues | 4 | 8 |

Total Hours: 135
*Indicates course must be taken in the term listed.

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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.

| Code | Title | Hours |
| :---: | :---: | :---: |
| JRNL 1000 or ARTF 1000 | Journalism at Northeastern Art and Design at Northeastern | 1 |
| Journalism Major Requirements |  |  |
| Code | Title | Hours |
| Journalism Introductory Course |  |  |
| JRNL 1150 | Understanding Today's News | 4 |
| 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 |

## Journalism Electives

Take three JRNL courses

## Art and Design Core

Code Title Hours

## Art and Design Fundamentals

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| :--- | :--- | :--- |
| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224) | 4 |
| Art and Design History |  |  |
| Complete two of the following: |  |  |
| ARTH 1111 | Global Art and Design History: <br> Renaissance to Modern |  |
| ARTH 2210 | Modern Art and Design History |  |
| ARTH 2215 | History of Graphic Design |  |

Design Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Design Courses |  |  |
| 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 | ollowing: | 8 |


| 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 | Photo Basics (with optional ARTD 2361) |  |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |  |
| ARTF 1120 | Observational Drawing |  |
| ARTF 1121 | Conceptual Drawing |  |
| ARTF 1124 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125) |  |
| ARTF 2220 | 4D Fundamentals: Sequence and Drawing (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 | Information Design 2 |  |
| ARTG 4553 | Environmental Information Design |  |
| ARTG 4554 | Typography 3 |  |

## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| JRNL 5311 | Design and Graphics | 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 |  | Summer 2 | Hours |
| JRNL 1000 <br> or ARTF <br> 1000 | 1 | JRNL 1101 and JRNL 1102 | 5 | Elective |  | Vacation |  |
| JRNL 1150 |  | ARTF 2223 <br> (with optional ARTF 2224) | 4 | Elective | 4 |  |  |
| ENGW 1111 |  | ARTG 2250 <br> (with optional ARTG 2251) | 4 |  |  |  |  |
| ARTG 1250 | 4 | Elective | 4 |  |  |  |  |
| ARTF 1122 <br> (with <br> optiional <br> 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 |  |



Year 3
$\left.\begin{array}{lcccrr}\hline \text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \hline \text { JRNL 2301 } & 4 \text { Co-op 2 } & \text { Co-op 2 } & \text { Elective } & 4 \\ \hline \begin{array}{l}\text { Journalism } \\ \text { elective 1 }\end{array} & 4 & & \text { ENGW 3302 }\end{array}\right) 44$

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| JRNL 3610 | 4 Co-op 3 |  |  |  |$\quad$ Co-op 3 $\quad$ Vacation | 0 |
| :--- |
| Journalism <br> elective 2 |
| Art + design <br> history <br> elective 2 |
| ARTG 3700 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| JRNL 5311 | 4 <br> Journalism <br> elective 3 | 4 |
| JRNL 3550 <br> or 4650 | ARTG 4551 <br> or 4701 | 4 |
| ARTG 3451 | 4 Art + design <br> elective | 4 |
| ARTG 4550 <br> 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 | 1 | JRNL 1101 and | 5 | Vacation |  | Vacation |  |
| 1000 |  | JRNL 1102 |  |  |  |  |  |
| JRNL 1150 |  | ARTF 2223 <br> (with optional ARTF 2224) | 4 |  |  |  |  |
| ENGW 1111 |  | ARTG 2250 <br> (with optional ARTG 2251) | 4 |  |  |  |  |
| ARTG 1250 | 4 | Elective | 4 |  |  |  |  |


| ARTF 1122 <br> (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 <br> (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 <br> elective 2 | 4 |  |  |
| Art + design <br> elective | 4 |  |  |
| ARTG 3700 | 4 | 0 | 0 |

Year 4
$\left.\begin{array}{lccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours } \\ \begin{array}{l}\text { JRNL 3550 } \\ \text { or 4650 }\end{array} & 4 \text { Co-op 2 }\end{array} \quad \begin{array}{l}\text { Co-op 2 }\end{array}\right]$

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| JRNL 5311 | 4 <br> Journalism <br> elective 3 | 4 |
| ARTG 3451 | 4 <br> ARTG 4551 <br> or 4701 | 4 |
| ARTG 4550 <br> 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



## 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 |
| :--- | :--- | ---: |
| Foundation |  |  |
| JRNL 1150 | Understanding Today's News | 4 |


| JRNL 2350 | The History of Journalism: How the <br> News Became the News | 4 |
| :--- | :--- | :---: |
| Law | The First Amendment and the Media | 4 |
| JRNL 3550 |  | 4 |

Take one JRNL course.

## 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.

## Required Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Photography Foundation |  |  |
| Complete one of the following: |  | 4 |
| ARTE 2500 | Art and Design Ab |  |
| ARTD 2360 | Photo Basics (with ARTD 2361) |  |
| ARTD 2350 | Photo Basics for |  |
| Photography Requirement |  |  |
| ARTD 3460 | Photography 1 | 4 |
| Integrative |  |  |
| JRNL 5310 | Photojournalism | 4 |
| Electives |  |  |
| Complete one | llowing: | 4 |
| JRNL 2301 | Visual Storytelling |  |
| JRNL 5314 | Video News Repo |  |

## GPA Requirement

2.000 GPA required in the minor

## Music

Website (http://camd.northeastern.edu/music)
Daniel Strong Godfrey, PhD
Professor and Chair
351 Ryder Hall
617.373 .2440
617.373.4129 (fax)

Allen G. Feinstein, Senior Teaching Professor and Head Faculty Mentor, a.feinstein@northeastern.edu

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 cuttingedge technology. The music faculty are dedicated to three continuously interacting and integrated dimensions: the creation of music; its

4 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, 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. An emphasis 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 economics aspects of the music industry; and broadcast, mobile, and online media technologies.

Through an exchange program with the New England Conservatory (NEC), the Department of Music also offers a joint certificate in performance, where students may attend classes and take performance instruction at NEC in combination with offerings from the Northeastern University music catalog (see below).

While some 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, Chamber Music Ensembles, and individual student recitals, along with an array of studentrun music groups.

In addition to co-op, Dialogues of Civilization, and a range of other opportunities for experiential learning and study abroad, students may immediately begin to participate in student organizations, such as Green Line Records and other groups, that allow students actively to pursue their passions and aspirations.

Students may double concentrate in music industry and music technology. 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.

## 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.

## Preapproved Template Programs in Music and in Music Industry

The Department of Music offers preapproved template programs in the following areas:

- Music
- Music industry
- Music technology

Each template program may be paired with another preapproved template program to create a combined major; to see a list of current preapproved template programs, visit the combined majors webpage (http://www.northeastern.edu/registrar/major-2.html).

Students may request admission to such a combined major via the Combined Major Approval form (http://www.northeastern.edu/ registrar/form-maj-comb.pdf), which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on preapproved template programs, see "Student-Requested Combined Major (p. 33)." For template program requirements, visit the myNortheastern web portal (http://my.northeastern.edu), click on the "Self-Service" tab, then on "My Degree Audit."

## NEC/NU Joint Certificate Programs in Music Performance

The Department of Music at Northeastern University (NU) and the New England Conservatory (NEC), administered through its School of Continuing Education, offer a Professional Studies Certificate in Music Performance. This program primarily serves undergraduate music majors who audition competitively and are dedicated to advancing their skills on an instrument or voice in the classical or jazz styles.

The certificate in music performance is in addition to the student's NU undergraduate degree-it is an entirely separate and distinct credential. Credits are taken partly at Northeastern University and partly at the New England Conservatory and/or its continuing education division. Those courses taken directly from the New England Conservatory catalog require permission of NEC faculty but are part of a tuition exchange program shared between Northeastern University and the New England Conservatory; they do not carry additional tuition costs. Some courses may be taken through NEC's School of Continuing Education, which is not part of the tuition exchange program; those courses are billed separately over and above tuition at Northeastern University and are not eligible for financial aid. Individual lessons with faculty at the New England Conservatory carry a lab fee each semester, which is billed separately from tuition.

Students should be aware that ensembles at NEC meet primarily during the morning and that academic courses offered at NEC meet primarily in the afternoons.

## Programs

## Bachelor of Arts (BA)

- Music (p. 179)


## Bachelor of Science (BS)

- Music with Concentration in Music Technology (p. 185)
- Music with Concentration in Music Industry (p. 182)
- Computer Science and Music with Concentration in Music Technology (p. 188)
- Electrical Engineering and Music with concentration in Music Technology (p. 414)
- Game Design and Music with Concentration in Music Technology (p. 94)
- Music and Communication Studies with Concentration in Music Industry (p. 151)
- Physics and Music with Concentration in Music Technology (p. 194)


## Minor

- Music (p. 196)
- Ethnomusicology (p. 196)
- Music Composition (p. 197)
- Music Industry (p. 197)
- Music Performance (p. 197)
- Music Recording (p. 198)
- Music Technology (p. 198)
- Musical Theatre (p. 199) (offered by the Department of Theatre)
- Songwriting (p. 199)


## Certificate

- NEC/NU Joint Certificate Program-Professional Studies Certificate in Music Performance (p. 199)


## 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 repertories, 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

- 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 |
| :--- | :--- |
| MUSC 1000 | Music at Northeastern |

Hours
MUSC 1000 Music at Northeastern
Music Theory and Musicianship
Code
Title

## 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

## Required Music Theory

A grade of C or higher is required in each course:

| MUSC 1201 | Music Theory 1 | 4 |
| :--- | :--- | :--- |
| 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 2303 | Tonal Form |
| MUSC 2350 | Acoustics and Psychoacoustics of |
| MUSC 3541 | Music |
| MUSI 1204 | Music Analysis Seminar |

## Music in Context

Choose one from each category below. From the categories "Traditional," "Ethnomusicology," and "Contemporary," at least two must be at the 2000level or higher. Courses may not double-count across the five areas.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introductory Class |  |  |
| MUSC 1001 | Music in Everyday Life | 4 |
| Traditional |  |  |


| Complete one of the following: |
| :--- |
| MUSC 1106 | Women in Music | 4 |
| :--- |
| MUSC 1109 |
| MUSC 1136 |
| Introduction to Art, Drama, and Music |
| MUSC 2311 | What's Playing at Symphony?


| MUSC 1131 | Music of Latin America and the <br> Caribbean |
| :--- | :--- |
| MUSC 2101 | Black Popular Music |
| MUSC 2130 | Music of Asia |
| MUSC 2313 | Historical Traditions: World |
| MUSC 2330 | Musical Communities of Boston |
| MUSC 3550 | Historical Traditions: Special Topics |
| MUSC 4641 | Seminar in Ethnomusicology: Issues in <br> Fieldwork and Methodology |

MUSI $3401 \quad$ Hip Hop in the Music Industry
Contemporary
Complete one of the following: 4

| MUSC 1106 | Women in Music |
| :--- | :--- |
| MUSC 1110 | Music in Popular Culture |
| MUSC 1112 | Jazz |
| MUSC 1113 | Film Music |
| MUSC 1141 | Wired for Sound |
| MUSC 2101 | Black Popular Music |
| MUSC 2310 | Popular Music Since 1945 |
| MUSC 2315 | History of Electronic 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 3560 | Topics in Music since 1900 |
| MUSI 3401 | Hip Hop in the Music Industry |

Creative
Complete one of the following 4-semester-hour courses or 4
choose four 1-semester-hour ensembles from the list below:

| MUST 1220 | Introduction to Music Technology |
| :--- | :--- |
| MUST 1301 | Introduction to Composition |
| MUSC 2208 | Jazz Improvisation |
| MUSC 2209 | Conducting |
| MUSC 2210 | Introduction to Songwriting |
| MUSC 2150 | Making a Musical: Analysis, Craft, and <br> Creation |
| Ensembles |  |
| 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 1916 | Contemporary Music Ensemble |
| MUSC 1917 | Jazz Choir and Combo |
| MUSC 1918 | World Music Ensemble |
| MUSC 1919 | Fusion Ensemble |
| MUSC 1920 | Pep Band |


| Capstone <br> Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | 4 |  |
| MUSC 4641 | Seminar in Ethnomusicology: Issues in <br> Fieldwork and Methodology |  |
| MUSI 4601 | Seminar in Music Industry |  |
| MUST 4611 | Music Technology Capstone/Senior <br> Recital |  |

## Music Electives

Code Title
Complete three additional courses in music (MUSC, MUSI, or MUST). At least two must be at the 2000-level or higher.

## Major Credit Requirement

Complete 49 semester hours in the major.

## Major GPA Requirement

Minimum 2.667 GPA required in 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 |

Hours

Year 3

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Music in context |  |  |
| course | 4 Elective | 4 |
| Music theory <br> course | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |
| Year 4 | Hours Spring |  |
| Fall | 4 Capstone course | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 16 | 16 |
|  |  | 4 |

Total Hours: 129

## Sample Five Years, Two Co-ops

$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { MUSC 1001 } & \begin{array}{c}\text { 4 Music theory } \\ \text { course }\end{array} & 4 \text { Vacation } & \text { Vacation }\end{array}\right]$

Year 2
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \begin{array}{l}\text { Music in } \\ \text { context } \\ \text { course }\end{array} & 4 \text { Co-op 1 }\end{array} \quad \begin{array}{c}\text { Co-op 1 }\end{array}\right]$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Music in context course | 4 Co-op 2 | Co-op 2 | Vacation |  |
| Music elective | 4 |  |  |  |
| Music theory course | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |


| Year 4 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | :---: |
| Fall | 4 Elective | 4 Vacation | Vacation |  |
| Music in <br> context <br> course | 4 Elective | 4 |  |  |
| Music <br> elective | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 |  | 0 |
| Elective | 16 | 16 | 0 |  |
|  |  |  |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Elective | 4 Capstone | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

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 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.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :--- | :--- | ---: |
| Music Core |  |  |
| MUSC 1000 | Music at Northeastern | 1 |
| MUSC 1001 | Music in Everyday Life | 4 |

Music Theory Placement

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

Music Theory Requirement

| MUSC 1201 | Music Theory 1 | 4 |
| :--- | :--- | :--- |
| MUSI 1204 | Analyzing Popular Genres | 4 |

## Music in Context

Choose one from each of these categories: "Traditional," "Ethnomusicology," "Contemporary," and "Creative." Of the courses from "Traditional", "Ethnomusicology," "Contemporary," at least two must be at the 2000-level or higher. Courses may not double count across these areas.

| Traditional (complete one): |  |
| :--- | :--- |
| MUSC 1106 | Women in Music |
| MUSC 1109 | Introduction to Art, Drama, and Music |
| MUSC 1136 | What's Playing at Symphony? |
| MUSC 2310 | Popular Music Since 1945 |
| MUSC 2311 | Historical Traditions: America |
| MUSC 2312 | Historical Traditions: Classical |
| MUSC 2320 | 40,000 Years of Music Technology |
| MUSC 2340 | Divas, DJs, and Double Standards |
| MUSC 3470 | War and Music |
| MUSC 3550 | Historical Traditions: Special Topics |

Ethnomusicology (complete one): 4

| MUSC 1131 | Music of Latin America and the <br> Caribbean |
| :--- | :--- |
| MUSC 2101 | Black Popular Music |
| MUSC 2130 | Music of Asia |
| MUSC 2313 | Historical Traditions: World |
| MUSC 2330 | Musical Communities of Boston |
| MUSC 3550 | Historical Traditions: Special Topics |
| MUSC 4641 | Seminar in Ethnomusicology: Issues in <br>  |

MUSI $3401 \quad$ Hip Hop in the Music Industry
Contemporary (complete one): 4

| MUSC 1106 | Women in Music |
| :--- | :--- |
| MUSC 1110 | Music in Popular Culture |
| MUSC 1112 | Jazz |
| MUSC 1113 | Film Music |
| MUSC 1141 | Wired for Sound |
| MUSC 2101 | Black Popular Music |
| MUSC 2315 | History of Electronic Music |
| MUSC 2317 | Punk Rock |
| MUSC 2340 | Divas, DJs, and Double Standards |
| MUSC 2351 | Music, Sound, and the Screen |
| MUSC 3560 | Topics in Music since 1900 |
| MUSI 3401 | Hip Hop in the Music Industry |
| Creative (complete one): | 4 |


| MUST 1220 | Introduction to Music Technology |
| :--- | :--- |
| MUST 1301 | Introduction to Composition |
| MUSC 2208 | Jazz Improvisation |
| MUSC 2209 | Conducting |
| MUSC 2210 | Introduction to Songwriting |


| Music Ensemble: <br> courses (ensembles and/or lessons) for one 4-semester-hour <br> creative course. |  |
| :--- | :--- |
| 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 1916 | Contemporary Music 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 |

## 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.
Creating and Producing
Note: MUSI 1230 is not a prerequisite for the following courses:

| MUSC 2210 | Introduction to Songwriting |
| :---: | :---: |
| MUSC 2211 | Advanced Songwriting |
| MUSI 2101 | Demo Production for Songwriters |
| MUSI 2232 | Music Recording 1 |
| MUSI 2331 | Music Recording 2 |
| MUSI 3341 | Music Recording 3-Mixing and Mastering |
| MUST 1220 | Introduction to Music Technology |
| MUST 3421 | Digital Audio Processing |
| Legal Aspects |  |
| Note: MUSI 1230 is a prerequisite for the following courses: |  |
| MUSI 2231 | Music Licensing for Media |
| MUSI 3333 | The Record Industry |
| MUSI 3335 | Copyright Law for Musicians |
| MUSI 2341 | Music Supervision 1 |
| Music Business and Management |  |
| Note: MUSI 1230 is a prerequisite for the following courses: |  |
| MUSI 2233 | Music in the Online and Mobile Environment |
| 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 |
| Music Industry Studies |  |

## Music Industry Studies

Note: MUSI 1230 is a prerequiste for the following MUSI courses only:

| MUSI 3401 | Hip Hop in the Music Industry |
| :--- | :--- |
| MUSI 4601 | Seminar in Music Industry |

## Business Course Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Economics |  | 4 |
| ECON 1116 | Principles of Microeconomics | 4 |


| Accounting |  |
| :--- | :--- |
| ACCT 1209 | Financial Accounting and Reporting |

Business Elective
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 $\quad$ Title |
| :--- |
| Complete one of the following: |
| MUSI $4601 \quad$ Seminar in Music Industry |
| MUSI $4530 \quad$ Music Entrepreneurship |
| Music Industry Major Credit Requirement |
| Complete 77 semester hours in the major. |
| Minimum 2.667 GPA is required 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 |
| :--- | :---: | :---: | :---: | ---: |
| 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 <br> industry <br> elective | 4 |  |  |
| MUSC 1000 | 1 | 16 | 8 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MUSI 1204 | S Music <br> industry <br> elective | 4 Vacation | 0 Co-op 1 | 0 |


| Year 3 | Hours Spring |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Summer 1 | Hours Summer 2 | Hours |  |
| Co-op 1 | Music in <br> context <br> course | 4 Elective | 4 Co-op 2 | 0 |
| Music <br> industry <br> elective | 4 Elective | 4 |  |  |
|  | Elective | 4 |  |  |
|  | Elective | 4 | 8 | 0 |
| 0 | 16 |  |  |  |


| Year 4 | Hours Spring |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Summer 1 <br> Music <br> industry <br> elective | 4 Vacation | Hours Summer 2 | Hours |
| Co-op 2 | Music in <br> context <br> course | 4 | 0 |  |
| Music <br> industry <br> elective | 4 | 0 | 0 |  |
|  | Elective | 4 | 16 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op 3 | O Music <br> industry <br> capstone | 4 |
|  | Music <br> industry <br> elective | 4 |
|  | Elective | 4 |
|  | 4 |  |
| 0 | Elective | 16 |

Total Hours: 130

## Sample Five Years, Three Co-ops in Spring/Summer 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 <br> context <br> course | 4 |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Elective | 4 | 0 | 0 | 8 |
|  | 17 | Hours Summer 1 | Hours Summer 2 | Hours |
| Year 3 | Hours Spring |  |  |  |
| Fall |  |  |  |  |

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 <br> context <br> course | M Music <br> industry <br> capstone | 4 |
| Music <br> industry <br> elective | 4 Music <br> industry <br> elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |
| Total Hours: 130 |  |  |

## Sample Four Years, One Co-op in Summer 2/Fall

| Year 1 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| MUSC 1000 | 1 ACCT 1209 | 4 Elective | 4 |  |
| MUSC 1001 | 4 ECON 1116 | 4 Elective | 4 |  |
| MUSC 1119 | 4 MUSC 1201 | 4 |  |  |
| MUSI 1230 | 4 Music <br> industry <br> elective | 4 |  |  |
| ENGW 1111 | 4 | 16 | 8 | 0 |

Year 2

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MUSI 1204 |  | Business elective | 4 Vacation | Co-op |  |
| Music industry elective | 4 | Music industry 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 | Music <br> industry <br> elective | 4 Elective | 4 Vacation |  |
| Music in <br> context <br> course | 4 Elective | 4 |  |  |
| Elective | 4 |  | 0 |  |
|  | Elective | 4 | 8 | 0 |

## Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Music <br> industry <br> elective | Music <br> industry <br> elective | 4 |
| Music <br> industry <br> elective | 4 Music <br> industry <br> capstone | 4 |
| Music in <br> context <br> course | 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 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. 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

- 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 |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| MUSC 1000 | Music at Northeastern | 1 |
| Music Theory and Composition |  |  |
| MUSC 1201 | Music Theory 1 | 4 |
| MUSC 1202 | Music Theory 2 | 4 |
| MUSC 3541 | Music Analysis Seminar | 4 |
| MUST 1301 | Introduction to Composition | 4 |
| Complete one of the following: |  | 4 |
| MUST 2320 | Sound Design |  |
| MUSC 1250 | Instrumentation and Orchestration |  |
| MUSC 2111 | Algebra and Geometry of Music |  |
| Music in Contex |  |  |

A grade of $C$ or higher is required. Choose one from each of these categories: "Traditional," "Ethnomusicology,"
"Contemporary," and "Creative." Of the courses from
"Traditional," "Ethnomusicology," "Contemporary," at least two must be at the 2000-level or higher. Courses may not double count across these areas.
Introductory Class

| MUSC 1001 | 4 |  |
| :--- | :--- | :---: |
| Traditional | Music in Everyday Life | 4 |
| Complete one of the following: | 4 |  |


| MUSC 2311 | Historical Traditions: America |
| :--- | :--- |
| MUSC 2312 | Historical Traditions: Classical |
| MUSC 2320 | 40,000 Years of Music Technology |
| MUSC 2340 | Divas, DJs, and Double Standards |
| MUSC 3470 | War and Music |
| MUSC 3550 | Historical Traditions: Special Topics |
| Ethnomusicology |  |
| Complete one of the following: |  |
| MUSC 1131 | Music of Latin America and the |
| MUSC 2101 | Caribbean |
| MUSC 2130 | Music of Asia |
| MUSC 2313 | Historical Traditions: World |
| MUSC 2330 | Musical Communities of Boston |
| MUSC 3550 | Historical Traditions: Special Topics |



| Elective | 4 Elective | 4 |
| :--- | :---: | :---: |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 130

## Sample Four Years, One Co-op in Spring/Summer 1

| Year 1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| MUSC 1001 | 4 | MUSC 1202 | 4 | Vacation |  | Vacation |  |
| MUSC 1201 | 4 | MUSC 2350 | 4 |  |  |  |  |
| MUST 1220 | 4 | Music in context: traditional | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| MUSC 1000 | 1 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 0 |  | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MUST 1301 | 4 | $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | 2 Electives | 82 Electives | 8 |
| MUST 2431 | 4 | Music in context: contemporary | 4 |  |  |  |
| MUSC 3541 | 4 | Elective | 4 |  |  |  |
| Music <br> theory/ composition elective | 4 | Elective | 4 |  |  |  |
|  | 16 |  | 17 |  | 8 | 8 |

Year 3


| Elective | 4 Elective | 4 |
| :--- | :---: | ---: |
|  | 16 | 16 |

Total Hours: 131

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

Year 1

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MUSC 1000 | 1 | MUSC 1202 | 4 Vacation | Vacation |  |
| MUSC 1201 | 4 | MUSC 2350 | 4 |  |  |
| MUST 1220 | 4 | Music in context: traditional | 4 |  |  |
| MUSC 1001 | 4 | Elective | 4 |  |  |
| ENGW 1111 | 4 |  |  |  |  |
|  | 17 |  | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 <br> MUST 1301 | V CS 2500 <br> and CS 2501 |
| :--- | :---: | :---: | :---: | :---: |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Music in context: ethnomusic | $4 \text { Co-op } 1$ <br> logical | Co-op 1 | Vacation |  |
| Music industry elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| EEAM 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Music technology restricted elective | 4 Co-op 2 | Co-op 2 | Vacation |  |
| CAMD elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |


| Year 5 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| Music <br> technology <br> restricted <br> elective | 4 MUST 4611 | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 131

## 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 digital sound 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Coop | 1 |
| Computer Science Fundamental Courses |  |  |
| A grade of C - or higher is required in computer science fundamental courses: |  |  |
| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 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 | Object-Oriented Design | 4 |


| CS 4500 | Software Development |  |
| :--- | :--- | :--- |
| and CS 4501 | and Recitation for CS 4500 | 4 |
| IS 4300 | Human Computer Interaction <br> (Integrative) | 4 |

## Presentation Requirement

THTR 1170 The Eloquent Presenter 1
Computer Science Elective Courses
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, IS, or DS classes that are not
already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Music Courses

Code Title Hours
Music Theory and Composition

| MUSC 1201 | Music Theory 1 | 4 |
| :--- | :--- | :--- |
| MUSC 1202 | Music Theory 2 | 4 |
| MUSC 3541 | Music Analysis Seminar | 4 |
| MUST 1301 | Introduction to Composition | 4 |
| Music in Context |  | 4 |
| MUSC 1001 | Music in Everyday Life | 4 |
| Contemporary |  | 4 |
| Complete one of the following: |  |  |


| MUSC 2101 | Black Popular Music |  |
| :--- | :--- | :--- |
| MUSC 2310 | Popular Music Since 1945 |  |
| MUSC 2315 | History of Electronic Music |  |
| MUSC 2320 | 40,000 Years of Music Technology | 4 |
| MUSC 3560 | Topics in Music since 1900 | 4 |
| MUSI 3401 | Hip Hop in the Music Industry | 4 |
| Music Technology |  | 4 |
| MUST 1220 | Introduction to Music Technology | 4 |
| MUST 2431 | Computer Music Fundamentals | 4 |
| MUSC 2350 | Acoustics and Psychoacoustics of |  |
| Music Industry | Music |  |
| Complete one of the following: | Introduction to Music Industry |  |
| MUSI 1230 | Music Recording 2 |  |
| MUSI 2331 | Copyright Law for Musicians |  |
| MUSI 3335 |  |  |

Music Technology Electives
Complete two of the following: 8
MUST 4520 Interactive Music Programming
MUST $4610 \quad$ Composition for Electronic Instruments
MUST 4XXX Composing with Image and Sound
MUST 4XXXX Spatial Audio
MUST $3540 \quad$ Special Topics in Music Technology
Music Technology Capstone
MUST 4611 Music Technology Capstone/Senior Recital


| Computing <br> and social <br> issues | 4 Music <br> industry <br> 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation | 0 |
| CS 1800 <br> and CS 1802 | 5 | MUST 1220 <br> (*) | 4 | CS 3200 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | MUSC 1202 <br> (*) | 4 |  |  |  |  |
| MUSC 1201 <br> (*) | 4 | MUSC 2350 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 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 1301 <br> $(\star)$ | 4 |  |  |  |
| Computer <br> science <br> elective | 4 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MUSC 3541 | 4 Co-op | 0 Co-op | 0 PSYC 1101 | 4 |
| MUST 2431 | 4 |  | Elective | 4 |
| Contemporary <br> music <br> requirement* | 4 |  |  |  |
| Music <br> technology <br> elective* | 4 | 0 | 0 | 8 |



| Computer <br> science <br> elective | 4 |  |  |
| :--- | :--- | :--- | :--- |
|  | 17 | 16 | 8 |

Total Hours: 134
*Indicates course must be taken in the term listed.

## Game Design and Music with concentration in Music Technology, 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Game Design Major Requirements

Code Title Hours

Art + Design Required Foundation Courses

| ARTF 1122 | 2D Fundamentals: Surface and Drawing | 4 |
| :--- | :--- | :--- |
| ARTF 2223 | 5D Fundamentals: Experience and | 4 |
|  | Drawing |  |
| Required Games Courses | 4 |  |
| GAME 1110 | Games and Society | 4 |
| GAME 1850 | Experimental Game Design | 4 |
| GAME 2500 | Foundations of Game Design | 4 |
| GAME 3700 | Rapid Idea Prototyping for Games | 4 |
| GAME 3800 | Game Concept Development and | 4 |

## Game Design Electives

Complete five of the following: 20

| ARTG 2260 | Programming Basics |
| :--- | :--- |
| ARTG 3250 | Physical Computing |
| GAME 2010 | The Business of Games |
| GAME 2355 | Narrative for Games |
| GAME 2650 | Introduction to Game Research |
| GAME 2750ds | 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 4155 | Designing Imaginary Worlds |
| GAME 4700 | Game Design Capstone 1 |

## Music Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Music Theory and Composition |  |  |
| MUSC 1201 | Music Theory 1 | 4 |
| MUSC 1202 | Music Theory 2 | 4 |
| MUSC 3541 | Music Analysis Seminar | 4 |
| MUST 1301 | Introduction to Composition | 4 |
| Music in Context |  |  |
| MUSC 1001 | Music in Everyday Life | 4 |
| Contemporary |  |  |
| Complete one from the following: |  | 4 |
| MUSC 2315 | History of Electronic Music |  |
| MUSC 2101 | Black Popular Music |  |
| MUSC 2310 | Popular Music Since 1945 |  |
| MUSC 2320 | 40,000 Years of Music Technology |  |
| MUSC 3560 | Topics in Music since 1900 |  |
| MUSI 3401 | Hip Hop in the Music Industry |  |
| Music Technology |  |  |
| MUST 1220 | Introduction to Music Technology | 4 |
| MUST 2431 | Computer Music Fundamentals | 4 |
| MUSC 2350 | Acoustics and Psychoacoustics of Music | 4 |
| Music Technology Electives |  |  |
| Complete two f | he following: | 8 |
| MUST 4520 | Interactive Music Programming |  |
| MUST 4610 | Composition for Electronic Instrume |  |
| MUST 3540 | Special Topics in Music Technology |  |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| MUST 1220 | Introduction to Music Technology | 4 |
| Capstone |  | 4 |
| Complete one of the following: | 4 |  |

MUST $4611 \quad$| Music Technology Capstone/Senior |  |
| :--- | :--- |
|  | Recital |

GAME 4701 Game Design Capstone 2

## Combined-Major Credit Requirement

Complete 90 semester hours in the major.

## Program Requirement

138 total semester hours required

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| MUSC 1000 | Music at Northeastern | 1 |
| Music Core |  | 4 |
| MUSC 1001 | Music in Everyday Life | 4 |

Music Theory Placement
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

## Music Theory Requirement

MUSC 1201 Music Theory $1 \quad 4$
Introductory Music Industry
MUSI $1230 \quad$ Introduction to Music Industry 4
Music in Context
Choose one course from traditional, ethnomusicology, or 4 contemporary categories.

## Traditional

| MUSC 2311 | Historical Traditions: America |
| :---: | :--- |
| MUSC 2312 | Historical Traditions: Classical |
| MUSC 3470 | War and Music |
| MUSC 3550 | Historical Traditions: Special Topics |
| MUSC 2101 | Black Popular Music |
| MUSC 2130 | Music of Asia |


| MUSC 2313 | Historical Traditions: World |
| :---: | :--- |
| MUSC 3550 | Historical Traditions: Special Topics |
| Contemporary |  |
| MUSC 2101 | Black Popular Music |
| MUSC 2315 | History of Electronic Music |
| MUSC 2317 | Punk Rock |
| MUSC 3560 | Topics in Music since 1900 |
| MUSI 3401 | Hip Hop in the Music Industry |
| Music Industry Electives |  |
| Complete three of the following: |  |
| MUSI 1204 | Analyzing Popular Genres |
| MUSI 2101 | Demo Production for Songwriters |
| MUSC 2210 | Introduction to Songwriting |
| MUSI 2231 | Music Licensing for Media |
| MUSI 2232 | Music Recording 1 |
| MUSI 2233 | Music in the Online and Mobile |
| MUSI 2341 | Environment |
| MUSI 2540 | Special Topics in Music Industry |
| MUSI 3332 | Artist Management |
| MUSI 3333 | The Record Industry |
| MUSI 3334 | Music Products Industry |
| MUSI 3335 | Copyright Law for Musicians |
| MUSI 3338 | Music Industry Marketing and |
| MUSI 3340 | Promotion |
| Concert Promotion and Venue |  |
| MUSI 3401 | Management |
| MUSI 4530 | Husic Entrepreneurship |
| MUSI 4601 | Seminar in Music Industry |
| MUST 1220 | Introduction to Music Technology |
| MUST 3421 | Digital Audio Processing |
| Business Course |  |
| ACCT 1209 | Financial Accounting and Reporting |

## Communication Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Communication Studies Common Requirements |  |  |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking | 4 |
| or COMM 2301 | Communication Research Methods |  |
| Foundation Course |  | 4 |


| COMM 1210 | Persuasion and Rhetoric |
| :--- | :--- |
| COMM 1231 | Principles of Organizational <br> Communication |
| COMM 1225 | Communication Theory |
| COMM 1255 | Communication in a Digital Age |

Cluster Course
Complete one of the following:
COMM 2303 Global and Intercultural Communication

COMM 2304 Communication and Gender
COMM 2501 Communication Law

COMM $2551 \quad$ Free Speech in Cyberspace
Writing-Intensive Courses
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 3330 Argumentation Theory
COMM $3400 \quad$ Rhetoric of Science
COMM 3414 $\begin{array}{ll}\text { Great Speakers and Speeches 2, 1930- } \\ & \text { Present }\end{array}$
COMM 3415 Communication Criticism
COMM $3445 \quad$ Public Relations Principles
COMM $3501 \quad$ Free Speech: Law and Practice
COMM $3530 \quad$ Communication and Sexualities
COMM 3532 Theories of Conflict and Negotiation
COMM $3610 \quad$ Communication, Politics, and Social Change
COMM 4535 Nonverbal Social Interaction
COMM $4605 \quad$ Youth and Communication Technology

COMM 4631 Crisis Communication and Image Management
Communication Studies Electives
Complete three COMM courses.

## Integrative Requirement

Code Title Hours

Complete one of the integrative options below. If a 4-8 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 |

## 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.

## Program Requirement

128 total semester hours required



Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Music | 4 Capstone | 4 |
| industry <br> elective |  |  |
| Integrative <br> requirement | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Physics Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introductory Physics |  |  |$\quad$| Physics 1 |  |
| :--- | ---: |
| PHYS 1161 | Physics 1 |
| and PHYS 1162 | and Lab for PHYS 1161 |

Intermediate Physics

| PHYS 2303 | Modern Physics | 4 |
| :--- | :--- | ---: |
| PHYS 2305 | Thermodynamics and Statistical <br> Mechanics | 4 |
| PHYS 2371 | Electronics | 4 |
| and PHYS 2372 | and Lab for PHYS 2371 |  |
| Advanced Physics |  | 4 |
| PHYS 3600 | Advanced Physics Laboratory | 4 |
| PHYS 3602 | Electricity and Magnetism | 4 |
| PHYS 5115 | Quantum Mechanics | 4 |
| PHYS 5318 | Principles of Experimental Physics | 4 |

## Music Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Music Theory and Composition |  |  |
| MUSC 1201 | Music Theory 1 | 4 |
| MUSC 1202 | Music Theory 2 | 4 |
| MUSC 3541 | Music Analysis Seminar | 4 |
| MUST 1301 | Introduction to Composition | 4 |
| Music in Context |  | 4 |
| MUSC 1001 | Music in Everyday Life |  |
| Contemporary |  | 4 |


| MUSC 2315 | History of Electronic Music |
| :--- | :--- |
| MUSC 2101 | Black Popular Music |
| MUSC 2310 | Popular Music Since 1945 |
| MUSC 2320 | 40,000 Years of Music Technology |
| MUSC 3560 | Topics in Music since 1900 |
| MUSI 3401 | Hip Hop in the Music Industry |
| Music Technology |  |
| MUST 1220 | Introduction to Music Technology |
| Music Technology Electives | 4 |
| Complete two courses from the following: | 8 |


| MUST 3540 | Special Topics in Music Technology |
| :--- | :--- |
| MUST 4520 | Interactive Music Programming |
| MUST 4610 | Composition for Electronic Instruments |

Music Technology Capstone

| MUST 4611 | Music Technology Capstone/Senior <br> Recital | 4 |
| :--- | :--- | :--- |

## Physics/Music Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative Course Requirements |  |  |
| MUSC 2350 | Acoustics and Psychoacoustics of | 4 |
|  | Music |  |

## Physics and Music Combined-Major Credit Requirement

Complete 90 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan 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 $2303{ }^{1}$ | 4 | PHYS $2305{ }^{2}$ | 4 | Vacation |  | Vacation |  |
| MATH 2321 | 4 | MUSC 1202 | 4 |  |  |  |  |
| MUSC 1201 | 4 | MUSC 2350 | 4 |  |  |  |  |
| Elective |  | MUSC xxxx contemporary elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| PHYS 2371 | Co-op | PHYS $3600^{4}$ | 4 |  |
| PHYS 2372 | 1 |  | Elective | 4 |
| MUST 1301 | 4 |  |  |  |
| MUST 2431 | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
| EESC 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 | 8 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| PHYS $3602^{6}$ | 4 Co-op | Co-op | Vacation |  |  |
| MUSC 3541 | 4 |  |  |  |  |
| MUSC | 4 |  |  |  |  |
| xxx music <br> technology <br> elective |  |  |  |  |  |
| Music <br> elective | 4 |  |  |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| PHYS $5115^{8}$ | 4 PHYS 5318 ${ }^{9}$ | 4 |
| ENGW 3307 | 4 MUST 4611 | 4 |
| MUSC | 4 |  |
| xxxx music <br> technology <br> elective |  |  |
|  | 12 | 8 |

Total Hours: 128

FOUR YEARS, ONE CO-OP IN SPRING/SUMMER 1
Year 1
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { PHYS 1000 } & 1 \text { PHYS 1165 } & 4 & \text { Vacation } & \text { Vacation }\end{array}\right]$

## Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHYS $2303{ }^{1}$ | 4 | PHYS $2305{ }^{2}$ | 4 | Vacation |  | Elective | 4 |
| PHYS $2371{ }^{3}$ | 3 | MUSC 1202 | 4 |  |  | Elective | 4 |
| PHYS $2372{ }^{3}$ | 1 | MUSC 2350 | 4 |  |  |  |  |
| MATH 2321 |  | MUSC xxxx contemporary elective | 4 |  |  |  |  |


| MUSC 1201 | 4 |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | 16 | 16 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :--- | :--- | :--- |
| PHYS 3602 | 4 Co-op | Co-op | PHYS 3600 | 4 |
| MUST 1301 | 4 |  | ENGW 3307 | 4 |
| MUST 2431 | 4 |  |  |  |
| MUST 3421 | 4 |  |  |  |
| EESC 2000 | 1 |  |  | 8 |
|  | 17 | 0 | 0 |  |

Year 4

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| PHYS $5115^{8}$ | $4{\text { PHYS } 5318^{9}}^{2}$ | 4 |
| MUSC 3541 | 4 MUST 4611 | 4 |
| MUSC <br> xxxx music | 4 |  |
| technology <br> elective | 4 |  |
| MUSC <br> xxxx music <br> technology <br> elective | 16 | 8 |

Total Hours: 124
PHYS 2303 offered fall and spring
2 PHYS 2305 offered every spring and summer 2 (even years)
3 PHYS 2371/2372 offered every fall
4 PHYS 3600 offered every summer 1 and summer 2
6 PHYS 3602 offered every fall and spring
8 PHYS 5115 offered every fall and spring
9 PHYS 5318 offered every spring

## 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 take in-depth electives that focus on the music of a region, tradition, global popular trends, etc. The minor culminates in a seminar that invites students to conduct their own ethnographic projects in and around Boston. Projects involving music's role in social justice issues are exciting options.

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 |
| Complete one of the following: | 4 |  |
| MUSC 4641 | Seminar in Ethnomusicology: Issues in |  |
|  | Fieldwork and Methodology |  |
| MUSC 2330 | Musical Communities of Boston |  |

Ethnomusicology Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete two of the following: | 8 |  |
| MUSC 1112 | Jazz |  |
| MUSC 1131 | Music of Latin America and the <br> Caribbean |  |
| MUSC 2101 | Black Popular Music |  |
| MUSC 2130 | Music of Asia |  |

## GPA Requirement

2.000 GPA required in the minor

## 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 $1001 \quad$ Music in Everyday Life 4
Complete one course from the following. Music theory 4
placement test permits placement into Music Theory 1 or higher.

| 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

## Electives

Complete two courses from the following. Four semesters of 8
ensembles may be substituted for one elective:

| MUSC 1106 | Women in Music |
| :---: | :---: |
| MUSC 1109 | Introduction to Art, Drama, and Music |
| MUSC 1110 | Music in Popular Culture |
| MUSC 1111 | Rock Music |
| MUSC 1112 | Jazz |
| MUSC 1113 | Film Music |
| MUSC 1114 | Mozart |
| MUSC 1115 | Debussy and the Music of Paris |
| MUSC 1116 | Beethoven |
| MUSC 1118 | Music Therapy 1 |
| MUSC 1131 | Music of Latin America and the Caribbean |
| MUSC 2311 | Historical Traditions: America |
| MUSC 2101 | Black Popular Music |
| MUSC 2320 | 40,000 Years of Music Technology |
| MUSC 2330 | Musical Communities of Boston |
| MUSC 2312 | Historical Traditions: Classical |
| MUSC 2313 | Historical Traditions: World |
| MUSC 2317 | Punk Rock |
| MUSC 2340 | Divas, DJs, and Double Standards |
| MUSC 2351 | Music, Sound, and the Screen |
| MUSC 3550 | Historical Traditions: Special Topics |
| MUSC 3560 | Topics in Music since 1900 |
| MUSC 4641 | Seminar in Ethnomusicology: Issues in Fieldwork and Methodology |
| Ensembles |  |
| All ensembles are 1 credit: |  |
| 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 1916 | Contemporary Music 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

## 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 |
| MUST 1301 | Introduction to Composition | 4 |
| MUSC 1903 | Composition Lessons | 1 |
| Elective |  |  |
| Code | Title | Hours |
| Complete one of the following: |  | 4 |
| MUSC 1250 | Instrumentation and Orchestration |  |
| MUSC 3541 | Music Analysis Seminar |  |
| MUST 1220 | Introduction to Music Technology |  |
| MUST 2320 | Sound Design |  |

## GPA Requirement

2.000 GPA required in the minor

## 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

MUSC 1001

## 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 2210 | Introduction to Songwriting |
| MUSI 2101 | Demo Production for Songwriters |
| MUSI 2231 | Music Licensing for Media |
| MUSI 2232 | Music Recording 1 |
| MUSI 2233 | Music in the Online and Mobile <br> Environment |
| 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 3335 | Copyright Law for Musicians <br> MUSI 3338Music Industry Marketing and <br> MUSI 3340Comotion |
| MUSI 3401 | Management |
| MUSI Hop in the Music Industry |  |
| MUSI 4630 | Music Entrepreneurship |
| MUST 1220 | Seminar in Music Industry |
| MUST 3421 | Introduction to Music Technology |

## GPA Requirement

2.000 GPA required in the minor

## 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 1916 | Contemporary Music 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 1106 | Women in Music |  |
| MUSC 1109 | Introduction to Art, Drama, and Music |  |
| MUSC 1110 | Music in Popular Culture |  |
| MUSC 1111 | Rock Music |  |
| MUSC 1112 | Jazz |  |
| MUSC 1113 | Film Music |  |
| MUSC 1114 | Mozart |  |
| MUSC 1115 | Debussy and the Music of Paris |  |
| MUSC 1116 | Beethoven |  |
| MUSC 1131 | Music of Latin America and the Caribbean |  |
| MUSC 1136 | What's Playing at Symphony? |  |
| MUSC 1250 | Instrumentation and Orchestration |  |
| MUSC 2101 | Black Popular Music |  |
| MUSC 2130 | Music of Asia |  |
| MUSC 2208 | Jazz Improvisation |  |
| MUSC 2209 | Conducting |  |
| MUSC 2210 | Introduction to Songwriting |  |
| MUSC 2310 | Popular Music Since 1945 |  |
| MUSC 2315 | History of Electronic 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 3470 | War and Music |
| MUSC 3540 | Special Topics in Music Analysis |
| MUSC 3541 | Music Analysis Seminar |
| MUSC 4641 | Seminar in Ethnomusicology: Issues in <br> Fieldwork and Methodology |

## Music Recitals

| Code | Title | Hours |
| :--- | :--- | ---: |
| MUSC 3410 | Recital 1 | 1 |
| MUSC 4622 | Recital 2 | 1 |

## GPA Requirement

2.000 GPA required in the minor

## 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 | 4 |
|  | Mastering |  |

## Recording Elective

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | 4 |  |
| MUSC 1001 | Music in Everyday Life |  |
| MUSI 2233 | Music in the Online and Mobile |  |
|  | Environment |  |
| MUSI 2341 | Music Supervision 1 |  |
| MUSI 3335 | Copyright Law for Musicians |  |
| MUST 1220 | Introduction to Music Technology |  |
| MUST 2320 | Sound Design |  |

## GPA Requirement

2.000 GPA required in the minor

## Music Technology, Minor

The minor in music technology gives students an opportunity to explore 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. 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 |

$\begin{array}{ll}\text { Music Technology Electives } \\ \text { Code } & \text { Title }\end{array}$
Title Hours

Complete two of the following:

| MUSC 2111 | Algebra and Geometry of Music |
| :--- | :--- |
| MUSC 1250 | Instrumentation and Orchestration |
| MUSC 2315 | History of Electronic Music |
| MUSC 2320 | 40,000 Years of Music Technology |
| MUSC 2350 | Acoustics and Psychoacoustics of <br> Music |
| MUSI 2101 | Demo Production for Songwriters |
| MUST 2320 | Sound Design |
| MUST 3540 | Special Topics in Music Technology |
| MUST 4520 | Interactive Music Programming |

GPA Requirement
2.000 GPA required in the minor

## Musical Theatre, Minor

A minor in musical theatre gives students a practical foundation in all aspects of the theatre including performance, music, design, and the history of the theatre.

## Minor Requirements

Complete all courses listed below unless otherwise indicated.

## Required Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| THTR 1130 | Introduction to Acting | 4 |
| THTR 4882 | Special Topics: Theatre Performance | 4 |
|  | (Singing for Musical Theatre) |  |

## Making Musical Theatre <br> Code Title

Hours
Choose one of the following:

| MUSC 1901 | Music Lessons 1 |
| :--- | :--- |
| THTR 1100 | Production Experience 1 |

## Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| Choose two of the following: | 8 |  |
| THTR 1101 | Introduction to Theatre |  |
| MUSC 2210 | Introduction to Songwriting |  |
| THTR 2310 | History of Musical Theatre |  |

THTR $2330 \quad$ Playwriting
THTR 3570 Musical Theatre Performance

## 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 |
| :---: | :---: | :---: |
| Music Theory |  |  |
| Complete one of the following: |  | 4 |
| MUSC 1119 | Fundamentals of Western Music Theory |  |
| MUSC 1201 | Music Theory 1 |  |
| MUSI 1204 | Analyzing Popular Genres |  |
| Songwriting |  |  |
| MUSC 2210 | Introduction to Songwriting | 4 |
| Songwriting Electives |  |  |
| Complete two of | llowing: | 8 |
| MUSC 1001 | Music in Everyday Life |  |
| MUSC 2211 | Advanced Songwriting |  |
| MUSI 2101 | Demo Production for Songwriters |  |
| MUSC 2150 | Making a Musical: Analysis, Craft, and Creation |  |
| MUSI 3335 | Copyright Law for Musicians |  |
| MUSI 2232 | Music Recording 1 |  |
| MUSI 2331 | Music Recording 2 |  |

## GPA Requirement

2.000 GPA required in the minor

## NEC/NU Joint Certificate Program-Professional Studies Certificate in Music Performance

The Department of Music at Northeastern University (NU) and the New England Conservatory (NEC), administered through its School of Continuing Education, offer a Professional Studies Certificate in Music Performance. This program primarily serves undergraduate music majors who audition competitively and are dedicated to advancing their skills on an instrument or voice in the classical or jazz styles.

The certificate in music performance is in addition to the student's NU undergraduate degree-it is an entirely separate and distinct credential. Credits are taken partly at Northeastern University and partly at the New England Conservatory and/or its continuing education division. Those courses taken directly from the New England Conservatory catalog require permission of NEC faculty but are part of a tuition exchange program shared between Northeastern University and the New England Conservatory, so they are treated as part of a Northeastern student's tuition package or otherwise billed like NU classes. Some courses may
be taken through NEC's School of Continuing Education, which is not part of the tuition exchange program; those courses are billed separately over and above tuition at Northeastern University and are not eligible for financial aid. Individual lessons with faculty at the New England Conservatory carry a lab fee each semester, which is billed separately from tuition.

Students should be aware that ensembles at NEC meet primarily during the morning and that academic courses offered at NEC meet primarily in the afternoons.

## Program Requirements

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

## Northeastern University Requirements

Complete 22 credits of course work at Northeastern University as indicated below.

## Code Title

Hours
Music Theory and Musicianship Placement
All students must take a theory placement exam. Students who do not place into MUSC 1201 or MUSI 1203 must first take the following course:
MUSC 1119 Fundamentals of Western Music Theory
Credits for MUSC 1119 do not count toward the certificate.
Music Theory and Musicianship ${ }^{1}$

| MUSC 1201 | Music Theory 1 | 4 |
| :--- | :--- | :--- |
| MUSC 1202 | Music Theory 2 | 4 |

Music in Context (Traditional, Ethnomusicological, Contemporary)
Complete 8 credits from the following:

| MUSC 1106 | Women in Music |
| :--- | :--- |
| MUSC 1109 | Introduction to Art, Drama, and Music |
| MUSC 1110 | Music in Popular Culture |
| MUSC 1111 | Rock Music |
| MUSC 1112 | Jazz |
| MUSC 1113 | Film Music |
| MUSC 1114 | Mozart |
| MUSC 1115 | Debussy and the Music of Paris |
| MUSC 1116 | Beethoven |
| MUSC 1131 | Music of Latin America and the |
| MUSC 1136 | Caribbean |
| MUSC 1140 | Global Pop Music |
| MUSC 1141 | Wired for Sound |
| MUSC 2101 | Black Popular Music |
| MUSC 2130 | Music of Asia |
| MUSC 2311 | Historical Traditions: America |
| MUSC 2312 | Historical Traditions: Classical |
| MUSC 2313 | Historical Traditions: World |
| MUSC 2315 | History of Electronic 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 3470 | War and Music |
| Note: Since the following course is repeatable, music |  |
| majors and combined majors may count the credits for |  |
| the second time they take this course toward the music |  |
| performance certificate. Students may utilize special |  |
| topics courses in music history to fulfill this requirement. |  |
| If interested in this option, students should consult the |  |
| coordinator of the certificate programs via email. |  |
| MUSC 3550 | Historical Traditions: Special Topics |
| MUSC 3560 | Topics in Music since 1900 |
| MUSC 4641 | Seminar in Ethnomusicology: Issues in |
| MUSI 3401 | Fieldwork and Methodology |
| Ensembles | Hip Hop in the Music Industry |
| Complete six music ensembles: |  |
| 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 1916 | Contemporary Music Ensemble |
| MUSC 1917 | Jazz Choir and Combo |
| MUSC 1918 | World Music Ensemble |
| MUSC 1919 | Fusion Ensemble |
| MUSC 1920 | Pep Band |
| Music majors with a concentration in music industry may substitute |  |
| (MUSI 1203) for Music Theory 1 (MUSC 1201) and Analyzing Popular |  |
| Genres (MUSI 1204) for Music Theory 2 (MUSC 1202). |  |

## New England Conservatory Requirements

Complete 26 credits of course work at New England Conservatory School of Continuing Education as indicated below.

## Code Title <br> Hours

## Private Studio Instruction

Complete 16 credits of (repeatable) private studio instruction
with New England Conservatory School of Continuing Education faculty. These credits may be accumulated in units of 2,3 , or 4 credits per semester. All private lessons require audition by NEC/NU faculty in order to assign private teacher placement. After being placed with a private teacher, and working with their certificate advisor, students must confirm with that teacher the length and number of lessons they will receive.

| MPNC 1102 | Music Instruction (2 credits) |
| :--- | :--- |
| MPNC 1103 | Music Instruction (3 credits) |
| MPNC 1104 | Music Instruction (4 credits) |

Music Technology
MPNC 1201 Contemporary Music Production and 1

## Electives

Complete 7 credits from the following:

| MPNC 1301 | Build Your Voice: Art/Skillful Singing |
| :---: | :---: |
| MPNC 1401 | Jazz Ear Training 1 |
| MPNC 1411 | Jazz Theory 1 |
| MPNC 1421 | Finale Chart Writing |
| MPNC 1451 | Jazz History 1 |
| MPNC 1501 | Introduction to Music-in-Education |
| MPNC 1612 | Group Piano Class |
| MPNC 1621 | The Art of Musical Sight-Reading |
| MPNC 1622 | The Art of Practice and Performance |
| MPNC 1623 | Developing Perfect Pitch 1 |
| MPNC 1631 | The Accidental Music Teacher. From Musical Artist to Creative Educator |
| MPNC 1642 | Sight-Singing for Singers |
| MPNC 1801 | Introduction to Composition 1 |
| MPNC 1802 | Contemporary Improvisation: Skill Building |
| MPNC 1803 | Contemporary Improvisation: Music of the World-The African Diaspora |
| MPNC 1901 | Art and Soul of Cinema: An Appreciation of Film Music |
| MPNC 1911 | Latin American Classical Traditions 1 |
| MPNC 2401 | Jazz Ear Training 2 |
| MPNC 2411 | Jazz Theory 2 |
| MPNC 2431 | Jazz Composition and Analysis |
| MPNC 2451 | Jazz History 2 |
| MPNC 2511 | Music-in-Education Seminar |
| MPNC 2512 | Models for Teaching and Learning for Music-in-Education |
| MPNC 2525 | Art and Science of Assessing Music Learning |
| MPNC 2526 | Music, Brain Development, and Learning |
| MPNC 2547 | Cross-Cultural Alternatives for Music-inEducation |
| MPNC 2548 | Teaching and Learning with Music Technology |
| MPNC 2556 | Improvisation in Music Education |
| MPNC 2561 | String Pedagogy |
| MPNC 2571 | Performing Artists in Schools |
| MPNC 2601 | Music Production for Media |
| MPNC 2612 | Piano Pedagogy |
| MPNC 2623 | Developing Perfect Pitch 2 |
| MPNC 2624 | Advanced Perfect Pitch |
| MPNC 2644 | Bach Arias for Singers and Instrumentalists |
| MPNC 2801 | Introduction to Composition 2 |
| MPNC 2911 | Latin American Classical Traditions 2 |
| MPNC 3401 | Jazz Ear Training 3 |
| MPNC 3411 | Jazz Theory 3 |
| MPNC 3431 | Jazz Arranging |
| MPNC 3611 | Piano Interpretation/Performance Seminar |
| MPNC 3631 | 18th-Century Tonal Counterpoint |
| MPNC 3633 | Modal Counterpoint |
| MPNC 3641 | Dramatic Coaching of Songs and Arias |


| MPNC 3643 | Vocal Repertoire: Coaching and <br> Performance |
| :--- | :--- |
| MPNC 3801 | Composition Seminar 1 |
| MPNC 3802 | Composition Seminar 2 |
| MPNC 4401 | Jazz Ear Training 4 |
| MPNC 4411 | Jazz Theory 4 |
| MPNC 4581 | Music-in-Education Guided Internship |
| MPNC 4591 | Music-in-Education Portfolio |
| Ensembles |  |
| Complete two music ensembles: |  |
| MPNC 1712 | Baroque Ensemble |
| MPNC 1713 | NEC Voices: A New Choral Experience |
| MPNC 1714 | Renaissance Ensemble |
| MPNC 1716 | Contemporary Improvisation Ensemble: |
| MPNC 1721 | Walking between Worlds |
| GPNC 1731 | Jazz Ensemble 1 |
| MPNC 1741 | Chamber Music Ensemble |
| MPNC 1742 | Chamber Music Duo |
| MPNC 1751 | Vocal Chamber Music |
| MPNC 1771 | Improvisation and Composition |
| MPNC 1781 | Ensemble |
| MPNC 3642 | Opera Ensemble Skills |

## Theatre

Website (https://camd.northeastern.edu/theatre)

## Scott Edmiston, MFA

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The Northeastern Department of Theatre is a community 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 education by aligning performance and production with academic inquiry and professional experiential learning. Our curriculum embraces diverse techniques, philosophies, and measures of success.

Connecting classroom experiences to the stage, we produce a diverse season of plays and musicals, ranging from classical theatre to world premieres. Nearly 50 performances take place annually in the Studio Theatre, where students collaborate with faculty and professional guest artists to achieve the highest standard of professionalism. With more than 30 co-op partners around the globe, students can unite the career elements of a conservatory program with the comprehensive education of a liberal arts degree.

Our multidimensional students develop a unique understanding of creative entrepreneurship. They are actors, directors, designers, technicians, playwrights, stage managers, producers, and adminstrators.

With 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

## Academic Progression Standards

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):

| Code | Title | Hours |
| :--- | :--- | ---: |
| 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 |

## Preapproved Template Program in Theatre

The Department of Theatre offers a preapproved template program that may be paired with another preapproved template program to create a combined major; to see a list of current preapproved template programs, visit our combined majors webpage (https://camd.northeastern.edu/ theatre/academics/undergraduate/flexible-curriculum).

Students may request admission to such a combined major via the Combined Major Approval form (http://www.northeastern.edu/ registrar/form-maj-comb.pdf), which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on preapproved template programs, see "Student-Requested Combined Major (p. 33)." For template program requirements, visit the myNortheastern web portal (http://my.northeastern.edu), click on the "Self-Service" tab, then on "My Degree Audit."

## Programs

## Bachelor of Arts (BA)

- Theatre (p. 202)
- Communication Studies and Theatre (p. 123)
- Cultural Anthropology and Theatre (p. 211)
- English and Theatre (p. 212)
- Media and Screen Studies and Theatre (p. 148)
- Theatre and Interaction Design (p. 102)


## Bachelor of Science (BS)

- Theatre (p. 205)
- American Sign Language and Theatre (p. 208)
- Media and Screen Studies and Theatre (p. 149)
- Theatre and Interaction Design (p. 103)


## Minors

- Theatre (p. 220)
- Dramatic Literature and the Human Experience (p. 220)
- Global Fashion Studies (p. 221)
- Musical Theatre (p. 199)
- Professional Presentation (p. 160)
- Theatrical Design (p. 222)


## Theatre, BA

The Northeastern Department of Theatre is a community 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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

Foundational Stages

| 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 | 8 |  |


| THTR 2300 | Classics of Global Theatre |
| :--- | :--- |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the <br> Dream |
| THTR 2340 | Theatre and Society |
| Making Theatre |  |
| THTR 1100 | Production Experience 1 |
| THTR 2000 | Production Experience 2 |


| THTR 3700 | Rehearsal and Production: The Art of Collaboration | 4 |
| :---: | :---: | :---: |
| 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-Playing Shakespeare (Theatre Performance Concentration) |  |
| THTR 3550 | Directing for the Stage |  |
| Electives |  |  |
| Complete the following electives or choose one of the concentrations below (p. 203). |  |  |
| Code | Title | Hours |
| Complete four of the following: |  | 16 |
| 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 | America Onstage: Dramatizing the Dream |  |
| 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 3200 | Queer Theatre and Performance |  |
| THTR 3300 | Devised Theatre Project: Collaborative Performance |  |
| THTR 3400 | Designing Combat for the Stage |  |
| THTR 3450 | Acting 3-Playing Shakespeare |  |
| THTR 3550 | Directing for the Stage |  |
| THTR 3570 | Musical Theatre Performance |  |

## Theatre Major Credit Requirement

Complete 60 semester hours in the major. The performance and production concentrations require 68 semester hours.

## Program Requirement

131 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 |
| :--- | :--- | ---: |
| Performance |  | 4 |
| THTR 1260 | Movement for the Actor | 4 |
| THTR 2342 | Acting 2 | 4 |
| THTR 2600 | Voice and Speech for the Actor |  |

Electives
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 <br> Making |
| THTR 2400 | Scenic Design <br> THTR 2500Breaking the Glass Ceiling: Women in <br> Theatre |
| THTR 3200 | Queer Theatre and Performance (Queer <br> Theatre - to be added) |
| THTR 3300 | Devised Theatre Project: Collaborative <br> Performance |
| THTR 3400 | Designing Combat for the Stage <br> (Designing Combat for the Stage - to be <br> added) |
| THTR 3450 | Acting 3-Playing Shakespeare |
| THTR 3550 | Directing for the Stage <br> THTR 3570 3570 |

## Theatre Production Concentration

A minimum grade of $C$ is required for all theatre courses in the production concentration.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Design and Production |  |  |
| Complete four of the following: |  | 16 |
| THTR 1230 | The Evolutic |  |
| THTR 2370 | Lighting |  |
| THTR 2380 | Costume |  |
| THTR 2385 | Fashion Making |  |
| THTR 2400 | Scenic De |  |
| Electives |  |  |
| Complete two | 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 3200 | Queer Theatre and Performance (Queer Theatre - to be added) |
| THTR 3300 | Devised Theatre Project: Collaborative Performance |
| THTR 3400 | Designing Combat for the Stage (Designing Combat for the Stage - to be added) |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |

## Plan of Study

## Theatre, BA

SAMPLE FOUR YEARS, ONE CO-OP IN SPRING/SUMMER

## Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| THTR 1000 | 1 THTR 1131 | 4 Foreign <br> language <br> core course | 4 Vacation | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| THTR 1100 | 1 Co-op \#1 | Co-op\#1 | 0 Vacation | 0 |
| THTR 2325 | 4 |  |  |  |
| THTR 1270 | 4 |  |  |  |
| Foreign <br> language <br> core course | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
| EEAM 2000 | 1 |  | 0 | 0 |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| THTR 2000 | 1 | Theatre elective \#3 | 4 | Elective | 4 | Vacation | 0 |
| Theatre texts and context \#2 | 4 | THTR 3700 | 4 | Elective | 4 |  |  |
| Theatre elective \#2 | 4 | Elective | 4 |  |  |  |  |
| Foreign language core course | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |  |
| THTR 4100 | 1 | Theatre advanced technique | 4 |  |  |  |  |
| Theatre elective \#4 | 4 | THTR 4702 | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  |  |  |  |

Total Hours: 133

## Theatre, BA

## SAMPLE FIVE 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 Vacation | 0 Vacation | 0 |
| THTR 1101 | 4 Theatre texts <br> and context <br> \#1 | 4 |  |  |
| THTR 1120 | 4 Theatre <br> elective \#1 | 4 |  |  |
| ENGW 1111 | 4 MATH 1215 | 4 | 0 | 0 |
| Elective | 4 | 16 | 0 |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| THTR 1100 | 1 Co-op \#1 | Co-op \#1 | 0 Vacation | 0 |
| THTR 1270 | 4 |  |  |  |
| THTR 2325 | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
| EEAM 2000 | 1 |  |  |  |
|  | 18 | 0 | 0 |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| THTR 2000 | 1 Co-op \#2 | Co-op \#2 | Vacation | 0 |
| Theatre texts | 4 |  |  |  |
| and context |  |  |  |  |
| \#2 |  |  |  |  |


| Theatre elective \#2 | 4 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Elective | 4 |  |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Theatre elective \#3 | 4 | Theatre elective \#4 |  | Vacation |  | Vacation | 0 |
| THTR 3700 |  | Foreign language core course | 4 |  |  |  |  |
| Foreign language core course | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| THTR 4100 | 1 THTR 4702 | 4 |
| Theatre <br> advanced <br> technique | 4 Elective | 4 |
| Foreign <br> language <br> core course | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 | 16 |

Total Hours: 133

## Theatre, BS

The Northeastern Department of Theatre is a community 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :---: | :---: | :---: |
| Foundational Stages |  |  |
| 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 (Senior Career Seminar) | 1 |
| Theatre Texts and Context |  |  |
| Complete two of the following: |  | 8 |
| THTR 2300 | Classics of Global Theatre |  |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the Dream |  |
| THTR 2340 | Theatre and Society |  |
| Making Theatre |  |  |
| THTR 1100 | Production Experience 1 | 1 |
| THTR 2000 | Production Experience 2 | 1 |
| THTR 3700 | Rehearsal and Production: The Art of Collaboration | 4 |
| THTR 4702 | Capstone Rehearsal and Performance | 4 |
| Advanced Technique |  |  |
| Complete one | 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-Playing Shakespeare (Theatre Performance Concentration) |  |
| THTR 3550 | Directing for the Stage |  |

## Electives

Complete the following electives or choose one of the concentrations below (p. 206).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete four | following: | 16 |
| 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 | America Onstage: Dramatizing the Dream |  |
| 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 3200 | Queer Theatre and Performance (Queer Theatre - to be added) |  |
| THTR 3300 | Devised Theatre Project: Collaborative Performance |  |
| THTR 3400 | Designing Combat for the Stage (Designing Combat for the Stage - to be added) |  |
| THTR 3450 | Acting 3-Playing Shakespeare |  |
| THTR 3550 | Directing for the Stage |  |
| THTR 3570 | Musical Theatre Performance |  |
| Theatre Major Credit Requirement <br> Complete 60 semester hours in the major. The performance and production concentrations require 68 semester hours. |  |  |
|  |  |  |
| Program Requirement |  |  |
| 131 total semester hours required |  |  |

## Theatre Performance Concentration

A minimum grade of C is required for all theatre courses in the performance concentration.

| Code <br> Performance | Title | Hours |
| :--- | :--- | ---: |
| THTR 1260 | Movement for the Actor | 4 |
| THTR 2342 | Acting 2 | 4 |
| THTR 2600 | Voice and Speech for the Actor | 4 |
| Electives |  | 12 |
| Complete three of the following: |  |  |
| 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 <br> THTR 2385Fashion Construction and Pattern <br> Making |
| THTR 2400 | Scenic Design <br> THTR 3200Queer Theatre and Performance (Queer <br> Theatre - to be added) |
| THTR 3300 | Devised Theatre Project: Collaborative <br> Performance |
| THTR 3400 | Designing Combat for the Stage <br> (Designing Combat for the Stage - to be <br> added) |
| THTR 3450 | Acting 3-Playing Shakespeare <br> THTR 3550Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |

## Theatre Production Concentration

A minimum grade of $C$ is required for all theatre courses in the production concentration.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Design and Production |  |  |
| 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 |  |
| Electives |  |  |
| 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 3200 | Queer Theatre and Performance (Queer Theatre - to be added) |  |


| THTR 3300 | Devised Theatre Project: Collaborative <br> Performance |
| :--- | :--- |
| THTR 3400 | Designing Combat for the Stage <br> (Designing Combat for the Stage - to be <br> added) |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |

Plan of Study
Theatre, BS
SAMPLE FOUR YEARS, ONE CO-OP 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 1101 | 4 Theatre texts <br> and context <br> $\# 1$ | 4 Elective | 4 |  |
| THTR 1120 | 4 Theatre <br> elective \#1 | 4 |  |  |
| ENGW 1111 | 4 MATH 1215 | 4 |  |  |
| Elective | 4 | 16 | 8 | 0 |


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| THTR 1100 | 1 | Co-op \#1 | Co-op \#1 | 0 |
| THTR 2325 | 4 |  |  |  |
| THTR 1270 | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
| Elective | 4 |  | 0 | 0 |
| EEAM 2000 | 1 |  |  |  |
|  | 18 | 0 | 0 |  |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| THTR 2000 | 1 <br> Theatre <br> elective \#3 | 4 Elective | 4 Vacation | 0 |
| Theatre texts <br> and context <br> \#2 | 4 THTR 3700 | 4 Elective | 4 |  |
| Theatre <br> elective \#2 | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
| Elective | 4 | 16 | 8 | 0 |

## Year 4

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| THTR 4100 | 1 | Theatre advanced technique | 4 |
| Theatre elective \#4 | 4 | THTR 4702 | 4 |
| Elective | 4 | Elective | 4 |
| Elective | 4 | Elective | 4 |
| Elective | 4 |  |  |
| 17 |  |  | 16 |

[^3]Theatre, BS
SAMPLE FIVE 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 Vacation | 0 Vacation | 0 |
| THTR 1101 | 4 Theatre texts <br> and context <br> \#1 | 4 |  |  |
| THTR 1120 | 4 Theatre <br> elective \#1 | 4 |  |  |
| ENGW 1111 | 4 MATH 1215 | 4 | 0 | 0 |
| Elective | 4 | 16 | 0 |  |
|  | 17 |  |  |  |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| THTR 1100 | 1 Co-op \#1 | Co-op \#1 | 0 | Vacation |$\quad 0$

Year 3

| Fall <br> THTR 2000 | Hours | Spring <br> Co-op \#2 | Hours | Summer 1 <br> Co-op \#2 | Hours | Summer 2 <br> Vacation | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Theatre texts and context \#2 | 4 |  |  |  |  |  |  |
| Theatre elective \#2 | 4 |  |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Theatre elective \#3 | 4 | Theatre elective \#4 | 4 | Vacation |  | Vacation | 0 |
| THTR 3700 | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
| 16 |  |  | 16 |  | 0 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| THTR 4100 | 1 THTR 4702 | 4 |
| Theatre <br> advanced <br> technique | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 | 16 |
|  | 17 |  |

Total Hours: 133

## American Sign Language and Theatre, BS

The American Sign Language (ASL) 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

American Sign Language Requirements
Code Title Hours

American Sign Language

| 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 |  | 4 |
| LING 1150 | Introduction to Language and  <br>  Linguistics |  |
| DEAF 2700 | ASL Linguistics | 4 |

Performance Interpreting

| INTP 3550 | Performance Interpreting-Interpreting |
| :--- | :--- |
| for the Theatre |  |

Interpreting
INTP 3500
The Interpreting Profession
2

## Theatre Requirements

| Code | Title | Hours |
| :--- | :--- | :--- |
| 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
Choose one of the following: 4

| THTR 2300 | Classics of Global Theatre |  |
| :--- | :--- | :--- |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the <br> Dream |  |
| THTR 2340 | Theatre and Society |  |
| Making Theatre |  | 1 |
| THTR 1100 | Production Experience 1 | 1 |
| THTR 2000 | Production Experience 2 | 8 |
| Intermediate or Advanced Technique | 8 |  |
| Choose two of the following: |  |  |


| THTR 2300 | Classics of Global Theatre |
| :--- | :--- |
| THTR 2310 | History of Musical Theatre |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the <br> Dream |
| 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 3450 | Acting 3-Playing Shakespeare |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| INTP 4940 | Interpreting Research Practicum | 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

## 4 Combined-Major Credit/Grade Requirement

Complete 88 semester hours in the major. A minimum grade of $C$ is required for all theatre courses.

## 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 |
| :--- | :---: | :---: | :---: | ---: |
| AMSL 1101 | 4 AMSL 1102 | 4 Vacation | 0 Vacation | 0 |
| DEAF 1500 | 4 THTR 1120 | 4 |  |  |
| THTR 1101 | 4 MATH 1215 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  | 0 |
|  | 16 | 16 | 0 | 0 |

Year 2
$\left.\begin{array}{lcccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { AMSL 2101 } & 4 \text { AMSL 2102 } & 4 & \text { Vacation } & 0 \text { Vacation }\end{array}\right) 0$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| INTP 4560 | 4 THTR 1260 | 4 Vacation | 0 Vacation | 0 |
| THTR 2325 | 4 INTP 3550 | 4 |  |  |
| THTR 3700 | 4 THTR 2300 | 4 |  |  |
| INTP 3510 | 4 AMSL 3102 | 4 |  | 0 |
|  | 16 | 16 | 0 | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| THTR 1100 | 1 Elective | 4 |
| ENGW 3315 | 4 Elective | 4 |
| THTR 3550 | 4 INTP 4940 | 4 |
| Elective | 4 THTR 2000 | 1 |
| Elective | 4 Elective | 4 |
|  | 17 | 17 |

Total Hours: 130

## Communication Studies and Theatre, BA

The Department of Communication Studies and the Department of Sociology offer an interdisciplinary combined major in communication studies and theatre. The combined major integrates the study of communication skills and processes with the study of theater history, playwriting, acting, and directing, as well as costume design, lighting, and scenery.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :--- | :--- | ---: |
| Communication Studies Common Requirements |  |  |
| COMM 1000 | Communication Studies at | 1 |
|  | Northeastern |  |
| 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 <br> Communication |
| COMM 1225 | Communication Theory |
| COMM 1255 | Communication in a Digital Age |

Cluster Course
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
Writing-Intensive Courses

| 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 3330 | Argumentation Theory |
| COMM 3400 | Rhetoric of Science |
| COMM 3414 | Great Speakers and Speeches 2, 1930- |
| COMM 3415 | Present |
| 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 | Communication, Politics, and Social <br> Change |
| COMM 4535 | Nonverbal Social Interaction |
| COMM 4605 | Youth and Communication Technology |
| COMM 4631 | Crisis Communication and Image <br> Management |

## Communication Studies Electives <br> Complete three COMM courses.

## Theatre Requirements

A minimum grade of $C$ is required in all theatre courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 |  |  |
| Choose one of the following: |  | 4 |
| THTR 2300 | Classics of Global Theatre |  |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the Dream |  |
| THTR 2340 | Theatre and Society |  |
| Intermediate or Advanced Technique |  |  |
| Choose two of | lowing: | 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 3200 Queer <br> Theatre) |
| THTR 2400 | Scenic Design |
| THTR 3200 | Queer Theatre and Performance |
| THTR 3300 | Devised Theatre Project: Collaborative <br> Performance |
| THTR 3400 | Designing Combat for the Stage |
| THTR 3450 | Acting 3-Playing Shakespeare |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |
| Making Theatre | Production Experience 1 |
| THTR 1100 | Production Experience 2 |
| THTR 2000 | Capstone Rehearsal and Performance |

## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Theatre Capstone |  |  |
| THTR 4702 | Capstone Rehearsal and Performance | 4 |

[^4]| Complete one of the following: | 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 Five Years, Three Co-ops in Spring/Summer 1

| Fall | Hours | Spring | Hours | Summer 1 H | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMM 1000 or THTR 1000 | 1 | COMM 1112 or 2301 |  | Communicaton studies foundation course | n 4 | Vacation |  |
| COMM 1101 | 4 | THTR 1131 |  | Communicatc studies elective | 4 |  |  |
| THTR 1101 |  | Foreign language course | 4 |  |  |  |  |
| THTR 1120 | 4 | ENGW 1111 | 4 |  |  |  |  |
| Foreign language elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |

## Year 2

|  | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Communicaton studies cluster course | $4 \text { Co-op }$ | Co-op | Vacation |  |
| Communicatc studies elective | 4 |  |  |  |
| THTR 2325 | 4 |  |  |  |
| EEAM 2000 | 1 |  |  |  |
| Theatre text and context elective | 4 |  |  |  |
|  | 17 | 0 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours | Summer 2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Intermediate or advanced THTR technique course | 4 Co-op | Co-op |  | Communication studies writingintensive | 4 |
| Foreign language culture course | 4 |  |  | Communicatic studies elective | 4 |
| ENGW 3314 or 3315 | 4 |  |  |  |  |


| THTR 1270 | 4 |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | 16 | 0 | 0 | 8 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Communication | 4 Co-op | Co-op | Vacation |  |

studies
writing-
intensive

| Intermediate <br> or advanced <br> technique <br> elective | 4 |  |  |  |
| :--- | ---: | ---: | ---: | :--- |
| THTR 1100 | 1 |  |  |  |
| Elective | 4 | 0 | 0 | 0 |
| Elective | 4 | 17 |  |  |
|  |  |  |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| THTR 4702 | 4 Elective | 4 |
| Communicati <br> studies <br> integrative <br> course | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 THTR 2000 | 1 |
|  | Elective | 4 |
|  | 16 | 17 |

Total Hours: 132

## 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. Successful students 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## 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 <br>  <br> Development |
| ANTH 4505 | Native North Americans |
| ANTH 4510 | Anthropology of Africa |
| ANTH 4515 | Culture and Politics in Modern India |

## Anthropology Electives

Complete six courses in the following range. Two study- 24 abroad courses may count toward this requirement with prior permission from the department:

ANTH 2300 to ANTH 4999
Social Science Electives
Complete three social science courses from the following subject areas:

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 |
| :--- | :--- | ---: |
| Foundational Stages |  | 4 |
| 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 2300 | Classics of Global Theatre |
| :--- | :--- |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the <br>  <br> Dream |
| 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 2500 | Breaking the Glass Ceiling: Women in <br> Theatre |
| THTR 3450 | Acting 3-Playing Shakespeare |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |


| Integrative Requirements <br> Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative Courses |  | 4 |
| THTR 4702 | Capstone Rehearsal and Performance | 4 |
| ANTH 2300 | Reading Culture through Ethnography | 4 |

## Cultural Anthropology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Program Requirement

128 total semester hours required

## English and Theatre, BA

The Department of English and the Department of Theatre 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 diverse English and American literatures. Students develop the capacity for interpreting a variety of texts through performance and writing to engage diverse 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## English Requirements

| Code Title | Hours |
| :---: | :---: |
| 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 |
| Foundational Courses |  |
| ENGL 1400 Introduction to Literary Studies | 4 |
| ENGL 1160 Introduction to Rhetoric <br> or ENGL 1410 Introduction to Writing Studies | 4 |
| Diversity |  |
| Complete one of the following courses. This course may also be used to fulfill an additional English requirement below: | 4 |



Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following: 4
ENGL 2260 Romantic Poetry

| ENGL 2330 | The American Renaissance |
| :--- | :--- |
| ENGL 2340 | American Realism |
| ENGL 3619 | Emerson and Thoreau |
| ENGL 3720 | 19th-Century Major Figure |
| ENGL 4040 | Topics in 19th-Century Literatures |
| ENGL 2301 | The Graphic Novel |
| ENGL 2410 | Contemporary American Literature |
| ENGL 2440 | The Modern Bestseller |



## Comparative Literature

Complete one of the following:

| ENGL 1120 | Trouble in Utopia |
| :--- | :--- |
| ENGL 1130 | Animals, Objects, Humans |
| ENGL 1450 | Reading and Writing in the Digital Age |
| ENGL 1500 | British Literature to 1800 |
| ENGL 1502 | American Literature to 1865 |
| ENGL 1503 | American Literature 1865 to Present |
| ENGL 2150 | Literature and Digital Diversity |
| ENGL 2370 | The Modern Short Story |
| ENGL 2380 | The Modern Novel |
| ENGL 2400 | Modern Poetry |
| ENGL 2420 | Contemporary Poetry |
| ENGL 2430 | Contemporary Fiction |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2510 | Horror Fiction |
| ENGL 2520 | Science Fiction |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2620 | What Is Nature? (Abroad) |
| ENGL 2690 | Boston in Literature |
| ENGL 3427 | The Literature of Science |


| ENGL 3487 | Film and Text (Abroad) |
| :--- | :--- |
| ENGL 3582 | Children's Literature |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in <br> Literature |
| ENGL 4070 | Topics in Genre |
| Writing |  |

Complete one of the following: 4

| ENGL 2700 | Creative Writing |
| :--- | :--- |
| ENGL 2710 | Style and Editing |
| ENGL 2730 | Digital Writing |
| 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 $3378 \quad$ Fiction Workshop
ENGL 3380 Topics in Writing
ENGL 3382 Publishing in the 21st Century
ENGL 3384 The Writer's Marketplace
Capstone
ENGL $4710 \quad$ Capstone Seminar 4
or ENGL 4720
Capstone Project
English Electives
Complete two additional ENGL electives. 8

## 4 Theatre Requirements

A minimum grade of $C$ is required in all theatre courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Foundational Stages |  |  |
| 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 2300 | Classics of Global Theatre |  |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the Dream |  |
| 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 |

## Intermedate or Advanced Technique

Complete two of the following:

| 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 |
| THTR 3400 | Performance |
| THTR 3450 | Acting 3-Playing Shakespeare |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |

## Integrative Requirements

Courses used in the integrative requirements cannot double-count in other areas of the major.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative Courses |  |  |$\quad$ Introduction to Shakespeare $\quad 4$.

## English and Theatre Major Credit Requirement

90 semester hours required in the major

## Program Requirement

128 total semester hours required

## 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, writing, and design with related studies in screenwriting, media technology, and media production. Students develop a personalized technique for the practices of making theatre, film (documentary and fiction), 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), 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

Introduction to College

| MSCR 1000 | Media and Screen Studies at <br> Northeastern | 1 |
| :--- | :--- | :--- |

Introduction to Media Studies
MSCR $1220 \quad$ Media, Culture, and Society
Introduction to Screen Studies
MSCR $2220 \quad$ Understanding Media and Film 4

Advanced Theory
MSCR 4623 Theories of Media and Culture 4
Media and Screen Studies Electives
Complete four of the following: 16

| CINE 2160 | Narrative Filmmaking |
| :--- | :--- |
| CINE 3389 | Screenwriting |
| CINE 3392 | Gender and Film |
| CINE 3446 | Topics in Documentary Production |
| CINE 3920 | Topics in Film Studies |
| MSCR 1230 | Introduction to Film Production |
| MSCR 1310 | Introduction to Digital Media Culture |
| MSCR 2302 | Advertising and Promotional Culture |
| MSCR 2325 | Global Media |
| MSCR 2895 | Film Analysis |
| MSCR 3210 | Special Topics in Media and Screen |
| MSCR 3420 | Studies |
| MSCR 3422 | Medial Media Culture |
| MSCR 3426 | Popular Music as Media Form |
| MSCR 3435 | Media Industries |
| MSCR 3437 | Media and Identity |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |
| ARTH 2212 | Survey of the Still and Moving Image |

Advanced Media and Screen Electives
Complete two of the following:

| CINE 3500 | Film Theory |
| :--- | :--- |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen <br>  |


| MSCR 4992 | Directed Study |
| :--- | :--- |
| MSCR 4993 | Independent Study |

## Theatre Requirements

Code Title Hours

## 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 2300 | Classics of Global Theatre |  |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the Dream |  |
| 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 | following: | 8 |


| THTR 2300 | Classics of Global Theatre |
| :--- | :--- |
| THTR 2310 | History of Musical Theatre |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the <br> Dream |
| 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 |
| THTR 2600 | Voice and Speech for the Actor |
| THTR 3200 | Queer Theatre and Performance (Queer <br> Theatre - to be added) |


| THTR 3300 | Devised Theatre Project: Collaborative <br> Performance |
| :--- | :--- |
| THTR 3400 | Designing Combat for the Stage <br> (Designing Combat for the Stage - to be <br> added) |
| THTR 3450 | Acting 3-Playing Shakespeare |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |


| Integrative Requirement <br> Code $\quad$ Title <br> Media and Screen Studies Capstone <br> MSCR 4623$\quad$ Hours |
| :--- | ---: |

## Theatre Capstone

THTR 4702 Capstone Rehearsal and Performance 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

130 total semester hours required

## Plan of Study

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | :---: | :---: |
| MSCR 1000 | 1 MSCR 2220 | 4 Elective | 4 Vacation |  |
| MSCR 1220 | 4 MSCR | 4 Elective | 4 |  |
| THTR 1101 | 4 THTR 1131 | 4 |  |  |
| THTR 1120 | 4 THTR 1270 | 4 |  |  |
| ENGW 1111 | 4 | 16 | 8 | 0 |
|  | 17 |  |  |  |


| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MSCR <br> elective | 4 Co-op |  | Co-op |  | Foreign language core course | 4 |
| Advanced 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 | 4 Co-op | Co-op | Vacation | 0 |

elective


Year 4

MSCR
elective

Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours
4 MSCR $4623 \quad 4$ Vacation 0 Vacation

| Intermediate <br> or advanced <br> technique <br> elective | 4 Elective | 4 |  |  |
| :--- | :---: | :---: | :--- | :--- |
| Foreign <br> language <br> core course | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 | 0 | 0 |

Year 5

| Fall | Hours |
| :--- | ---: |
| THTR 4702 | 4 |
| Elective | 4 |
| Elective | 4 |
| Elective | 4 |
|  | 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, writing, and design with related studies in screenwriting, media technology, and media production. Students develop a personalized technique for the practices of making theatre, film (documentary and fiction), 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), 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 |  |
| Introduction to College |  |  |
| MSCR 1000 | Media and Screen Studies at | 1 |
|  | Northeastern |  |

Introduction to Media Studies
MSCR $1220 \quad$ Media, Culture, and Society 4
Introduction to Screen Studies
MSCR $2220 \quad$ Understanding Media and Film 4

Advanced Theory
MSCR 4623 Theories of Media and Culture 4

Media and Screen Studies Electives
Complete four of the following: 16

| CINE 2160 | Narrative Filmmaking |
| :--- | :--- |
| CINE 3389 | Screenwriting |
| CINE 3392 | Gender and Film |
| CINE 3446 | Topics in Documentary Production |
| CINE 3920 | Topics in Film Studies |
| MSCR 1230 | Introduction to Film Production |
| MSCR 1310 | Introduction to Digital Media Culture |
| MSCR 2302 | Advertising and Promotional Culture |
| MSCR 2325 | Global Media |
| MSCR 2895 | Film Analysis |
| MSCR 3210 | Special Topics in Media and Screen |
| MSCR 3420 | Studies |
| MSCR 3422 | Medial Media Culture |
| MSCR 3426 | Popular Music as Media Form |
| MSCR 3435 | Media Industries |
| MSCR 3437 | Media and Identity |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |
| ARTH 2212 | Survey of the Still and Moving Image |

Advanced Media and Screen Electives
Complete two of the following: 8

| CINE 3500 | Film Theory |
| :--- | :--- |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen <br>  <br> Studies |
| MSCR 4992 | Directed Study |
| MSCR 4993 | Independent Study |

## Theatre Requirements

Code Title Hours

## 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 2300 | Classics of Global Theatre |
| :--- | :--- |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the <br>  <br> Dream |
| THTR 2340 | Theatre and Society |

Making Theatre

| THTR 1100 | Production Experience 1 | 1 |
| :---: | :---: | :---: |
| THTR 2000 | Production Experience 2 | 1 |
| Intermedate or Advanced Technique |  |  |
| Complete two | llowing: | 8 |
| THTR 2300 | Classics of Global Theatre |  |
| THTR 2310 | History of Musical Theatre |  |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the Dream |  |
| 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 3200 | Queer Theatre and Performance (Queer Theatre - to be added) |  |
| THTR 3300 | Devised Theatre Project: Collaborative Performance |  |
| THTR 3400 | Designing Combat for the Stage (Designing Combat for the Stage - to be added) |  |
| THTR 3450 | Acting 3-Playing Shakespeare |  |
| THTR 3550 | Directing for the Stage |  |
| THTR 3570 | Musical Theatre Performance |  |
| Integrative Requirement |  |  |
| Code | Title | Hours |
| Media and Screen Studies Capstone |  |  |
| MSCR 4623 | Theories of Media and Culture | 4 |
| Theatre Capstone |  |  |
| THTR 4702 | Capstone Rehearsal and Performance | 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

130 total semester hours required

## Plan of Study

$\left.\begin{array}{lcccc}\text { Year 1 } & & & & \\ \text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { MSCR 1000 } & 1 \text { MSCR 2220 }\end{array} \quad \begin{array}{c}\text { 4 Elective }\end{array}\right)$


Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 <br> Vacation | Hours |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| MSCR <br> elective | 4 Co-op | Co-op |  |  |  |
| Advanced | 4 |  |  |  |  |
| MSCR <br> elective |  |  |  |  |  |
| Intermediate <br> or advanced <br> technique <br> elective | 4 |  |  |  | 0 |
| Elective | 4 | 0 | 0 | 0 |  |
| THTR 2000 | 1 | 17 |  |  |  |

## Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MSCR <br> elective | 4 | MSCR 4623 | 4 | Vacation |  | Vacation |  |
| Intermediate or advanced technique elective | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

Year 5

| Fall | Hours |
| :--- | ---: |
| THTR 4702 | 4 |
| Elective | 4 |
| Elective | 4 |
| Elective | 4 |
|  | 16 |

Total Hours: 132

## Theatre and Interaction Design, BA

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Theatre Requirements

A minimum grade of $C$ is required for all theatre courses.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Foundational Stages |  | 4 |
| 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 |  |
| Making Theatre |  | 1 |
| THTR 1100 | Production Experience 1 | 1 |
| THTR 2000 | Production Experience 2 | 4 |
| THTR 4702 | Capstone Rehearsal and Performance | 4 |
| Major Electives |  |  |
| Complete one from the following: |  |  |
| THTR 2300 | Classics of Global Theatre |  |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the |  |
| THTR 2340 | Dream | Theatre and Society |


| Intermediate/Advanced Electives <br> Complete two from the following: <br> THTR 2300 | Classics of Global Theatre  <br> THTR 2310 History of Musical Theatre <br> THTR 2315 Rebels of Modern Drama <br> THTR 2320 America Onstage: Dramatizing the <br> Dream <br> THTR 2330 Playwriting <br> THTR 2340 Theatre and Society <br> THTR 2342 Acting 2 <br> THTR 2345 Acting for the Camera <br> THTR 2346 Viewpoints <br> THTR 2300 Classics of Global Theatre <br> THTR 2370 Lighting Design <br> THTR 2380 Costume Design <br> THTR 2400 Scenic Design <br> THTR 2500 Breaking the Glass Ceiling: Women in <br> Theatre <br> THTR 2600 Voice and Speech for the Actor <br> THTR 3450 Acting 3-Playing Shakespeare <br> THTR 3550 Directing for the Stage <br> THTR 3570 Musical Theatre Performance |
| :--- | :--- |

## Interaction Design Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Art + Design at Northeastern |  |  |
| ARTF 1000 | Art and Design at Northeastern | 1 |
| Art + Design Fundementals |  |  |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing | 4 |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing | 4 |
| Design |  |  |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 2250 | Typography 1 | 4 |
| ARTG 2251 | Type Tools | 1 |
| ARTG 2260 | Programming Basics | 4 |
| ARTG 2400 | Interaction Design 1: Responsive | 4 |
| ARTG 2401 | Interaction Design Tools | 1 |
| ARTG 3350 | Typography 2 | 4 |
| ARTG 3451 | Information Design 1 | 4 |
| ARTG 3700 | Interaction Design 2: Mobile | 4 |
| Design Project |  |  |
| Complete one of the following: |  | 4 |
| ARTG 4550 | Design Degree Project 1 |  |
| ARTG 4700 | Interaction Team Degree Project 1 |  |
| Major Electives |  |  |
| Art + Design History |  |  |
| 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 |  |
| Art + Design Electives |  |  |
| Complete one of the following: |  | 4 |
| ARTD 2360 | Photo Basics |  |
| ARTD 2380 | Video Basics |  |
| ARTF 1120 | Observational Drawing |  |
| ARTF 1121 | Conceptual Drawing |  |
| ARTF 1124 | 3D Fundamentals: Structure and Drawing |  |
| ARTF 2220 | 4D Fundamentals: Sequence and Drawing |  |
| ARTG 2252 | Graphic Design 1 |  |
| ARTG 3250 | Physical Computing |  |
| ARTG 3460 | Identity and Brand Design |  |
| ARTG 3351 | Time-Based Design |  |
| ARTG 4552 | Information Design 2 |  |
| ARTG 4553 | Environmental Information Design |  |
| ARTG 4554 | Typography 3 |  |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| THTR 4702 | Capstone Rehearsal and Performance | 4 |
| ARTG 4551 | Design Degree Project 2 | 4 |
| or ARTG 4701 | Interaction Team Degree Project 2 |  |

## Theatre and Interaction Design Combined-Major Credit Requirement

Complete 98 semester hours in the major.

## Program Requirement

128 total semester hours required

## Theatre and Interaction Design, 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Theatre Requirements

A minimum grade of C is required for all theatre courses.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Foundational Stages |  | 4 |
| 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 | 1 |
| Making Theatre |  | 1 |
| THTR 1100 | Production Experience 1 | 4 |
| THTR 2000 | Production Experience 2 | 4 |
| THTR 4702 | Capstone Rehearsal and Performance |  |
| Major Electives |  |  |
| Complete one from the following: |  |  |
| THTR 2300 | Classics of Global Theatre |  |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the |  |
| THTR 2340 | Dream | Theatre and Society |
| Intermediate/Advanced Electives |  |  |
| Complete two from the following: |  |  |
| THTR 2300 | Classics of Global Theatre |  |
| THTR 2310 | History of Musical Theatre |  |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the |  |
| THTR 2330 | Dream | 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 <br>  <br> Theatre |
| THTR 2600 | Voice and Speech for the Actor |
| THTR 3450 | Acting 3-Playing Shakespeare |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |

## Interaction Design Requirements

Code Title Hours

Art + Design at Northeastern
ARTF 1000 Art and Design at Northeastern 1
Art + Design Fundementals
ARTF 1122 2D Fundamentals: Surface and Drawing 4
ARTF 2223 5D Fundamentals: Experience and 4 Drawing
Design
ARTG 1250 Design Process Context and Systems 4
ARTG 2250 Typography 1 4
ARTG 2251 Type Tools 1

ARTG $2260 \quad$ Programming Basics 4
ARTG 2400 Interaction Design 1: Responsive 4
ARTG 2401 Interaction Design Tools 1
ARTG $3350 \quad$ Typography $2 \quad 4$
ARTG 3451 Information Design $1 \quad 4$
ARTG $3700 \quad$ Interaction Design 2: Mobile 4
Design Project
Complete one of the following: 4

| ARTG 4550 | Design Degree Project 1 |  |
| :---: | :---: | :---: |
| ARTG 4700 | Interaction Team Degree Project 1 |  |
| Major Electives |  |  |
| Art + Design History |  |  |
| 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 |  |
| Art + Design Electives |  |  |
| Complete one | following: | 4 |


| ARTD 2360 | Photo Basics |
| :--- | :--- |
| ARTD 2380 | Video Basics |
| ARTF 1120 | Observational Drawing |
| ARTF 1121 | Conceptual Drawing |
| ARTF 1124 | 3D Fundamentals: Structure and <br> Drawing |
| ARTF 2220 | 4D Fundamentals: Sequence and <br> Drawing |
| ARTG 2252 | Graphic Design 1 |
| ARTG 3250 | Physical Computing |
| ARTG 3460 | Identity and Brand Design |
| ARTG 3351 | Time-Based Design |
| ARTG 4552 | Information Design 2 |


| ARTG 4553 | Environmental Information Design |
| :--- | :--- |
| ARTG 4554 | Typography 3 |

Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| THTR 4702 | Capstone Rehearsal and Performance | 4 |
| ARTG 4551 | Design Degree Project 2 | 4 |
| or ARTG 4701 | Interaction Team Degree Project 2 |  |

## Theatre and Interaction Design Combined-Major Credit Requirement

Complete 98 semester hours in the major.

## Program Requirement

128 total semester hours required

## Theatre, Minor

Theatre minors are important and fully engaged members of our theatre department and community. Minors may be interested in becoming professional theatre artists or looking for creative inspiration or to enhance their communication skills. No two student experiences are alike, and you can choose the path that matches your theatre interests and ambitions.

## 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):

| THTR 1125 | Improvisation |
| :--- | :--- |
| THTR 1130 | Introduction to Acting |
| THTR 1131 | Technical Theatre 1 |
| THTR 1135 | Introduction to Acting Abroad |
| THTR 1160 | The Professional Voice |
| THTR 1165 | The Professional Voice Abroad |
| 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 | America Onstage: Dramatizing the <br> Dream |
| :--- | :--- |
| 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 <br> THeatre |
| THTR 3300 | Voice and Speech for the Actor <br> Performance |
| THTR 3450 | Acting 3-Playing Shakespeare |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |

## Making Theatre

Code Title Hours

Participate in a theatre department production:
THTR $1100 \quad 1$

NOTE: If cast in a substantial role, THTR 3700 Rehearsal and Production (4 semester hours) can be substituted for THTR 1100.

## GPA Requirement

2.000 GPA required in the minor

## Dramatic Literature and the Human Experience, Minor

This minor is designed for students with an interest in experiencing theatre as ideas, connecting theatre and creative writing, and understanding human behavior and psychology as captured by the written word. Students can select a personalized path of study to explore a range of diverse and innovative plays, playwrights, dramatic theories, forms, and movements spanning from Ancient Greece to today.

The dramatic literature and human experience minor combines courses from the Department of Theatre with additional choices from the English, communication studies, and media and screen studies departments.

## Minor Requirements

Complete all courses listed below unless otherwise indicated.

## Required Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| THTR 1101 | Introduction to Theatre | 4 |

## Electives

| Code Title | Hours |
| :--- | ---: |
| Choose three from the following: | 12 |
| Note: Two of the three electives must be selected within the |  |
| theatre curriculum. |  |

CINE 3389 Screenwriting

| COMM 1511 | Communication and Storytelling |
| :--- | :--- |
| ENGL 1600 | Introduction to Shakespeare |
| THTR 2300 | Classics of Global Theatre |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the <br> Dream |
| THTR 2325 | From Script to Stage |
| THTR 2330 | Playwriting |
| THTR 2335 | Boston Theatre Experience |
| THTR 2340 | Theatre and Society |
| THTR 2500 | Breaking the Glass Ceiling: Women in <br> THTR 3200 |

Note: For theatre majors, only Introduction to Theatre (THTR 1101) may be double counted within the existing theatre requirements. They must take three additional courses to complete the minor (for a total of six dramatic literature courses).

## GPA Requirement

2.000 GPA required in the minor

## Global Fashion Studies, Minor

This program of study has grown from steadily increasing student enthusiasm in fashion history and costume design courses offered by the Department of Theatre. The primary focus of this new minor is on the context, culture, and practices of the fashion industry. This minor will appeal to students whose interests lie in fashion marketing, fashion journalism, fashion photography, and fashion and textile technology.

As a prominent global industry, fashion offers employment opportunities in a wide variety of areas. This new minor allows Northeastern students to identify, analyze, demonstrate, and communicate how the evolving and highly competitive fashion industry functions artistically, socially, historically, economically, ethically, and culturally in a global market. Courses in this minor include opportunities for design thinking and collaborative maker activities as well as the development of innovation and entrepreneurship.

## Minor Requirements

Complete all courses listed below unless otherwise indicated.

## Required Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | 4 |  |
| THTR 1236 | Introduction to Global Fashion Studies: |  |
|  | History, Theory, and Contemporary <br> Practice |  |
| THTR 1237 | Introduction to Global Fashion <br>  | Studies Abroad: History, Theory, and <br> Contemporary Practice |

## Electives

| Code | Title |
| :--- | :--- |
| Complete two of the following: |  |
| ARTE 4901 | Special Topics in Art and Design Studio |
| THTR 1230 | The Evolution of Fashion and Costume |
| THTR 1233 | 19th- and 20th-Century Fashion in <br> 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 2550 | Mass Media and the Fashion Industry in Europe |
| THTR 3350 | Fashion Marketing and Merchandising in Europe |
| Complete one of the following: |  |
| 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

## Musical Theatre, Minor

A minor in musical theatre gives students a practical foundation in all aspects of the theatre including performance, music, design, and the history of the theatre.

## Minor Requirements

Complete all courses listed below unless otherwise indicated.

## Required Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| THTR 1130 | Introduction to Acting | 4 |
| THTR 4882 | Special Topics: Theatre Performance | 4 |
|  | (Singing for Musical Theatre) |  |

## Making Musical Theatre

| Code | Title | Hours |
| :--- | :--- | ---: |
| Choose one of the following: | 1 |  |
| MUSC 1901 | Music Lessons 1 |  |
| THTR 1100 | Production Experience 1 |  |

## Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| Choose two of the following: | 8 |  |
| THTR 1101 | Introduction to Theatre |  |
| MUSC 2210 | Introduction to Songwriting |  |
| THTR 2310 | History of Musical Theatre |  |
| THTR 2330 | Playwriting |  |
| THTR 3570 | Musical Theatre Performance |  |

## GPA Requirement

2.000 GPA required in the minor

## Professional Presentation, Minor

Whether you are speaking at a meeting, engaging an audience, pitching a new idea, or energizing your team, effective presentation skills are essential to professional success. This dynamic, interdisciplinary minor is designed to help you become a more confident, creative, and compelling communicator. Uniting the acting training of theatre with practical techniques of communications studies, develop an individualized course of study that will empower your voice and speech, cultivate your onstage persona, and develop high-impact presentation skills to enhance your career prospects.

## Minor Requirements

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

Presentation Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete two of the following: | 8 |  |
| COMM 1112 | Public Speaking |  |
| COMM 1113 | Business and Professional Speaking |  |
| COMM 1210 | Persuasion and Rhetoric |  |
| COMM 1511 | Communication and Storytelling |  |

## Performance Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete two of the following: | 8 |  |
| THTR 1125 | Improvisation |  |
| THTR 1130 | Introduction to Acting |  |
| THTR 1135 | Introduction to Acting Abroad |  |
| THTR 1160 | The Professional Voice |  |
| THTR 1165 | The Professional Voice Abroad |  |
| THTR 2345 | Acting for the Camera |  |

## GPA Requirement

2.000 GPA required in 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 Department 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 |
| THTR 2600 | Voice and Speech for the Actor |
| 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 |  |
| THTR 2600 | Voice and Speech for the Actor |  |
| MUST 2320 | Sound Design |  |

## GPA Requirement

### 2.000 GPA required in the minor

## D'Amore-McKim School of Business

Website (http://www.damore-mckim.neu.edu)
Raj Echambadi, PhD, Dunton Family Dean
Jeffery A. Born, PhD, Associate Dean of Undergraduate Programs
Kate E. Klepper, MBA, Associate Dean of Graduate Programs
Emery A. Trahan, PhD, Senior Associate Dean of Faculty and Research
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617.373.3270
617.373 .4804 (fax)

Cynthia Elcock, Academic Assistant, c.elcock@northeastern.edu
Modern business faces many opportunities and challenges due to increasing globalization of economies; political change; and the effects of foreign policy, technological advances, regulatory policies, and economic policies. The result is increased demand for highly educated individuals equipped to analyze and address this changing environment.

Programs in the D'Amore-McKim School of Business are designed for students who are preparing to take on managerial responsibility or starting their own companies. These programs seek to help students develop the ability to recognize and solve business and organizational problems and understand the role of business in the community, the nation, and the world. The school strives to assist students in becoming global citizens, designing innovative solutions, and developing their own professional paths and passions.

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
- Entrepreneurship and Innovation
- Finance
- Management
- Management Information Systems
- Marketing
- 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.

Co-op provides a learning experience beyond the classroom. Textbook examples come to life in real-world business settings where business theories are applied to actual business problems. In turn, these experiences serve to stimulate inquiry and discussion back in the classroom. This interaction between college studies and cooperative education sets the stage for a lifetime of learning.

The undergraduate program of the D'Amore-McKim School of Business meets the standards of the American Assembly of 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 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 coop) 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

It is D'Amore-McKim School of Business policy that, with permission of their academic advisor, co-op coordinator, and employer, students may take a maximum of one class while on co-op during the fall, spring, or summer term.

## 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 Admissions Office.

The D'Amore-McKim School of Business at Northeastern University is accredited by the Association for the Advancement of Collegiate Schools of Business (AACSB) 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.

## Bachelor of Science in Business Administration, BSBA

The Bachelor of Science in Business Administration program integrates the theory and practice of management through active learning, problemdriven research, corporate partnerships, and experiential assignments. As part of the degree program, all students are expected to participate in the co-op program, where they participate in paid work placements related to their field of study. The BS degree can be accomplished using the fouryear co-op plan or with 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).
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 |
| :--- | :--- | ---: |
| Accounting |  |  |
| ACCT 1201 | Financial Accounting and Reporting | 4 |
| ACCT 2301 | Managerial Accounting | 4 |
| Finance |  | 4 |
| FINA 2201 | Financial Management | 4 |
| Marketing Introduction to Marketing <br> MKTG 2201 Management Information Systems <br> Management Information Systems  <br> MISM 2301 Supply Chain and Operations <br> Operations Management and Supply Chain Management 4 <br> SCHM 2301 Management |  |  |
| Organizational Behavior 4 <br> ORGB 3201 Organizational Behavior | 4 |  |


| Strategy in Action |  | 4 |
| :--- | :--- | :--- |
| STRT 4501 | Strategy in Action | 4 |
| or STRT 4516 | External Case Competition Challenge |  |
| International Business/Social Responsibility |  |  |
| INTB 1203 | International Business and Global <br> Social Responsibility | 4 |
| Statistics | Business Statistics | 4 |
| MGSC 2301 |  | 4 |

## Concentration

Complete the required concentration appropriate to your program. One concentration is required. A second concentration is optional.

- Accounting (p. 259)
- Business/Interdisciplinary (p.259) (second concentration only)
- Entrepreneurship and Innovation (p. 259)
- Finance (p. 260)
- Management (p. 261)
- Management Information Systems (p. 261)
- Marketing (p. 262)
- Supply Chain Management (p. 262)


## Supporting Courses

Code Title Hours

Mathematics
\(\left.$$
\begin{array}{l}\text { Complete one of the following: } \\
\hline \begin{array}{ll}\text { MATH 1231 } & \text { Calculus for Business and Economics } \\
\text { MATH 1241 } & \text { Calculus 1 }\end{array} \\
\hline \text { MATH 1242 }\end{array}
$$ $$
\begin{array}{l}\text { Calculus 2 } \\
\text { MATH 1251 }\end{array}
$$ \begin{array}{l}Calculus and Differential Equations for <br>

Biology 1\end{array}\right]\)| MATH 1252 | Calculus and Differential Equations for <br> Biology 2 |
| :--- | :--- |
| MATH 1340 | Intensive Calculus for Engineers |
| MATH 1341 | Calculus 1 for Science and Engineering |
| MATH 1342 | Calculus 2 for Science and Engineering |

## Business Cooperative Education Requirement

Complete two six-month co-op experiences.

## Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

## Program Requirement

128 total semester hours required

## Plan of Study

## Five Years, Three 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 |  | Business core ${ }^{1}$ | 4 | Vacation | 0 | Vacation | 0 |
| BUSN 1102 |  | Business core ${ }^{1}$ | 4 |  |  |  |  |
| ENGW 1111, <br> ECON 1116, <br> or MATH <br> 1231 (FQ) | 4 | ENGW 1111, <br> ECON 1116, <br> or MATH <br> 1231 (FQ) | 4 |  |  |  |  |
| Take two: | 8 | Take one: | 4 |  |  |  |  |
| $\begin{aligned} & \text { MGSC } 230 \\ & \text { (AD) } \end{aligned}$ |  | $\begin{aligned} & \text { MGSC } 23 \\ & \text { (AD) } \end{aligned}$ |  |  |  |  |  |
| ACCT 1201 |  | ACCT 120 |  |  |  |  |  |
| INTB 1203 (IC and ER) |  | INTB 120 (IC and ER) |  |  |  |  |  |
|  | 17 |  | 16 |  | 0 |  | 0 |

Year 2

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Concentration course |  | Concentration course | 4 Vacation | 0 Co-op | 0 |
| Business core ${ }^{1}$ | 4 | Business core ${ }^{1}$ | 4 |  |  |
| Business core ${ }^{1}$ | 4 | Elective ${ }^{2}$ | 4 |  |  |
| ECON 1116, 1115, or MATH 1231 (FQ) | 4 | ECON 1116, 1115, or MATH 1231 (FQ) | 4 |  |  |
| BUSN 1100 | 1 | BUSN 1103 | 1 |  |  |
|  | 17 |  | 17 | 0 | 0 |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | Concentration course | ก 4 | Elective |  | Co-op | 0 |
|  |  | ENGW 3304 | 4 | Elective | 4 |  |  |
|  |  | ORGB 3201 | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | Concentration course ${ }^{3}$ | ก 4 | Elective | 4 | Co-op | 0 |
|  |  | Elective ${ }^{4}$ | 4 | Elective | 4 |  |  |
|  |  | Elective ${ }^{4}$ | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

## Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: |
| Co-op | 0 STRT 4501 | 4 |
|  | (WI, CE, and |  |
|  | SI) |  |
|  | Elective $^{4}$ | 4 |
|  | Elective $^{4}$ | 4 |


| Elective |  |
| :--- | :---: |
| 0 | 4 |
| Total Hours: 131 |  |
| Five Years, Three Co-ons in Spring/Summer 1 |  |

Five Years, Three Co-ops in Spring/Summer 1
Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUSN 1101 | 4 | Business core ${ }^{1}$ | 4 | Vacation | 0 | Vacation | 0 |
| BUSN 1102 |  | Business core ${ }^{1}$ | 4 |  |  |  |  |
| ENGW 1111, <br> ECON 1116, <br> or MATH <br> 1231 (FQ) |  | ENGW 1111, <br> ECON 1116, <br> or MATH <br> 1231 (FQ) | 4 |  |  |  |  |
| Take two: | 8 | Take one: | 4 |  |  |  |  |
| $\begin{aligned} & \text { MGSC } 2301 \\ & \text { (AD) } \end{aligned}$ |  | $\begin{aligned} & \text { MGSC } 23 \\ & \text { (AD) } \end{aligned}$ |  |  |  |  |  |
| ACCT 1201 |  | ACCT 120 |  |  |  |  |  |
| INTB 1203 <br> (IC and ER) |  | INTB 1203 (IC and ER) |  |  |  |  |  |
|  |  | BUSN 1100 | 1 |  |  |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Concentration course | 4 Co-op | Co-op |  | Elective ${ }^{2}$ | 4 |
| Business core ${ }^{1}$ | 4 |  |  | Elective | 4 |
| Business core ${ }^{1}$ | 4 |  |  |  |  |
| ECON 1116, <br> 1115, or MATH 1231 (FQ) | 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 |
| Business core ${ }^{1}$ | 4 |  |  | Elective | 4 |
| ORGB 3201 | 4 |  |  |  |  |
| ECON 1116, 1115, or MATH 1231 (FQ) | 4 |  |  |  |  |
|  | 16 | 0 | 0 |  | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Concentration <br> course $^{3}$ | 4 Co-op | Co-op | Vacation |  |
| ENGW 3304 | 4 |  |  |  |
| Elective $^{4}$ | 4 |  |  |  |



## Bachelor of Science in International Business, BSIB

The BSIB program allows students the opportunity to create their own path to experience the challenges of an international assignment that any manager may encounter during his or her career. You will have the chance to take courses in the principal fields of business and choose among our seven business concentrations. Students may choose their destination for international immersion from a wide variety of locations. Whether you do a four- or five-year program with one, two, or three co-ops, a yearlong immersion, customized study and co-op or study semesters, dual or single degree, the choice is yours.

## Available Opportunities

A yearlong immersion, which includes a full semester of study at one of the traditional BSIB partners with a six-month co-op in the host country. Course work and co-op are completed in one consecutive year at the same location with business-based curricula and dual-degree opportunities. Work may be completed in either English or the language of the host country.

A customized study and co-op program during either the spring or fall terms at either a BSIB partner or via the Global Experience Office. This version of the program will allow for study semesters and co-op to be completed in separate academic years and in different locations. A wide variety of subjects are offered; not always business focused. This opportunity requires an independent international co-op search.

Custom study semesters are also available between a BSIB partner school or a program sponsored by the Global Experience Office. The study semesters can be completed in separate academic years and in different locations. Course work is generally taught in English and there are a wide variety of subjects offered.

Students also have the dual-degree option, which allows them to receive both the BSIB degree from Northeastern and an equivalent undergraduate
degree from some of the partner schools. This dual-degree path is an intensive program requiring strong commitment.

With the flexibility of the BSIB, students are able to combine their undergraduate program with the Master of Science in International Management PlusOne program, the Master of Finance, or the Master of Accounting.

In conjunction with their academic advisor, students will determine an individual action plan to meet their needs. Students take the degree's required courses in international business administration and choose a concentration from other business areas such as accounting, entrepreneurship, finance, marketing, management, information management, and supply chain management.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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
ACCT 1202

| ENTR 2301 | Innovation! | 4 |
| :--- | :--- | :---: |
| FINA 2202 | Financial Management in a Global | 4 |
|  | Context | 4 |
| ORGB 3201 | Organizational Behavior | 4 |
| MGSC 2301 | Business Statistics | 4 |
| MKTG 2202 | Introduction to Marketing in a Global |  |
|  | Context |  |

## International Business Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| INTB 1202 | Becoming a Global Manager | 4 |
| INTB 2202 | Analyzing the Global Business | 4 |
|  | Environment | 4 |
| INTB 3202 | Managing the International Assignment | 4 |
| INTB 4202 | Executing Global Strategy |  |

## Language Proficiency or Minor Requirement

Students must test to a level of B1 proficiency in the language of their destination to qualify for their expatriate year.

Note: Students who opt for the expatriate year in England or Ireland must complete a globally focused general minor to earn the BSIB degree. A list of qualifying minors may be found on the overview (p. 226) page.

## 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. 259)
- Business/Interdisciplinary (p. 259) (second concentration only)
- Entrepreneurship and Innovation (p. 259)
- Finance (p. 260)
- Management (p. 261)
- Management Information Systems (p. 261)
- Marketing (p. 262)
- Supply Chain Management (p. 262)


## General Education

| Code | Title | Hours |
| :--- | :--- | ---: |
| ECON 1116 | Principles of Microeconomics | 4 |
| ENGW 1111 | First-Year Writing | 4 |
| ENGW 3304 | Advanced Writing in the Business <br> Administration Professions | 4 |
| BUSN 1100 | Introduction to Planning for Business <br> Co-op and Careers | 1 |
| BUSN 1102 | Personal Skill Development for <br> Business <br> Professional Development for Business <br> Co-op | 1 |

## Business Cooperative Education

Complete two six-month co-op experiences.

## Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

## Program Requirement

128 total semester hours required

## Plan of Study

## Five-Year Program: Year 3 Abroad with 3 Co-ops

Note: Plan of study will vary based upon student's academic program. Individual study plans will be created with academic advisor.

- Additional courses may be required in place of open electives. Electives may be moved or used to fulfill language classes.
- This plan of study will not work for the United Kingdom or Spain. Consult advisor for study plan example. Finance concentration requires Managerial Accounting in a Global Context (ACCT 2302) and Principles of Macroeconomics (ECON 1115) to fulfill prerequisites. Accounting concentration requires Managerial Accounting in a Global Context (ACCT 2302) as a prerequisite. Supply chain management requires Supply Chain and Operations Management (SCHM 2301) as 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 | MKTG 2202 | 4 | Elective | 4 | Co-op | 0 |
| MGSC 2301 | 4 | FINA 2202 | 4 | Concentratior course | - 4 |  |  |
| ACCT 1202 | 4 | ENGW 1111 | 4 |  |  |  |  |
| ECON 1116 or ENTR 2301 |  | ECON 1116 or ENTR 2301 | 4 |  |  |  |  |
| BUSN 1102 | 1 | BUSN 1103 | 1 |  |  |  |  |
| BUSN 1100 | 1 |  |  |  |  |  |  |
|  | 18 |  | 17 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | ---: | ---: |
| Co-op | INTB 2202 | 4 Elective | 4 Vacation | 0 |
|  | Concentratior | 4 Concentratior |  |  |
| course | course | 4 |  |  |
|  | Elective | 4 |  |  |
|  | Elective | 4 |  | 0 |
| 0 | 16 | 8 |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Expatriate <br> year <br> abroad- <br> school and <br> co-op | 0 Co-op abroad | Co-op abroad | Elective | 4 |
| Concentratior course | 4 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Concentration course | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| ORGB 3201 | 4 |  | Elective | 4 |
| ENGW 3304 | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |

Year 5

| Fall | Hours |
| :--- | ---: |
| INTB 4202 | 4 |
| Elective | 4 |
| Elective | 4 |
| Elective | 4 |
|  | 16 |

Total Hours: 131
${ }^{1}$ If a student completes summer classes and no vacation, these electives will not be necessary.

## Business Administration Combined Majors

- Business Administration and Design, BS (p. 76)
- Business Administration and Psychology, BS (p. 231)
- Computer Science and Business Administration, BS (p. 234)
- Cybersecurity and Business Administration, BS (p. 239)
- Economics and Business Administration, BS (p. 243)
- Health Science and Business Administration, BS (p. 246)
- Information Science and Business Administration, BS (p. 249)
- Mathematics and Business Administration, BS (p. 253)
- Political Science and Business Administration, BS (p. 256)


## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).
Business Core Requirements
Code Title Hours
Introduction to College


## Business Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Accounting |  |  |
| ACCT 1201 | Financial Accounting and Reporting | 4 |
| Business Statistics |  | 4 |
| MGSC 2301 | Business Statistics | 4 |

International Business/Social Responsibility

| INTB 1203 | International Business and Global <br> Social Responsibility | 4 |
| :--- | :--- | :--- |


| Marketing |  |  |
| :--- | :--- | ---: |
| MKTG 2201 | Introduction to Marketing | 4 |
| Finance |  | 4 |
| FINA 2201 | Financial Management |  |


| Organizational Behavior | 4 |
| :--- | ---: |
| ORGB $3201 \quad$ Organizational Behavior | 4 |
| Business Core Option | 4 |
| Complete one of the following: |  |


| ACCT 2301 | Managerial Accounting |
| :--- | :--- |
| MISM 2301 | Management Information Systems |
| SCHM 2301 | Supply Chain and Operations <br>  |

## Professional Development

| BUSN 1103 | Professional Development for Business | 1 |
| :---: | :--- | :--- |
| Co-op |  |  |

## Art + Design Requirements

Code Title Hours

## Art + Design Fundamentals

| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (With optional ARTF 1123) | 4 |
| :--- | :--- | :--- |
| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (With optional ARTF 2224) | 4 |
| Design Courses |  | 4 |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 2250 | Typography 1 (With optional |  |
| ARTG 2251) | 4 |  |
| ARTG 3460 | Typography 2 | 4 |


| Art+Design History |  | 4 |
| :--- | :--- | :--- |
| ARTH 1100 | Interactive Media and Society |  |

## Design Option

Code Title Hours
Complete one of the following options: 8

Interaction Design Option

| ARTG 2400 | Interaction Design 1: Responsive (With <br> optional ARTG 2401) |
| :--- | :--- |
| ARTG 3700 | Interaction Design 2: Mobile |

Graphic and Information Design Option

| ARTG 2252 | Graphic Design 1 |
| :--- | :--- |
| ARTG 3463 | Experience Design 2 |


| Experience Design Option |  |
| :--- | :--- |
| ARTG 3462 | Experience Design 1 |
| ARTG 3463 | Experience Design 2 |



## Electives

At least one course must be taken from the business courses listed and one from the interactive media courses listed.
Complete three of the following:
Business

| MKTG 4502 | Marketing in the Service Sector |
| :--- | :--- |
| MKTG 4504 | Advertising and Brand Promotion |
| MKTG 4506 | Consumer Behavior |
| MKTG 4508 | Digital Marketing |
| MKTG 4510 | New Product Development |
| Art + Design | Photo Basics (With optional  <br> ARTD 2360 ARTD 2361) <br> ARTD 2380 Basics (With optional  <br> ARTF 2220 4D Fundamentals: Sequence and <br> Drawing (With optional ARTF 2221) <br> ARTG 2260 Programming Basics <br> ARTG 3250 Physical Computing <br> ARTG 3351 Time-Based Design <br> ARTG 3451 Information Design 1 <br> ARTE 4901 Special Topics in Art and Design Studio |

## Second Business Concentration (Optional)

A second business concentration is optional and may be chosen from the following list. Requirements for the concentrations are listed below (p. 77).

- Accounting (p. 77)
- Business/Interdisciplinary (p. 78)
- Entrepreneurship and Innovation (p. 78)
- Finance (p. 78)
- Management (p. 78)
- Management Information Systems (p. 79)
- Supply Chain Management (p. 79)


## Integrative Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Integrative Courses |  |  |
| Note: These courses also satisfy requirements above: |  |  |
| MKTG 3301 | Marketing Management |  |
| ARTG 3460 | Identity and Brand Design |  |
| Capstone |  |  |
| Complete the interactive media capstone or the business capstone: |  | 4-8 |
| Interactive Media Capstone |  |  |
| ARTG 4550 and ARTG 4551 | Design Degree Project 1 and Design Degree Project 2 |  |
| ARTG 4700 and ARTG 4701 | Interaction Team Degree Project 1 and Interaction Team Degree Project 2 |  |
| Business Capstone |  |  |
| STRT 4501 | Strategy in Action |  |

## 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

132 total semester hours required

## Second Business Concentration (Optional)

A second business concentration is optional and may be chosen from the following:

## CONCENTRATION IN ACCOUNTING

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 |  |
| Electives |  | 4 |
| Complete two of the following: | 8 |  |
| ACCT 3403 | Accounting Information Systems |  |
| ACCT 3416 | Strategic Cost Analysis for Decision <br> Making |  |
| ACCT 4412 | Auditing and Other Assurance Services <br> ACCT 4414Income Tax Determination and <br> Planning |  |

## CONCENTRATION IN BUSINESS/INTERDISCIPLINARY

Code Title Hours

Complete four courses in consultation with approved 16
D'Amore-McKim School of Business faculty member.

CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION

| Code | Title |
| :--- | :--- |
| Note: The following courses do not count toward this |  |
| concentration: |  |$\quad$ Hours


| ENTR 3346 |  |
| :--- | :--- |
| ENTR 4510 | Management Consulting Abroad |
| ENTR 4514 | Development Practice and Global <br> Citizenship in India |

Introductory Course

| ENTR 2301 <br> or ENTR 2303 <br> Capstone Course | Innovation! <br> Entrepreneurial Marketing and Selling |
| :--- | :--- |
| Complete one of the following: | 4 |
| ENTR 4501 | Business Planning for Technology <br> Ventures |
| ENTR 4503 | Business Planning for Small and <br> Medium Enterprises |
| ENTR 4505 | Entrepreneurial Growth Strategy for <br> Technology Ventures |


| ENTR 4506 | Advanced Studies in Social Enterprise |  |
| :---: | :---: | :---: |
| Electives |  |  |
| Note: Only one non-ENTR course may be used as an elective. |  |  |
| Complete two of | following: | 8 |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |  |
| ENTR 3212 | Innovation for Social Change |  |
| ENTR 3217 | Global Family Business Leadership |  |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |  |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |  |
| ENTR 3306 | Global Entrepreneurship |  |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |  |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |  |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |  |
| ENTR 3520 | Impact Investing and Social Finance |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |
| MGMT 3302 | Negotiating in Business |  |


| CONCENTRATION IN FINANCE  <br> Code Title | Hours |  |
| :--- | :--- | ---: |
| Required Course |  | 4 |
| FINA 3301 | Corporate Finance |  |
| or FINA 3303 | Investments |  |

## Electives

$\left.\begin{array}{l}\text { Complete three of the following: } \\ \begin{array}{l}\text { ENTR 3520 } \\ \text { or FINA 2720 }\end{array} \\ \hline \text { FINA 3301 }\end{array} \begin{array}{l}\text { Impact Investing and Social Finance } \\ \text { Sustainability in the Business Environment } \\ \text { Corporate Finance (if not selected as a } \\ \text { required course) }\end{array}\right]$

| 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 4983 | Special Topics in Finance |
| FINA 4602 | Turnaround Management |
| FINA 4604 | Fixed-Income Securities |
| FINA 4608 | Advanced Financial Strategy |
| FINA 4610 | Entrepreneurial Finance, Innovation |

## CONCENTRATION IN MANAGEMENT Code Title Hours

## Required Course

MGMT $4501 \quad$ Skills for Managerial Success 4

Electives
Note: Only one non-MGMT course may be used as an elective.
Complete three of the following:

| MGMT 3302 | Negotiating in Business |
| :--- | :--- |
| MGMT 3315 | Managing Organizational Change and <br> Disruption |
| MGMT 3330 | Developing Leaders for Global <br> Sustainability |
| MGMT 3340 | Managing Healthcare Organizations: <br> Critical Challenges and New <br> Approaches |
| MGMT 3350 | Managing a Diverse Workforce |
| MGMT 3360 | Law and the Legal Process |
| MGMT 3420 | Managing Human Capital |
| MGMT 3510 | Managing Global Teams Virtually and <br> Locally |
| MGMT 3530 | Project Management <br> MGMT 4310 Management Practices of Great <br> Organizations |
| MGMT 4410 | Human Resources and Workforce <br> Analytics |
| ENTR 2215 | Understanding Family Enterprise <br> Social Responsibility of Business in an |
| ENTR 2414 | Age of Inequality |
| Corporate Entrepreneurship through |  |

CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS
Code Title Hours

## Required Courses

MISM 3403 Data Management in the Enterprise 4
MISM 4501 Business Systems Integration 4

## Electives

Note: Only one non-MISM course may be used as an elective.
Complete two of the following:

| MISM 2510 | Fundamentals of Information Analytics |
| :--- | :--- |
| MISM 3305 | Information Resource Management |
| MISM 3404 | Data Communications |


| MISM 3406 | Introduction to Web Design, Practices, and Standards |  |
| :---: | :---: | :---: |
| MISM 3501 | Information Visualization for Business |  |
| MISM 3515 | Data Mining for Business |  |
| MKTG 4508 | Digital Marketing |  |
| SCHM 3301 | Global Supply Chain Strategy |  |
| SCHM 3305 | Sourcing and Procurement |  |
| SCHM 3308 | Supply Chain Analytics |  |
| CONCENTRATION IN SUPPLY CHAIN MANAGEMENT |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation Management | 4 |
| Elective |  |  |
| Complete one of the following: |  | 4 |
| SCHM 3308 | Supply Chain Analytics |  |
| SCHM 3320 | Demand Planning and Forecasting |  |
| SCHM 3330 | Sustainability and Supply Chain Management |  |
| SCHM 4401 | Advanced Problems in Supply Chain Management |  |

Plan of Study
Five Years, Three Co-ops

| Year 1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| BUSN 1102 <br> or ARTF <br> 1000 | 1 | MGSC 2301 | 4 | Vacation |  | Vacation |  |
| INTB 1203 | 4 | BUSN 1100 | 1 |  |  |  |  |
| ACCT 1201 |  | ENGW 1111, <br> MATH 1231, <br> or MATH $1260$ | 4 |  |  |  |  |
| ENGW 1111, <br> MATH 1231, <br> or MATH <br> 1260 | 4 | ARTG 2250 <br> (With optional ARTG 2251) | 4 |  |  |  |  |
| ARTG 1250 |  | ARTF 1122 <br> (With optional ARTF 1123) | 4 |  |  |  |  |
|  | 17 |  | 17 |  | 0 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MKTG 2201 | 4 Co-op 1 | 0 Co-op 1 | 0 Elective | 4 |
| FINA 2201 | 4 |  | Elective ND <br> or DD | 4 |
| BUSN 1103 | 1 |  |  |  |
| ARTF 2223 <br> (With | 4 |  |  |  |
| Optional |  |  |  |  |
| ARTF 2224) |  |  |  |  |


| Art + design <br> history | 4 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 17 | 0 | 0 | 8 |



Year 4
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \begin{array}{l}\text { MKTG 3301 } \\ \text { or 3401 }\end{array} & 4 \text { Co-op 3 }\end{array} \quad \begin{array}{l}\text { Co-op 3 }\end{array}\right)$

Year 5


Total Hours: 131

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Business Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| 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 | 4 |
| MISM 2301 | Social Responsibility | 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 |

Supporting Courses for Business

| 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. Requirements for the concentrations are listed below (p. 233).

- Accounting (p. 233)
- Entrepreneurship and Innovation (p. 233)
- Finance (p. 233)
- Management (p. 234)
- Management Information Systems (p. 234)
- Marketing (p. 234)
- Supply Chain Management (p. 234)


## Psychology Requirements

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| PSYC 1101 | Foundations of Psychology | 4 |
| PSYC 2320 | Statistics in Psychological Research |  |
| or MGSC 2301 | Business Statistics | 4 |
| PSYC 3402 | Social Psychology | 4 |
| PSYC 3466 | Cognition | 4 |
| PSYC 3400 | Personality | 4 |
| PSYC 3404 | Developmental Psychology | 4 |
| Required Seminar |  | 4 |
| Complete one of the following: | 4 |  |
| PSYC 4650 | Seminar in Clinical Case Study | 4 |
| 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 |  |
| Required Lab |  |  |
| Complete one of the fo | 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

## Introduction to College

| BUSN 1102 | Personal Skill Development for <br> Business | 1 |
| :--- | :--- | :--- |
| or PSYC 1000 | Psychology at Northeastern |  |
| Co-op Preparation |  | $1-5$ |
| Complete one of the following: |  |  |
| BUSN 1101 <br> and BUSN 1103 | Introduction to Business <br> and Professional Development for <br> Business Co-op |  |
| 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

| Business Concentration |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN ACCOUNTING |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 | 4 |
| Electives |  |  |
| Complete two of the following: |  | 8 |
| ACCT 3403 | Accounting Information Systems |  |
| ACCT 3416 | Strategic Cost Analysis for Decision Making |  |
| ACCT 4412 | Auditing and Other Assurance Services |  |
| ACCT 4414 | Income Tax Determination and Planning |  |
| CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION |  |  |
| Note: The following courses do not count toward this concentration: |  |  |
| ENTR 1201 | The Entrepreneurial Universe |  |
| ENTR 3308 | Business Economic History of South Africa |  |
| ENTR 3318 |  |  |
| ENTR 3328 |  |  |
| ENTR 3338 | Field Research in Sustainable Energy in Iceland |  |
| ENTR 3346 |  |  |
| ENTR 4510 | Management Consulting Abroad |  |
| ENTR 4514 | Development Practice and Global Citizenship in India |  |
| Introductory Course |  |  |
| $\begin{aligned} & \text { ENTR } 2301 \\ & \text { or ENTR } 2303 \end{aligned}$ | Innovation! Entrepreneurial Marketing and Selling | 4 |
| Capstone Course |  |  |
| Complete one of the following: |  | 4 |
| ENTR 4501 | Business Planning for Technology Ventures |  |
| ENTR 4503 | Business Planning for Small and Medium Enterprises |  |
| ENTR 4505 | Entrepreneurial Growth Strategy for Technology Ventures |  |
| ENTR 4506 | Advanced Studies in Social Enterprise |  |
| Electives |  |  |
| Note: Only one non-ENTR course may be used as an elective. |  |  |
| Complete two of the following: |  | 8 |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |


| ENTR 2303 | Entrepreneurial Marketing and Selling <br> (if not used for introductory course) |
| :--- | :--- |
| ENTR 3212 | Innovation for Social Change |
| ENTR 3217 | Global Family Business Leadership <br> International Entrepreneurship and <br> Innovation Consulting |
| ENTR 3220 | Entrepreneurial Strategy and Business <br> Model Design |
| ENTR 3305 | Global Entrepreneurship |
| ENTR 3306 | Lean Design and Development for <br> Entrepreneurs |
| ENTR 3330 Small- and Medium-Sized Enterprises |  |

## CONCENTRATION IN FINANCE Code Title Hours

## Required Course

| FINA 3301 | Corporate Finance | 4 |
| :---: | :--- | :--- |
| or FINA 3303 | Investments |  |

Electives
Complete three of the following
ENTR $3520 \quad$ Impact Investing and Social Finance
or FINA 2720 Sustainability in the Business Environment

FINA $3301 \quad$| Corporate Finance (if not selected as a |
| :--- |
| required course) |

FINA $3303 \quad$ 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 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 4983 | Special Topics in Finance |
| FINA 4602 | Turnaround Management |
| FINA 4604 | Fixed-Income Securities |
| FINA 4608 | Advanced Financial Strategy |

$\begin{array}{ll}\text { FINA } 4610 & \text { Entrepreneurial Finance, Innovation } \\ & \text { Valuation, and Private Equity }\end{array}$

| CONCENTRATION IN MANAGEMENT |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Required Course |  |  |
| MGMT 4501 | Skills for Managerial Success | 4 |
| Electives |  |  |
| Note: Only one non-MGMT course may be used as an elective. |  |  |
| Complete three of | following: | 12 |
| MGMT 3302 | Negotiating in Business |  |
| MGMT 3315 | Managing Organizational Change and Disruption |  |
| MGMT 3330 | Developing Leaders for Global Sustainability |  |
| MGMT 3340 | Managing Healthcare Organizations: Critical Challenges and New Approaches |  |
| MGMT 3350 | Managing a Diverse Workforce |  |
| MGMT 3360 | Law and the Legal Process |  |
| MGMT 3420 | Managing Human Capital |  |
| MGMT 3510 | Managing Global Teams Virtually and Locally |  |
| MGMT 3530 | Project Management |  |
| MGMT 4310 | The Management Practices of Great Organizations |  |
| MGMT 4410 | Human Resources and Workforce Analytics |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |

## CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS Code Title Hours

| Required Courses |  | 4 |
| :--- | :--- | :--- |
| MISM 3403 | Data Management in the Enterprise | 4 |
| MISM 4501 | Business Systems Integration |  |

## Electives

Note: Only one non-MISM course may be used as an elective.
Complete two of the following:

| MISM 2510 | Fundamentals of Information Analytics |
| :--- | :--- |
| MISM 3305 | Information Resource Management |
| MISM 3404 | Data Communications |
| MISM 3406 | Introduction to Web Design, Practices, <br> and Standards |
| MISM 3501 | Information Visualization for Business |
| MISM 3515 | Data Mining for Business |
| MKTG 4508 | Digital Marketing |
| SCHM 3301 | Global Supply Chain Strategy |
| SCHM 3305 | Sourcing and Procurement |
| SCHM 3308 | Supply Chain Analytics |


| CONCENTRATION IN MARKETING  <br> Code Title | Hours |  |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| MKTG 3401 | Marketing Research | 4 |
| MKTG 3301 | Marketing Management |  |
| or MKTG 4506 | Consumer Behavior | 4 |
| Electives |  | 8 |


| MKTG 2301 | Marketing and Society |
| :--- | :--- |
| MKTG 3301 | Marketing Management (if not selected <br> as a required course) |
| MKTG 3501 | Marketing Analytics |
| MKTG 4220 | Marketing in Asia |
| MKTG 4420 | Sales Management |
| MKTG 4502 | Marketing in the Service Sector |
| MKTG 4504 | Advertising and Brand Promotion |
| MKTG 4506 | Consumer Behavior (if not selected as a <br> required course) |
| MKTG 4508 | Digital Marketing |
| MKTG 4510 | New Product Development |
| MKTG 4512 | International Marketing |

CONCENTRATION IN SUPPLY CHAIN MANAGEMENT
Code $\quad$ Title Hours

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation <br> Management | 4 |

## Elective

Complete one of the following: 4
SCHM $3308 \quad$ Supply Chain Analytics
SCHM 3320 Demand Planning and Forecasting
SCHM 3330 Sustainability and Supply Chain Management
SCHM 4401 Advanced Problems in Supply Chain Management

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science |  |  |
| CS 1200 | Leadershiew Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 |  |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |


| Computer Science Required Courses |  |
| :--- | :--- |
| CS 3000 | Algorithms and Data |

CS 3200 Database Design 4
CS 3500 Object-Oriented Design 4
CS 4500 Software Development 4
and CS 4501 and Recitation for CS 4500
Complete two of the following: 8

| CS 3650 | Computer Systems |
| :--- | :--- |
| CS 3700 | Networks and Distributed Systems |
| DS 4100 | Data Collection, Integration, and <br> Analysis |
| DS 4200 | Information Presentation and <br> Visualization |
| DS 4300 | Large-Scale Information Storage and <br> Retrieval |

Presentation Requirement
THTR $1170 \quad$ The Eloquent Presenter

## Computer Science Elective Courses

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, IS, or DS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Business Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Business Courses |  |  |
| 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 |
| Choose one of the following: ${ }^{1}$ |  | 4 |
| STRT 4501 | Strategy in Action |  |
| STRT 4516 | External Case Competition Challenge |  |
| 1 <br> Strategy in Challenge | (STRT 4501), and External Case Comp 16) both satisfy the capstone require |  |

## Business Concentration

Complete a four-course business concentration from the following list. Requirements for the concentrations are listed below (p. 236).

- Accounting (p. 236)
- Entrepreneurship and Innovation (p. 236)
- Finance (p. 236)
- Management (p. 237)
- Marketing (p. 237)
- Supply Chain Management (p. 237)


## Integrative Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| Information Resource Management |  |  |
| MISM 2301 | Management Information Systems | 4 |

## Supporting Courses

Code Title Hours

## Mathematics

| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| :---: | :--- | :---: |
| or MATH 1231 | Calculus for Business and Economics |  |

Economics

| ECON 1115 | Principles of Macroeconomics | 4 |
| :--- | :--- | :--- |
| ECON 1116 | Principles of Microeconomics | 4 |

Computing and Social Issues
Complete one of the following: 4

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

Computer Science Writing Requirement
Code Title Hours

## College Writing

ENGW 1111 First-Year Writing 4

Advanced Writing in the Disciplines

| ENGW 3302 | 4 |
| :--- | :--- |
|  | Advanced Writing in the Technical <br> Professions |

or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

## Required General Electives

Code Title Hours

Complete four general electives.

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Computer Science GPA Requirement

Minimum 2.000 GPA required in all CS 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 coop.

## Program Requirement

133 total semester hours required

| Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN ACCOUNTING |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 | 4 |
| Electives |  |  |
| Complete two of the following: |  | 8 |
| ACCT 3403 | Accounting Information Systems |  |
| ACCT 3416 | Strategic Cost Analysis for Decision Making |  |
| ACCT 4412 | Auditing and Other Assurance Services |  |
| ACCT 4414 | Income Tax Determination and Planning |  |
| CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION |  |  |
| Code | Title | Hours |
| Note: The following courses do not count toward this concentration: |  |  |
| ENTR 1201 | The Entrepreneurial Universe |  |
| ENTR 3308 | Business Economic History of South Africa |  |
| ENTR 3318 |  |  |
| ENTR 3328 |  |  |
| ENTR 3338 | Field Research in Sustainable Energy in Iceland |  |
| ENTR 3346 |  |  |


| ENTR 4510 | Management Consulting Abroad |  |
| :---: | :---: | :---: |
| ENTR 4514 | Development Practice and Global Citizenship in India |  |
| Introductory Course |  |  |
| ENTR 2301 or ENTR 2303 | Innovation! <br> Entrepreneurial Marketing and Selling | 4 |
| Capstone Course |  |  |
| Complete one of the following: |  | 4 |
| ENTR 4501 | Business Planning for Technology Ventures |  |
| ENTR 4503 | Business Planning for Small and Medium Enterprises |  |
| ENTR 4505 | Entrepreneurial Growth Strategy for Technology Ventures |  |
| ENTR 4506 | Advanced Studies in Social Enterprise |  |
| Electives |  |  |
| Note: Only one non-ENTR course may be used as an elective. |  |  |
| Complete two of $t$ | following: | 8 |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |  |
| ENTR 3212 | Innovation for Social Change |  |
| ENTR 3217 | Global Family Business Leadership |  |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |  |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |  |
| ENTR 3306 | Global Entrepreneurship |  |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |  |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |  |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |  |
| ENTR 3520 | Impact Investing and Social Finance |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |
| MGMT 3302 | Negotiating in Business |  |

CONCENTRATION IN FINANCE
Code Title Hours
Required Course

| FINA 3301 | Corporate Finance | 4 |
| :---: | :--- | :--- |
| or FINA 3303 | Investments |  |

Electives
Complete three of the following:

| ENTR 3520 <br> or FINA 2720 | Impact Investing and Social Finance <br> Sustainability in the Business Environment <br> Corporate Finance (if not selected as a <br> required course) |
| :--- | :--- |
| FINA 3303 | Investments (if not selected as a <br> 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 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 4983 | Special Topics in Finance |
| FINA 4602 | Turnaround Management |
| FINA 4604 | Fixed-Income Securities |
| FINA 4608 | Advanced Financial Strategy |
| FINA 4610 | Entrepreneurial Finance, Innovation <br> Valuation, and Private Equity |


| ENTR 4225 | Corporate Entrepreneurship through |
| :--- | :--- |
| Global Growth, Acquisitions, and |  |
| Alliances |  |

CONCENTRATION IN MARKETING
Code Title Hours

| Required Courses |  | Hours |
| :--- | :--- | ---: |
| MKTG 3401 | Marketing Research | 4 |
| MKTG 3301 | Marketing Management | 4 |
| or MKTG 4506 | Consumer Behavior |  |

Electives
Complete two of the following: 8

| MKTG 2301 | Marketing and Society |
| :--- | :--- |
| MKTG 3301 | Marketing Management (if not selected <br> as a required course) |
| MKTG 3501 | Marketing Analytics |
| MKTG 4220 | Marketing in Asia |
| MKTG 4420 | Sales Management |
| MKTG 4502 | Marketing in the Service Sector |
| MKTG 4504 | Advertising and Brand Promotion |
| MKTG 4506 | Consumer Behavior (if not selected as a <br> required course) |
| MKTG 4508 | Digital Marketing |
| MKTG 4510 | New Product Development |
| MKTG 4512 | International Marketing |


| CONCENTRATION IN MANAGEMENT <br> Code <br> Required Course | Title | Hours |
| :--- | :--- | ---: |
| MGMT 4501 |  |  |$\quad$| Skills for Managerial Success |
| :--- |

## CONCENTRATION IN SUPPLY CHAIN MANAGEMENT

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation |  |

Elective

| Complete one of the following: |  |
| :--- | :--- |
| SCHM 3308 | Supply Chain Analytics |
| SCHM 3320 | Demand Planning and Forecasting |
| SCHM 3330 | Sustainability and Supply Chain <br> Management |
| SCHM 4401 | Advanced Problems in Supply Chain <br> Management |

## 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | MATH 1341 or 1231 | 4 | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 3200 | 4 | ACCT 1201 | 4 |  |  |
| CS 2500 and CS 2501 | 5 | ECON 1116 | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |


| ECON 1115 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 19 |  | 17 |  | 8 | 0 |
| Year 2 |  |  |  |  |  |  |
| Fall | Hours | Spring Hound | Hours | Summer 1 | Hours Summer 2 | Hours |
| ACCT 2301 | 4 | Business concentration 1 | 4 | MKTG 2201 | 4 Co-op |  |
| CS 3500 | 4 | CS 3000 | 4 | Elective | 4 |  |
| MGSC 2301 |  | Computing and social issues | 4 |  |  |  |
| Elective | 4 | CS 1210 | 1 |  |  |  |
|  |  | Elective | 4 |  |  |  |
|  | 16 |  | 17 |  | 8 | 0 |
| Year 3 |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| Co-op |  | CS 3650 |  | FINA 2201 | 4 Co-op |  |
|  |  | MISM 2301 | 4 | ORGB 3201 | 4 |  |
|  |  | Business concentration 2 | 4 |  |  |  |
|  |  | CS/IS/DS elective | 4 |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |
|  | 0 |  | 17 |  | 8 | 0 |
| Year 4 |  |  |  |  |  |  |
| Fall | Hours | Spring Hound | Hours | Summer 1 | Hours |  |
| Co-op |  | CS 3700 | 4 | STRT 4501 | 4 |  |
|  |  | $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 | ENGW 3302 | 4 |  |
|  |  | Business concentration 3 | 4 |  |  |  |
|  |  | Business concentartion 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 | 5 CS 2510 | 5 | Vacation | 0 Vacation |$\quad 0$


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 3500 | 4 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 |  |  |  |
|  | 16 | 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 <br> concentration <br> 1 | 4 MKTG 2201 | 4 |  |
|  | MISM 2301 | 4 |  |  |
|  | ENGW 3302 | 4 |  | 0 |
|  | THTR 1170 | 1 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 Business <br> concentration  <br> 2  | 4 Elective | 4 Co-op | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 STRT 4501 | 4 |
|  | Business <br> concentration <br> 4 | 4 |
|  | CS 4500 <br> and CS 4501 | 4 |
|  | Computing <br> and social <br> 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 | $\text { CS } 2510$ <br> and CS 2511 | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| MATH 1341 | 4 |  |  |  |
| ACCT 1201 | 4 |  |  |  |


| MGSC 2301 | 4 |  |  |  |
| :--- | ---: | ---: | :--- | :--- |
| CS 1210 | 1 |  |  |  |
|  | 17 | 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 |  |  |  |
| THTR 1170 | 1 |  |  | 8 |
|  | 17 | 0 | 0 |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CS 3650 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Business <br> concentration | 4 |  | Elective | 4 |
| 1 |  |  |  |  |

## Year 5

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| CS/IS/DS <br> elective | 4 | STRT 4501 | 4 |
| Business concentration 2 | 4 | $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 |
| Business concentration 3 | 4 | Computing and social issues | 4 |
| CS 3700 |  | 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).
Cybersecurity Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| CS 3700 | Networks and Distributed Systems | 4 |
| Cybersecurity Required Courses |  |  |
| CS 2550 | Foundations of Cybersecurity | 4 |
| CS 3740 | Systems Security | 4 |
| CS 4170 | The Law, Ethics, and Policy of Data and Digital Technologies | 4 |
| or IA 5240 | Cyberlaw: Privacy, Ethics, and Digital Rights |  |
| CS 4740 | Network Security | 4 |

## Cybersecurity Electives

If courses require prerequisites, those should be taken using general electives.

| Complete one course from the following: |  |
| :--- | :--- |
| CS 2800 | Logic and Computation |
| CS 4240 | Large-Scale Parallel Data Processing |
| CS 4400 | Programming Languages |
| CS 4500 | Software Development <br> and CS 4501 <br> and Recitation for CS 4500 |
| CS 4710 | Mobile and Wireless Systems |
| CS 5770 | Software Vulnerabilities and Security |
| CS 6710 | Wireless Network |
| DS 4300 | Large-Scale Information Storage and <br> Retrieval |
| DS 4400 | Machine Learning and Data Mining 1 |
| IA 5200 | Security Risk Management and <br> Assessment |
| IA 5210 | Information System Forensics <br> and Lab for IA 5210 |
| and IA 5211 | Human Computer Interaction <br> IS 4300 |
| EECE 2160 | Embedded Design: Enabling Robotics |
| EECE 2322 | Fundamentals of Digital Design and <br> and EECE 2323 <br> Computer Organization <br> 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 2200 | Criminology |  |
| CRIM 3030 | Global Criminology |  |
| CRIM 3400 | 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 |  |
| 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 |  |
| Presentation Requirement |  |  |
| THTR 1170 | The Eloquent Presenter | 1 |
| Business Requirements |  |  |
| Code | Title | Hours |
| Accounting |  |  |
| ACCT 1201 | Financial Accounting and Reporting | 4 |
| ACCT 2301 | Managerial Accounting | 4 |
| Finance |  |  |
| FINA 2201 | Financial Management | 4 |
| Organizational Behavior |  |  |
| ORGB 3201 | Organizational Behavior | 4 |
| Marketing |  |  |
| MKTG 2201 | Introduction to Marketing | 4 |
| Statistics |  |  |
| MGSC 2301 | Business Statistics | 4 |
| Strategy |  |  |
| STRT 4501 | Strategy in Action | 4 |
| or STRT 4516 | External Case Competition Challenge |  |

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| MISM 2301 | Management Information Systems | 4 |

## Supporting Courses



## Writing Requirements

Code Title Hours

## 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:

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :--- | :--- |
| ENGW 3308 | Advanced Writing in the Social <br> Sciences |
| ENGW 3315 | Interdisciplinary Advanced Writing in <br> the Disciplines |

## Required General Electives

| Code | Title |
| :--- | ---: | Hours

## Cybersecurity GPA Requirement

Minimum 2.000 GPA required in all computer and information science 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 coop.

## Program Requirement

133 semester hours required

| Business Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN ACCOUNTING |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| ACCT 3401 | Financia | 4 |
| ACCT 4501 | Financial | 4 |
| Electives |  |  |
| Complete two of the following: |  | 8 |
| ACCT 3403 | Account |  |
| ACCT 3416 | Strategic <br> Making |  |
| ACCT 4412 | Auditing |  |
| ACCT 4414 | Income Planning |  |
| CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION |  |  |
| Code | Title | Hours |

Note: The following courses do not count toward this concentration:

| ENTR 1201 | The Entrepreneurial Universe |  |
| :---: | :---: | :---: |
| ENTR 3308 | Business Economic History of South Africa |  |
| ENTR 3318 |  |  |
| ENTR 3328 |  |  |
| ENTR 3338 | Field Research in Sustainable Energy in Iceland |  |
| ENTR 3346 |  |  |
| ENTR 4510 | Management Consulting Abroad |  |
| ENTR 4514 | Development Practice and Global Citizenship in India |  |
| Introductory Course |  |  |
| ENTR 2301 <br> or ENTR 2303 | Innovation! <br> Entrepreneurial Marketing and Selling | 4 |
| Capstone Course |  |  |
| Complete one of th | following: | 4 |


| ENTR 4501 | Business Planning for Technology <br> Ventures |
| :--- | :--- |
| ENTR 4503 | Business Planning for Small and <br> Medium Enterprises |
| ENTR 4505 | Entrepreneurial Growth Strategy for <br> Technology Ventures |
| ENTR 4506 | Advanced Studies in Social Enterprise |
| Electives | Note: Only one non-ENTR course may be used as an elective. |
| Complete two of the following: |  |
| ENTR 2206 | Global Social Enterprise <br> ENTR 2215 |
| ENTR 2414 | Social Responsibility of Business in an <br> Age of Inequality |
| ENTR 2301 | Innovation! (if not used as introductory <br> course) |


| ENTR 2303 | Entrepreneurial Marketing and Selling <br> (if not used for introductory course) |
| :--- | :--- |
| ENTR 3212 | Innovation for Social Change |
| ENTR 3217 | Global Family Business Leadership <br> International Entrepreneurship and <br> Innovation Consulting |
| ENTR 3220 | Entrepreneurial Strategy and Business <br> Model Design |
| ENTR 3305 | Global Entrepreneurship |
| ENTR 3306 | Lean Design and Development for <br> Entrepreneurs <br> in Small- and Medium-Sized Enterprises |
| ENTR 3330 3401 | Managing Operations in a Technology- <br> Based Startup Firm |
| ENTR 3403 Impact Investing and Social Finance |  |

## CONCENTRATION IN FINANCE Code Title Hours

## Required Course

| FINA 3301 | Corporate Finance | 4 |
| :---: | :--- | :--- |
| or FINA 3303 | Investments |  |

Electives
Complete three of the following
ENTR 3520 Impact Investing and Social Finance
or FINA 2720 Sustainability in the Business Environment
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 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 4983 | Special Topics in Finance |
| FINA 4602 | Turnaround Management |
| FINA 4604 | Fixed-Income Securities |
| FINA 4608 | Advanced Financial Strategy |

FINA $4610 \quad$ Entrepreneurial Finance, Innovation Valuation, and Private Equity

| MKTG 4510 | New Product Development |
| :--- | :--- |
| MKTG 4512 | International Marketing |

CONCENTRATION IN SUPPLY CHAIN MANAGEMENT
CONCENTRATION IN MANAGEMENT
Code Title Hours

| Required Course |  |  |
| :---: | :---: | :---: |
| MGMT 4501 | Skills for Managerial Success | 4 |
| Electives |  |  |
| Note: Only one non-MGMT course may be used as an elective. |  |  |
| Complete three | following: | 12 |
| MGMT 3302 | Negotiating in Business |  |
| MGMT 3315 | Managing Organizational Change and Disruption |  |
| MGMT 3330 | Developing Leaders for Global Sustainability |  |
| MGMT 3340 | Managing Healthcare Organizations: Critical Challenges and New Approaches |  |
| MGMT 3350 | Managing a Diverse Workforce |  |
| MGMT 3360 | Law and the Legal Process |  |
| MGMT 3420 | Managing Human Capital |  |
| MGMT 3510 | Managing Global Teams Virtually and Locally |  |
| MGMT 3530 | Project Management |  |
| MGMT 4310 | The Management Practices of Great Organizations |  |
| MGMT 4410 | Human Resources and Workforce Analytics |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |


| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation Management | 4 |
| Elective |  |  |
| Complete one of | following: | 4 |
| SCHM 3308 | Supply Chain Analytics |  |
| SCHM 3320 | Demand Planning and Forecasting |  |
| SCHM 3330 | Sustainability and Supply Chain Management |  |
| SCHM 4401 | Advanced Problems in Supply Chain Management |  |

Plan of Study
Sample Patterns:
Four Years, Two Co-ops in Summer 2/Fall

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 2550 | 4 | Elective 1 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | MATH 1341 or 1231 | 4 |  |  |  |  |
| ENGW 1111 | 4 | ACCT 1201 | 4 |  |  |  |  |
| $\begin{aligned} & \text { ECON } 1115 \\ & \text { or } 1116 \end{aligned}$ | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |


| CONCENTRATION IN MARKETING |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Required Courses |  |  |
| MKTG 3401 | Marketing Research | 4 |
| MKTG 3301 | Marketing Management | 4 |
| or MKTG 4506 | Consumer Behavior |  |
| Electives |  |  |
| 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 | Marketing in the Service Sector |  |
| MKTG 4504 | Advertising and Brand Promotion |  |
| MKTG 4506 | Consumer Behavior (if not selected as a required course) |  |
| MKTG 4508 | Digital Marketing |  |

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 CS 3740 | 4 Elective 3 | 4 |  |
| ACCT 2301 | 4 <br> Business <br> concentration <br> 1 | 4 |  |  |
|  | 4 Elective 2 | 4 |  |  |
| MGSC 2301 | CS 1210 | 1 | 8 | 0 |

## Year 3

| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | $\begin{aligned} & \text { CS } 4170 \text { or } \\ & \text { IA } 5240 \end{aligned}$ | 4 | FINA 2201 |  | Co-op |  |
|  | Business concentration 2 | 4 | ORGB 3201 | 4 |  |  |
|  | Business concentration 3 | 4 |  |  |  |  |
|  | CS 4740 | 4 |  |  |  |  |



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



| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 3500 | 4 | CS 1210 | 1 | Vacation |  | Co-op |  |
| CS 3650 | 4 | CS 3700 | 4 |  |  |  |  |
| ACCT 2301 | 4 | CS 3000 | 4 |  |  |  |  |
| MGSC 2301 |  | Business concentr 1 | 4 |  |  |  |  |
|  |  | Elective 1 | 4 |  |  |  |  |
|  | 16 |  | 17 |  | 0 |  | 0 |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | CS 3740 | 4 | FINA 2201 |  | Co-op |  |
|  |  | MKTG 2201 | 4 | ORGB 3201 | 4 |  |  |
|  |  | THTR 1170 | 1 |  |  |  |  |
|  |  | Business concentration 2 | 4 |  |  |  |  |
|  |  | Elective 2 | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | $\begin{aligned} & \text { CS } 4170 \text { or } \\ & \text { IA } 5240 \end{aligned}$ | 4 | ENGW 3302 |  | Co-op |  |
|  |  | CS 4740 | 4 | Elective 4 | 4 |  |  |
|  |  | Business concentration 3 | 4 |  |  |  |  |


| Elective 3 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 |  | 12 | 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: 130

## Economics and Business Administration, BS

The combined major with business administration is our most popular combined major, combining 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Economics Requirements

Grades in required economics courses must average a minimum GPA of 2.000 with no grade lower than C-.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| ECON 1000 | Economics at Northeastern | 1 |
| or BUSN 1102 | Personal Skill Development for Business |  |


| 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 2350 | Statistics | 4 |
| or MGSC 2301 | Business Statistics | 4 |
| ECON 2560 | Applied Econometrics | 4 |


| Economics Electives |  |
| :---: | :---: |
| Complete four courses from the following lists with no more than one at the introductory level: | 16 |
| Introductory |  |
| ECON 1200 to ECON 1990 |  |
| Intermediate/Advanced |  |
| ECON 2990 to ECON 3499 |  |
| ECON 3520 History of Economic Thought |  |
| ECON $3915 \quad$ Intermediate Selected Topics in |  |
| ECON $3916 \quad \begin{aligned} & \text { Intermediate Selected Topics in } \\ & \text { Microeconomics }\end{aligned}$ |  |
| ECON 3990 Elective |  |
| ECON 4600 to ECON 4681 |  |
| ECON 4915 to ECON 4916 |  |
| ECON 4965 Undergraduate Teaching Experience 1 |  |
| ECON 4970 to ECON 4990 |  |
| ECON 4992 Directed Study |  |

Business Requirements
Code Title Hours

| Accounting |  |  |
| :--- | :--- | ---: |
| ACCT 1201 | Financial Accounting and Reporting | 4 |
| ACCT 2301 | Managerial Accounting | 4 |
| Finance |  | 4 |
| FINA 2201 | Financial Management |  |


| Marketing |  |
| :--- | :--- |
| MKTG 2201 | Introduction to Marketing |


| Organizational Behavior |  |  |
| :--- | :--- | :--- |
| ORGB 3201 | Organizational Behavior | 4 |

International Business/Social Responsibility

| INTB 1203 | International Business and Global <br> Social Responsibility | 4 |
| :--- | :--- | :--- |

## Business Concentration

Complete one of the following business concentrations. Requirements for the concentrations are listed below (p. ).

- Accounting (p. 244)
- Entrepreneurship and Innovation (p. 244)
- Finance (p. 245)
- Management (p. 245)
- Management Information Systems (p. 245)
- Marketing (p. 246)
- Supply Chain Management (p. 246)


## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Mathematics |  |  |
| MATH 1231 | Calculus for Business and Economics | 4 |
| $\quad$ or MATH 1341 | Calculus 1 for Science and Engineering |  |
| Computer Science |  | 4 |
| CS 1100 | Computer Science and Its Applications |  |

## Co-op Preparation

| BUSN 1103 | Professional Development for Business | 1 |
| :---: | :--- | :--- |
| Co-op |  |  |

Capstone Requirement
ECON 4692 Senior Economics Seminar 4
STRT 4501 Strategy in Action 4

## Economics GPA Requirement

Minimum 2.000 GPA required in all economics courses

## Business GPA Requirement

Minimum 2.000 GPA required in business courses

## Program Requirement

128 total semester hours required

## Concentrations

## CONCENTRATION IN ACCOUNTING

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 | 4 |
| Electives |  |  |
| Complete two of the following: |  | 8 |
| ACCT 3403 | Accounting Information Systems |  |
| ACCT 3416 | Strategic Cost Analysis for Decision Making |  |
| ACCT 4412 | Auditing and Other Assurance Services |  |
| ACCT 4414 | Income Tax Determination and Planning |  |
| CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION |  |  |
| Code | Title | Hours |


| Code | Title |
| :--- | :--- | :--- |
| Note: The following courses do not count toward this |  |
| concentration: |  |$\quad$ Hours


| ENTR 4503 | Business Planning for Small and Medium Enterprises |  |
| :---: | :---: | :---: |
| ENTR 4505 | Entrepreneurial Growth Strategy for Technology Ventures |  |
| ENTR 4506 | Advanced Studies in Social Enterprise |  |
| Electives |  |  |
| Note: Only one n | NTR course may be used as an elective. |  |
| Complete two of | following: | 8 |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |  |
| ENTR 3212 | Innovation for Social Change |  |
| ENTR 3217 | Global Family Business Leadership |  |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |  |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |  |
| ENTR 3306 | Global Entrepreneurship |  |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |  |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |  |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |  |
| ENTR 3520 | Impact Investing and Social Finance |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |
| MGMT 3302 | Negotiating in Business |  |

## CONCENTRATION IN FINANCE

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Course |  |  |
| FINA 3301 | Corporate Finance | 4 |
| or FINA 3303 | Investments |  |

Electives
Complete three of the following:

| ENTR 3520 | Impact Investing and Social Finance |
| :--- | :--- |
| or FINA 2720 | Sustainability in the Business Environment <br> Corporate Finance (if not selected as a <br> required course) |
| FINA 3303 | Investments (if not selected as a <br> 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 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 4983 | Special Topics in Finance |
| FINA 4602 | Turnaround Management |
| FINA 4604 | Fixed-Income Securities |
| FINA 4608 | Advanced Financial Strategy |
| FINA 4610 | Entrepreneurial Finance, Innovation |

## CONCENTRATION IN MANAGEMENT

Code Title Hours

Required Course
MGMT 4501 Skills for Managerial Success 4

## Electives

Note: Only one non-MGMT course may be used as an elective.
Complete three of the following: 12

| MGMT 3302 | Negotiating in Business |
| :--- | :--- |
| MGMT 3315 | Managing Organizational Change and <br> Disruption |
| MGMT 3330 | Developing Leaders for Global <br> Sustainability |


| MGMT 3340 | Managing Healthcare Organizations: <br> Critical Challenges and New <br> Approaches |
| :--- | :--- |
| MGMT 3350 | Managing a Diverse Workforce |
| MGMT 3360 | Law and the Legal Process |
| MGMT 3420 | Managing Human Capital |
| MGMT 3510 | Managing Global Teams Virtually and <br> Locally |
| MGMT 3530 | Project Management |
| MGMT 4310 | The Management Practices of Great <br> Organizations |
| MGMT 4410 | Human Resources and Workforce <br> Analytics |

ENTR 2215 Understanding Family Enterprise ENTR 2414 Social Responsibility of Business in an Age of Inequality
ENTR 4225 Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances

| CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| Required Courses |  |  |$\quad$ Data Management in the Enterprise $\quad 4$.

## Electives

Note: Only one non-MISM course may be used as an elective.

| Complete two of the following: <br> MISM 2510 | Fundamentals of Information Analytics |
| :--- | :--- |
| MISM 3305 | Information Resource Management |
| MISM 3404 | Data Communications |
| MISM 3406 | Introduction to Web Design, Practices, <br> and Standards |
| MISM 3501 | Information Visualization for Business |
| MISM 3515 | Data Mining for Business |
| MKTG 4508 | Digital Marketing |
| SCHM 3301 | Global Supply Chain Strategy |
| SCHM 3305 | Sourcing and Procurement |
| SCHM 3308 | Supply Chain Analytics |

## CONCENTRATION IN MARKETING

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| MKTG 3401 | Marketing Research | 4 |
| MKTG 3301 | Marketing Management |  |
| or MKTG 4506 | Consumer Behavior | 4 |
| Electives |  | 8 |
| Complete two of the following: |  |  |


| MKTG 2301 | Marketing and Society |
| :--- | :--- |
| MKTG 3301 | Marketing Management (if not selected <br> as a required course) |
| MKTG 3501 | Marketing Analytics |
| MKTG 4220 | Marketing in Asia |
| MKTG 4420 | Sales Management |
| MKTG 4502 | Marketing in the Service Sector |
| MKTG 4504 | Advertising and Brand Promotion |
| MKTG 4506 | Consumer Behavior (if not selected as a <br> required course) |
| MKTG 4508 | Digital Marketing |
| MKTG 4510 | New Product Development |
| MKTG 4512 | International Marketing |

CONCENTRATION IN SUPPLY CHAIN MANAGEMENT
Code Title Hours

| Required Courses |  |  |
| :---: | :---: | :---: |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation Management | 4 |
| Elective |  |  |
| Complete one of the following: |  | 4 |
| SCHM 3308 | Supply Chain Analytics |  |
| SCHM 3320 | Demand Planning and Forecasting |  |
| SCHM 3330 | Sustainability and Supply Chain Management |  |
| SCHM 4401 | Advanced Problems in Supply Chain Management |  |

## 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 health care. 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 health care 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Health Science Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Public Health Core |  |  |
| PHTH 1260 | The American Healthcare System | 4 |
| PHTH 2300 | Communication Skills for the Health Professions | 4 |
| PHTH 2350 | Community and Public 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 |
| HLTH 5450 | Healthcare Research | 4 |
| Supporting Courses for Health Science |  |  |
| 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 1211 <br> and CHEM 1212 <br> 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 |
| PSYC 1101 | Foundations of Psychology | 4 |

## Business Administration Requirements

Code Title Hours

## 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 | 4 |


| Business Electives |  |
| :--- | :--- |
| Complete two of the following: | 8 |
| MISM 2301 | Management Information Systems |

## Business Concentration

Complete one of the following concentrations. Requirements for the concentrations are listed below. (p. 247)

- Accounting
- Entrepreneurship and Innovation
- Finance
- Management
- Management Information Systems
- Marketing
- Supply Chain Management


## Supporting Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| HSCI 1000 or BUSN 1102 | College: An Introduction <br> Personal Skill Development for Business | 1 |
| Calculus |  |  |
| MATH 1231 or MATH 1241 | Calculus for Business and Economics Calculus 1 | 4 |
| Statistics |  |  |
| $\begin{aligned} & \text { PHTH } 2210 \\ & \text { or MGSC } 2301 \end{aligned}$ | Foundations of Biostatistics Business Statistics | 4 |
| Co-op Preparation |  |  |
| Complete one of the folllowing: |  | 4-5 |
| BUSN 1101 and BUSN 1103 | Introduction to Business and Professional Development for Business Co-op |  |
| HSCI 2000 | Professional Development for Bouvé Co-op |  |
| Capstone |  |  |
| Complete one of the | folllowing: | 4 |
| STRT 4501 | Strategy in Action |  |
| HSCI 4720 | Health Science Capstone-Service (Prerequisite course HSCl 4700) |  |
| HSCI 4730 | Health Science Capstone-Research (Prerequisite course HSCI 4700) |  |

## Integrative Requirement

## Code

 TitleMGMT 3340
Managing Healthcare Organizations: Critical Challenges and New Approaches

## Business GPA Requirement

A minimum 2.000 GPA is required in all business courses.

## Program Requirement

132 total semester hours required

## Business Concentrations

CONCENTRATION IN ACCOUNTING

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 |  |
| Electives |  | 8 |
| Complete two of the following: |  |  |


| ACCT 3403 | Accounting Information Systems |
| :--- | :--- |
| ACCT 3416 | Strategic Cost Analysis for Decision <br> Making |
| ACCT 4412 | Auditing and Other Assurance Services |
| ACCT 4414 | Income Tax Determination and <br> Planning |

## $\begin{array}{ll}\text { CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION } \\ \text { Code } & \text { Title Hours }\end{array}$

Note: The following courses do not count toward this concentration:

| ENTR 1201 | The Entrepreneurial Universe |  |
| :---: | :---: | :---: |
| ENTR 3308 | Business Economic History of South Africa |  |
| ENTR 3318 |  |  |
| ENTR 3328 |  |  |
| ENTR 3338 | Field Research in Sustainable Energy in Iceland |  |
| ENTR 3346 |  |  |
| ENTR 4510 | Management Consulting Abroad |  |
| ENTR 4514 | Development Practice and Global Citizenship in India |  |
| Introductory Cour |  |  |
| ENTR 2301 or ENTR 2303 | Innovation! <br> Entrepreneurial Marketing and Selling | 4 |
| Capstone Course |  |  |
| Complete one of | llowing: | 4 |
| ENTR 4501 | Business Planning for Technology Ventures |  |
| ENTR 4503 | Business Planning for Small and Medium Enterprises |  |
| ENTR 4505 | Entrepreneurial Growth Strategy for Technology Ventures |  |
| ENTR 4506 | Advanced Studies in Social Enterprise |  |
| Electives |  |  |
| Note: Only one non | NTR course may be used as an elective. |  |
| Complete two of ther | following: | 8 |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |


| ENTR 2301 | Innovation! (if not used as introductory course) |
| :---: | :---: |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |
| ENTR 3212 | Innovation for Social Change |
| ENTR 3217 | Global Family Business Leadership |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |
| ENTR 3306 | Global Entrepreneurship |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |
| ENTR 3520 | Impact Investing and Social Finance |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |
| MGMT 3302 | Negotiating in Business |
| CONCENTRATION IN FINANCE |  |
| Code | Title |
| Required Course |  |
| FINA 3301 | Corporate Finance |
| or FINA 3303 | Investments |
| Electives |  |
| Complete three of the following: |  |
| ENTR 3520 <br> or FINA 2720 | Impact Investing and Social Finance Sustainability in the Business Environment |
| 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 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 4983 | Special Topics in Finance |
| FINA 4602 | Turnaround Management |
| FINA 4604 | Fixed-Income Securities |


| FINA 4608 | Advanced Financial Strategy |
| :--- | :--- |
| FINA 4610 | Entrepreneurial Finance, Innovation |
|  | Valuation, and Private Equity |

## CONCENTRATION IN MANAGEMENT <br> Code Title Hours

Required Course
MGMT 4501 Skills for Managerial Success 4

## Electives

Note: Only one non-MGMT course may be used as an elective.
Complete three of the following: 12

| MGMT 3302 | Negotiating in Business |
| :--- | :--- |
| MGMT 3315 | Managing Organizational Change and <br> Disruption |
| MGMT 3330 | Developing Leaders for Global <br> Sustainability |
| MGMT 3340 | Managing Healthcare Organizations: <br> Critical Challenges and New <br> Approaches |
| MGMT 3350 | Managing a Diverse Workforce |
| MGMT 3360 | Law and the Legal Process |$|$| Managing Human Capital |
| :--- | :--- |

CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS
Code Title Hours

| Code Title Hours |  |
| :--- | :--- | :--- |
| Required Courses |  |

MISM $3403 \quad$ Data Management in the Enterprise 4
MISM $4501 \quad$ Business Systems Integration 4

## Electives

Note: Only one non-MISM course may be used as an elective.
Complete two of the following: 8

| MISM 2510 | Fundamentals of Information Analytics |
| :--- | :--- |
| MISM 3305 | Information Resource Management |
| MISM 3404 | Data Communications |
| MISM 3406 | Introduction to Web Design, Practices, <br> and Standards |
| MISM 3501 | Information Visualization for Business |
| MISM 3515 | Data Mining for Business |
| MKTG 4508 | Digital Marketing |
| SCHM 3301 | Global Supply Chain Strategy |
| SCHM 3305 | Sourcing and Procurement |
| SCHM 3308 | Supply Chain Analytics |


| CONCENTRATION IN MARKETING |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Required Courses |  |  |
| MKTG 3401 | Marketing Research | 4 |
| MKTG 3301 | Marketing Management | 4 |
| or MKTG 4506 | Consumer Behavior |  |
| Electives |  |  |
| 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 | Marketing in the Service Sector |  |
| 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 |  |
| CONCENTRATION IN SUPPLY CHAIN MANAGEMENT |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation Management | 4 |
| Elective |  |  |
| Complete one of th | following: | 4 |
| SCHM 3308 | Supply Chain Analytics |  |
| SCHM 3320 | Demand Planning and Forecasting |  |
| SCHM 3330 | Sustainability and Supply Chain Management |  |
| SCHM 4401 | Advanced Problems in Supply Chain Management |  |

## Information Science and Business Administration, BS

The information science and business combined major provides a technical degree with a strong grounding in business. Information science combines concepts and skills from computer science, behavioral and social science, and system design into an integrated, people-centered curriculum. Students will complete most of the requirements of a business major, including macroeconomics and microeconomics, while studying how information is acquired, organized, communicated, and used by both people and computers.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- <br> op | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 | Discrete Structures |  |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 and Lab for CS 2500 |  |  |
| CS 2510 Fundamentals of Computer Science 2 <br> and CS 2511 and Lab for CS 2510 | 5 |  |

and Lab for CS 2510
Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| Information Science | Required Courses |  |
| IS 2000 | Principles of Information Science | 4 |
| IS 3500 | Information System Design and | 4 |
| IS 4800 | Development | 4 |

Presentation Requirement
THTR $1170 \quad$ The Eloquent Presenter 1

## Business Courses

Code Title Hours

Required Business Courses

| 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 |
| Choose one of the following: ${ }^{1}$ | 4 |  |


| STRT 4501 | Strategy in Action |
| :--- | :--- |
| STRT 4516 | External Case Competition Challenge |

${ }^{1}$ Strategy in Action (STRT 4501), and External Case Competition Challenge (STRT 4516) satisfy the capstone requirement.

## Business Concentration

Complete a four-course business concentration from the following list. Requirements for the concentrations are listed below (p. 250).

- Accounting (p. 250)
- Entrepreneurship and Innovation (p. 250)
- Finance (p. 251)
- Management (p. 251)
- Marketing (p. 251)
- Supply Chain Management (p. 252)


## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| MISM 2301 | Management Information Systems | 4 |
| MISM 3404 | Data Communications | 4 |

## Supporting Courses

Code Title Hours

Mathematics

| MATH 1341 or MATH 1231 | Calculus 1 for Science and Engineering Calculus for Business and Economics | 4 |
| :---: | :---: | :---: |
| Economics |  |  |
| ECON 1115 | Principles of Macroeconomics | 4 |
| ECON 1116 | Principles of Microeconomics | 4 |
| Computing and Social Issues |  |  |
| Complete one of th | following: | 4 |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| IA 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 21 st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |

Computer Science Writing Requirement
Title

| College Writing |  |
| :--- | :--- |
| ENGW 1111 First-Year Writing |  |
| Advanced Writing in the Disciplines | 4 |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Code Title
Hours
Complete four general electives.

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Information Science GPA Requirement

Minimum 2.000 GPA required in all CS 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 coop.

## Program Requirement

133 total semester hours required

| Business Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN ACCOUNTING |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 | 4 |
| Electives |  |  |
| Complete tw | following: | 8 |


| ACCT 3403 | Accounting Information Systems |
| :--- | :--- |
| ACCT 3416 | Strategic Cost Analysis for Decision <br> Making |
| ACCT 4412 | Auditing and Other Assurance Services |
| ACCT 4414 | Income Tax Determination and <br> Planning |

$\begin{array}{lll}\text { CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION } \\ \text { Code } & \text { Title Hours }\end{array}$

| Code $\quad$ Title | Hours |
| :--- | :--- |
| Note: The following courses do not count toward this |  |

concentration:


| ENTR 4501 | Business Planning for Technology <br> Ventures |
| :--- | :--- |
| ENTR 4503 | Business Planning for Small and <br> Medium Enterprises |
| ENTR 4505 | Entrepreneurial Growth Strategy for <br> Technology Ventures |
| ENTR 4506 | Advanced Studies in Social Enterprise |


| Electives |  |  |
| :---: | :---: | :---: |
| Note: Only one non-ENTR course may be used as an elective. |  |  |
| Complete two of the | following: | 8 |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |  |
| ENTR 3212 | Innovation for Social Change |  |
| ENTR 3217 | Global Family Business Leadership |  |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |  |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |  |
| ENTR 3306 | Global Entrepreneurship |  |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |  |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |  |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |  |
| ENTR 3520 | Impact Investing and Social Finance |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |
| MGMT 3302 | Negotiating in Business |  |
| CONCENTRATION IN FINANCE |  |  |
| Code | Title | Hours |
| Required Course |  |  |
| FINA 3301 or FINA 3303 | Corporate Finance Investments | 4 |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| ENTR 3520 or FINA 2720 | Impact Investing and Social Finance Sustainability in the Business Environment |  |
| 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 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 4983 | Special Topics in Finance |
| FINA 4602 | Turnaround Management |
| FINA 4604 | Fixed-Income Securities |
| FINA 4608 | Advanced Financial Strategy |
| FINA 4610 | Entrepreneurial Finance, Innovation |

Code Title Hours
Required Course
MGMT 4501 Skills for Managerial Success 4

## Electives

Note: Only one non-MGMT course may be used as an elective.
Complete three of the following:

| MGMT 3302 | Negotiating in Business |
| :--- | :--- |
| MGMT 3315 | Managing Organizational Change and <br> Disruption |
| MGMT 3330 | Developing Leaders for Global <br> Sustainability |
| MGMT 3340 | Managing Healthcare Organizations: <br> Critical Challenges and New <br> Approaches |
| MGMT 3350 | Managing a Diverse Workforce |
| MGMT 3360 | Law and the Legal Process <br> Managing Human Capital |
| MGMT 3510 3420 | Managing Global Teams Virtually and <br> Locally |
| MGMT 3530 | Project Management <br> MGe Management Practices of Great <br> Organizations <br> Human Resources and Workforce |
| MGMT 4410 | Analytics |
| ENTR 2215 | Understanding Family Enterprise <br> Social Responsibility of Business in an <br> Age of Inequality |
| ENTR 2414 | Corporate Entrepreneurship through <br> Global Growth, Acquisitions, and <br> Alliances |

## CONCENTRATION IN MARKETING

Code Title Hours

## Required Courses

| MKTG 3401 | Marketing Research | 4 |
| :---: | :--- | :--- |
| MKTG 3301 | Marketing Management | 4 |
| or MKTG 4506 | Consumer Behavior |  |

## Electives

Complete two of the following:
8

| MKTG 2301 | Marketing and Society |
| :--- | :--- |
| MKTG 3301 | Marketing Management (if not selected <br> as a required course) |
| MKTG 3501 | Marketing Analytics |

Hours 4
4

8

| MKTG 4220 | Marketing in Asia |
| :--- | :--- |
| MKTG 4420 | Sales Management |
| MKTG 4502 | Marketing in the Service Sector |
| MKTG 4504 | Advertising and Brand Promotion |
| MKTG 4506 | Consumer Behavior (if not selected as a <br> required course) |
| MKTG 4508 | Digital Marketing |
| MKTG 4510 | New Product Development |
| MKTG 4512 | International Marketing |


|  |  | MISM 2301 |  | 4 Elective | 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Business concentration 3 | 4 | 4 |  |  |
|  |  | Computing and social issues | 4 |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |
|  | 0 |  | 17 |  | 8 | 0 |
| Year 4 |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours |  |
| Co-op |  | IS 4800 |  | STRT 4501 | 4 |  |
|  |  | ENGW 3302 | 4 | 4 Elective | 4 |  |
|  |  | Business concentration 4 | 4 |  |  |  |
|  |  | MISM 3404 | 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 |  |
| IS 2000 | 4 IS 3500 | 4 | Vacation | 0 Co-op | 0 |
| CS 3500 | 4 ACCT 2301 | 4 |  |  |  |
| ACCT 1201 | 4 Elective | 4 |  |  |  |
| MGSC 2301 | 4 CS 3000 | 4 |  | 0 |  |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | ---: | :---: | ---: |
| Co-op | 0 MISM 3404 | 4 ORGB 3201 | 4 Co-op | 0 |
|  | FINA 2201 | 4 MKTG 2201 | 4 |  |
|  | MATH 1341 | 4 |  |  |
|  | ENGW 3302 | 4 |  |  |
|  | THTR 1170 | 1 | 8 | 0 |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | 0 IS 4800 | 4 Elective | 4 Co-op | 0 |
|  | MISM 2301 | 4 Elective | 4 |  |
|  | Business <br> concentration <br> 1 | 4 |  |  |
|  |  |  |  |  |


| Business <br> concentration <br> 2 | 4 |  |  |
| :--- | :--- | :--- | :--- |
| 0 | 16 | 8 | 0 |

Year 5

| Fall | HoursSpring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 STRT 4501 | 4 |
|  | Business <br> concentration <br> 3 | 4 |
|  | Computing <br> and social <br> issues | 4 |
|  | Business <br> concentration <br> 4 | 4 |
| 0 | 16 |  |

Total Hours: 134

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Mathematics Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| MATH 1342 | Calculus 2 for Science and Engineering | 4 |
| MATH 1365 | Introduction to Mathematical <br> Reasoning | 4 |
| MATH 3081 | Probability and Statistics | 4 |

## Calculus and Linear Algebra (Required) and Differential Equations (Recommended)

Complete either Option 1 or Option 2 below: 8

Option 1 (Recommended)

| MATH 2321 | Calculus 3 for Science and Engineering |
| :---: | :---: |
| MATH 2341 | Differential Equations and Linear Algebra for Engineering |
| Option 2 |  |
| MATH 2321 or MATH 2323 | Calculus 3 for Science and Engineering Calculus 3 for Business, Economics, and Mathematics |
| MATH 2331 | Linear Algebra |
| Co-op Reflections |  |
| MATH 3000 | Co-op and Experiential Learning Reflection Seminar 1 |
| Mathematics Electives |  |
| Complete three cours 5999. The following | es in the range MATH 3001 to MATH courses are recommended: |
| MATH 4681 | Probability and Risks |
| MATH 4682 | Theory of Interest and Basics of Life Insurance |
| MATH 4581 | Statistics and Stochastic Processes |

## Business Requirements

Code Title Hours

| Accounting |  | 4 |
| :--- | :--- | :--- |
| ACCT 1201 | Financial Accounting and Reporting | 4 |
| ACCT 2301 | Managerial Accounting | 4 |

Finance

| FINA 2201 | Financial Management | 4 |
| :--- | :--- | :--- |
| Marketing |  | 4 |
| MKTG 2201 | Introduction to Marketing | 4 |


| Organizational Behavior |  |  |
| :--- | :--- | :--- |
| ORGB 3201 | Organizational Behavior | 4 |

International Business/Social Responsibility

| INTB 1203 | International Business and Global <br> Social Responsibility | 4 |
| :--- | :--- | :---: |
| 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
Finance Requirements

| FINA 3301 | Corporate Finance | 4 |
| :--- | :--- | :--- |
| FINA 3303 | Investments | 4 |
| FINA 4512 | Financial Risk Management | 4 |
| Finance Elective |  | 4 |
| Complete one of the following: |  |  |

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, Innovation <br> Valuation, 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. Requirements for the concentrations are listed below (p. 254).

- Accounting (p. 254)
- Business/Interdisciplinary (p. 254)
- Entrepreneurship and Innovation (p. 254)
- Management (p. 255)
- Management Information Systems (p. 255)
- Marketing (p. 255)
- Supply Chain Management (p. 255)

| Supplemental Courses <br> Code <br> Economics | Title | Hours |
| :--- | :--- | ---: |
| ECON 1115 | Principles of Macroeconomics | 4 |
| ECON 1116 | Principles of Microeconomics | 4 |
| Co-op Preparation |  | 1 |
| BUSN 1103 | Professional Development for Business <br> 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

## CONCENTRATION IN ACCOUNTING

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 | 4 |

Electives
Complete two of the following: 8

| ACCT 3403 | Accounting Information Systems |
| :--- | :--- |
| ACCT 3416 | Strategic Cost Analysis for Decision <br> Making |
| ACCT 4412 | Auditing and Other Assurance Services |
| ACCT 4414 | Income Tax Determination and <br> Planning |

CONCENTRATION IN BUSINESS/INTERDISCIPLINARY
Code Title Hours

Complete four courses in consultation with approved 16
D'Amore-McKim School of Business faculty member.

CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION
Code Title Hours

Note: The following courses do not count toward this concentration:

| ENTR 1201 | The Entrepreneurial Universe |  |
| :---: | :---: | :---: |
| ENTR 3308 | Business Economic History of South Africa |  |
| ENTR 3318 |  |  |
| ENTR 3328 |  |  |
| ENTR 3338 | Field Research in Sustainable Energy in Iceland |  |
| ENTR 3346 |  |  |
| ENTR 4510 | Management Consulting Abroad |  |
| ENTR 4514 | Development Practice and Global Citizenship in India |  |
| Introductory Course |  |  |
| ENTR 2301 or ENTR 2303 | Innovation! <br> Entrepreneurial Marketing and Selling | 4 |
| Capstone Course |  |  |
| Complete one of th | ollowing: | 4 |


| ENTR 4501 | Business Planning for Technology <br> Ventures |
| :--- | :--- |
| ENTR 4503 | Business Planning for Small and <br> Medium Enterprises |
| ENTR 4505 | Entrepreneurial Growth Strategy for <br> Technology Ventures |
| ENTR 4506 | Advanced Studies in Social Enterprise |


| ENTR 2206 | Global Social Enterprise |
| :--- | :--- |
| ENTR 2215 | Understanding Family Enterprise |
| ENTR 2414 | Social Responsibility of Business in an <br> Age of Inequality |
| ENTR 2301 | Innovation! (if not used as introductory <br> course) |
| ENTR 2303 | Entrepreneurial Marketing and Selling <br> (if not used for introductory course) |
| ENTR 3212 | Innovation for Social Change |
| ENTR 3217 | Global Family Business Leadership <br> International Entrepreneurship and |
| ENTR 3220 | Innovation Consulting |


| ENTR 3305 | Entrepreneurial Strategy and Business <br> Model Design |
| :--- | :--- |
| ENTR 3306 | Global Entrepreneurship |
| ENTR 3330 | Lean Design and Development for <br> Entrepreneurs |
| ENTR 3401 | Management of Operations and Growth <br> in Small- and Medium-Sized Enterprises |
| ENTR 3403 | Managing Operations in a Technology- <br> Based Startup Firm |
| ENTR 3520 | Impact Investing and Social Finance |
| ENTR 4225 | Corporate Entrepreneurship through <br> Global Growth, Acquisitions, and |
| ENTR 4512 | Alliances |
| Social Entrepreneurship and |  |
| Sustainable Development in India |  |

CONCENTRATION IN MANAGEMENT
Code Title Hours

| Required Course |  |  |
| :---: | :---: | :---: |
| MGMT 4501 | Skills for Managerial Success | 4 |
| Electives |  |  |
| Note: Only one non-MGMT course may be used as an elective. |  |  |
| Complete three | following: | 12 |
| MGMT 3302 | Negotiating in Business |  |
| MGMT 3315 | Managing Organizational Change and Disruption |  |
| MGMT 3330 | Developing Leaders for Global Sustainability |  |
| MGMT 3340 | Managing Healthcare Organizations: Critical Challenges and New Approaches |  |
| MGMT 3350 | Managing a Diverse Workforce |  |
| MGMT 3360 | Law and the Legal Process |  |
| MGMT 3420 | Managing Human Capital |  |
| MGMT 3510 | Managing Global Teams Virtually and Locally |  |
| MGMT 3530 | Project Management |  |
| MGMT 4310 | The Management Practices of Great Organizations |  |
| MGMT 4410 | Human Resources and Workforce Analytics |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |

## CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS Code $\quad$ Title Hours

| Required Courses |  | 4 |
| :--- | :--- | :--- |
| MISM 3403 | Data Management in the Enterprise | 4 |
| MISM 4501 | Business Systems Integration |  |

## Electives

Note: Only one non-MISM course may be used as an elective.
Complete two of the following:

| MISM 2510 | Fundamentals of Information Analytics |
| :--- | :--- |
| MISM 3305 | Information Resource Management |
| MISM 3404 | Data Communications |
| MISM 3406 | Introduction to Web Design, Practices, <br> and Standards |
| MISM 3501 | Information Visualization for Business |
| MISM 3515 | Data Mining for Business |
| MKTG 4508 | Digital Marketing |
| SCHM 3301 | Global Supply Chain Strategy |
| SCHM 3305 | Sourcing and Procurement |
| SCHM 3308 | Supply Chain Analytics |

## CONCENTRATION IN MARKETING

Code Title Hours

## Required Courses

| MKTG 3401 | Marketing Research | 4 |
| :--- | :--- | :--- |
| MKTG 3301 | Marketing Management | 4 |
| or MKTG 4506 | Consumer Behavior |  |
| Electives |  | 8 |


| MKTG 2301 | Marketing and Society |
| :--- | :--- |
| MKTG 3301 | Marketing Management (if not selected <br> as a required course) |
| MKTG 3501 | Marketing Analytics |
| MKTG 4220 | Marketing in Asia |
| MKTG 4420 | Sales Management |
| MKTG 4502 | Marketing in the Service Sector |
| MKTG 4504 | Advertising and Brand Promotion |
| MKTG 4506 | Consumer Behavior (if not selected as a <br> required course) |
| MKTG 4508 | Digital Marketing |
| MKTG 4510 | New Product Development |
| MKTG 4512 | International Marketing |

## CONCENTRATION IN SUPPLY CHAIN MANAGEMENT

Code Title Hours

## Required Courses

| SCHM 3301 | Global Supply Chain Strategy | 4 |
| :--- | :--- | :--- |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation <br>  | Management |

## Elective

Complete one of the following: 4
SCHM 3308 Supply Chain Analytics
SCHM 3320 Demand Planning and Forecasting
SCHM $3330 \quad$ Sustainability and Supply Chain Management
SCHM $4401 \quad$ Advanced Problems in Supply Chain Management

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| POLS 1000 or BUSN 1102 | Political Science at Northeastern <br> Personal Skill Development for Business | 1 |
| Poltical 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 |  |
| Political Science Restricted Electives |  |  |
| Complete two of the following: |  | 8 |
| POLS 3307 | Public Policy and Administration |  |
| POLS 2335 | Budgeting and Taxation |  |
| POLS 2340 | Business and Government |  |
| POLS 2345 | Urban Policies and Politics |  |
| POLS 3405 | International Political Economy |  |
| POLS 3487 | Politics of Developing Nations |  |
| Statistics |  |  |
| $\begin{aligned} & \text { POLS } 2400 \\ & \text { or MGSC } 2301 \end{aligned}$ | Quantitative Techniques <br> Business Statistics | 4 |

## Political Science Electives

Complete two courses in the following range, or complete a
political science concentration as outlined below:
POLS 3300 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. 258).

- American Political Institutions (p. 258)
- Identity, Culture, and Politics (p. 259)
- Law and Legal Studies (p. 259)


## Business Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Accounting |  |  |
| ACCT 1201 | Financial Accounting and Reporting | 4 |
| ACCT 2301 | Managerial Accounting | 4 |
| Finance |  | 4 |
| FINA 2201 | Financial Management | 4 |
| Marketing |  | 4 |
| MKTG 2201 | Introduction to Marketing | 4 |
| Organizational Behavior | 4 |  |
| ORGB 3201 | Organizational Behavior |  |

## Business Concentration

Complete one of the following business concentrations. Requirements for the concentrations are listed below (p. 257).

- Accounting (p. 257)
- Entrepreneurship and Innovation (p. 257)
- Finance (p. 257)
- Management (p. 258)
- Management Information Systems (p. 258)
- Marketing (p. 258)
- Supply Chain Management (p. 258)


## Supporting Courses

Code Title Hours
Mathematics

| MATH 1231 | Calculus for Business and Economics | 4 |
| :---: | :--- | :---: |
| or MATH 1341 | Calculus 1 for Science and Engineering |  |

Economics

| ECON 1115 | Principles of Macroeconomics | 4 |
| :---: | :--- | :---: |
| or ECON 1116 | Principles of Microeconomics |  |

Computer Science

| CS 1100 | Computer Science and Its Applications | 4 |
| :--- | :--- | :--- |
| Co-op Preparation |  |  |
| BUSN 1103 | Professional Development for Business <br> Co-op | 1 |
| or EESH 2000 | Professional Development for Co-op |  |

Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Senior Capstone |  |  |
| POLS 4701 | Political Science Senior Capstone | 4 |

or STRT 4501 Strategy in Action
The following course is fulfilled through the political science requirement:

POLS 1160

## 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

## Program Requirement

128 total semester hours required

| Business Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN ACCOUNTING |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 | 4 |
| Electives |  |  |
| Complete two of the following: |  | 8 |
| ACCT 3403 | Accounting Information Systems |  |
| ACCT 3416 | Strategic Cost Analysis for Decision Making |  |
| ACCT 4412 | Auditing and Other Assurance Services |  |
| ACCT 4414 | Income Tax Determination and Planning |  |

CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION
Code Title Hours

Note: The following courses do not count toward this concentration:

| ENTR 1201 | The Entrepreneurial Universe |  |
| :---: | :---: | :---: |
| ENTR 3308 | Business Economic History of South Africa |  |
| ENTR 3318 |  |  |
| ENTR 3328 |  |  |
| ENTR 3338 | Field Research in Sustainable Energy in Iceland |  |
| ENTR 3346 |  |  |
| ENTR 4510 | Management Consulting Abroad |  |
| ENTR 4514 | Development Practice and Global Citizenship in India |  |
| Introductory Course |  |  |
| ENTR 2301 or ENTR 2303 | Innovation! <br> Entrepreneurial Marketing and Selling | 4 |
| Capstone Course |  |  |
| Complete one of the | following: | 4 |


| ENTR 4501 | Business Planning for Technology <br> Ventures |
| :--- | :--- |
| ENTR 4503 | Business Planning for Small and <br> Medium Enterprises |


| ENTR 4505 | Entrepreneurial Growth Strategy for Technology Ventures |
| :---: | :---: |
| ENTR 4506 | Advanced Studies in Social Enterprise |
| Electives |  |
| Note: Only one non-ENTR course may be used as an elective. |  |
| Complete two of | following: |
| ENTR 2206 | Global Social Enterprise |
| ENTR 2215 | Understanding Family Enterprise |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |
| ENTR 2301 | Innovation! (if not used as introductory course) |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |
| ENTR 3212 | Innovation for Social Change |
| ENTR 3217 | Global Family Business Leadership |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |
| ENTR 3306 | Global Entrepreneurship |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |
| ENTR 3520 | Impact Investing and Social Finance |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |
| MGMT 3302 | Negotiating in Business |

## CONCENTRATION IN FINANCE Hours

## Required Course

| FINA 3301 | Corporate Finance | 4 |
| :---: | :--- | :---: |
| or FINA 3303 | Investments |  |

Electives
Complete three of the following:

| ENTR 3520 | Impact Investing and Social Finance |
| :--- | :--- |
| or FINA 2720 | Sustainability in the Business Environment <br> FINA 3301 |
| FINA 3303 | required course) <br> Investments (if not selected as a <br> 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 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 4983 | Special Topics in Finance |
| FINA 4602 | Turnaround Management |
| FINA 4604 | Fixed-Income Securities |
| FINA 4608 | Advanced Financial Strategy |
| FINA 4610 | Entrepreneurial Finance, Innovation |


| MISM 3305 | Information Resource Management |
| :--- | :--- |
| MISM 3404 | Data Communications |
| MISM 3406 | Introduction to Web Design, Practices, <br> and Standards |
| MISM 3501 | Information Visualization for Business |
| MISM 3515 | Data Mining for Business |
| MKTG 4508 | Digital Marketing |
| SCHM 3301 | Global Supply Chain Strategy |
| SCHM 3305 | Sourcing and Procurement |
| SCHM 3308 | Supply Chain Analytics |


| CONCENTRATION IN MANAGEMENT |  |
| :--- | :--- |
| Code Title$\quad$ Hours |  |
| Required Course |  |

CONCENTRATION IN MARKETING
Code Title Hours

Required Courses

| MGMT 4501 | Skills for Managerial Success | 4 |
| :--- | :--- | :--- |
| Electives |  |  |


| MKTG 3401 | Marketing Research | 4 |
| :--- | :--- | :---: |
| MKTG 3301 | Marketing Management | 4 |
| or MKTG 4506 Consumer Behavior |  |  |
| Electives |  | 8 |

Note: Only one non-MGMT course may be used as an elective.
Complete three of the following:

| MGMT 3302 | Negotiating in Business |
| :---: | :---: |
| MGMT 3315 | Managing Organizational Change and Disruption |
| MGMT 3330 | Developing Leaders for Global Sustainability |
| MGMT 3340 | Managing Healthcare Organizations: Critical Challenges and New Approaches |
| MGMT 3350 | Managing a Diverse Workforce |
| MGMT 3360 | Law and the Legal Process |
| MGMT 3420 | Managing Human Capital |
| MGMT 3510 | Managing Global Teams Virtually and Locally |
| MGMT 3530 | Project Management |
| MGMT 4310 | The Management Practices of Great Organizations |
| MGMT 4410 | Human Resources and Workforce Analytics |
| ENTR 2215 | Understanding Family Enterprise |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |

CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS
Code Hours

| Required Courses |  | 4 |
| :--- | :--- | :--- |
| MISM 3403 | Data Management in the Enterprise | 4 |
| MISM 4501 | Business Systems Integration | 4 |
| Electives |  |  |

Note: Only one non-MISM course may be used as an elective.
Complete two of the following:

[^5]| POLS 3300 | The U.S. Congress |  |
| :---: | :---: | :---: |
| POLS 3302 | Judicial Process and Behavior |  |
| POLS 3305 | The American Presidency |  |
| POLS 3307 | Public Policy and Administration |  |
| POLS 3310 | Public Opinion, Voting, and Elections |  |
| CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS |  |  |
| Code | Title | Hours |
| Core Course |  |  |
| POLS 3418 | Nationalism | 4 |
| Electives |  |  |
| Complete three | following: | 12 |
| POLS 2360 | Politics of Poverty |  |
| POLS 2368 | Music and Politics in America and Abroad |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |  |
| POLS 3324 | Law and Society |  |
| 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 4500 | U.S. Constitutional Law |  |
| POLS 4505 | U.S. Civil Liberties |  |

## Concentrations

- Accounting (p. 259)
- Business/Interdisciplinary (p. 259) (available only as a second concentration)
- Entrepreneurship and Innovation (p. 259)
- Finance (p. 260)
- Management (p. 261)
- Management Information Systems (p. 261)
- Marketing (p. 262)
- Supply Chain Management (p. 262)


## Accounting

Website (http://www.damore-mckim.neu.edu)
404 Hayden Hall
617.373.3240
617.373 .8814 (fax)

Ganesh Krishnamoorthy, Professor and Group Coordinator, g.krishnamoorthy@northeastern.edu

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 accounting information 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
Required Courses

| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| :--- | :--- | ---: |
| ACCT 4501 | Financial Reporting and Analysis 2 | 4 |
| Electives |  | 8 |
| Complete two of the following: |  |  |


| ACCT 3403 | Accounting Information Systems |
| :--- | :--- |
| ACCT 3416 | Strategic Cost Analysis for Decision <br> Making |
| ACCT 4412 | Auditing and Other Assurance Services |
| ACCT 4414 | Income Tax Determination and <br> Planning |

## Business/Interdisciplinary

Complete four courses in consultation with approved D'Amore-McKim School of Business faculty member.

## Concentration Requirements

Note: Business/interdisciplinary is only available as a second concentration.

CONCENTRATION IN BUSINESS/INTERDISCIPLINARY Code Title

Hours
Complete four courses in consultation with approved
D'Amore-McKim School of Business faculty member.

## Entrepreneurship and Innovation

Website (http://www.damore-mckim.neu.edu)
214 Hayden Hall
617.373.3241
617.373 .8628 (fax)

Tucker Marion,The Sam and Nancy Altschuler Faculty Fellow; Bornstein Endowed Faculty Fellow
Professor of Technological Entrepreneurship; Entrepreneurship and Innovation Group Coordinator, Academic Programs,
t.marion@northeastern.edu

Fernando F. Suarez, Jean C. Tempel Professor, Entrepreneurship and Innovation; Entrepreneurship and Innovation Group Coordinator, Research and Tenure-Track Faculty, f.suarez@northeastern.edu

Entrepreneurship and Innovation Group offers a dynamic set of courses for students considering career paths as either entrepreneurs or corporate innovators. It is also a wonderful complement to finance, marketing, and other disciplines interested in learning and applying entrepreneurial thinking to business problems. We offer three specific tracks within the concentration-technological entrepreneurship, family business, and social enterprise-in which there is a required capstone that varies by these three tracks, plus any other three ENTR courses from a broad menu. In addition, the Entrepreneurship and Innovation Group provides a five-course interdisciplinary entrepreneurship minor for non-D'Amore-McKim students in which college-specific courses in innovation and design can be combined with D'Amore-McKim School of Business entrepreneurship courses. We also offer a concentrated course of study with an off-campus program in Silicon Valley. This program leverages the strength of our campus network and builds on the university's existing brand in entrepreneurship so students have an opportunity to build their own network of future entrepreneurs within Silicon Valley. In all these programs, the professors have been entrepreneurs and innovators throughout their careers. This makes the courses both cutting edge and "real world."

There are also specialized field studies in our international new ventures and Dialogues of Civilization programs, conducted in Summer 1 and Summer 2. Locales include South Africa, India, Italy, South Korea, and Israel.

Even if you don't wish to start your own company, entrepreneurial thinking is an attribute greatly valued by employers across industry and around the world.

## Concentration Requirements

CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION
Code Title Hours

Note: The following courses do not count toward this concentration:


Note: Only one non-ENTR course may be used as an elective.

| Complete two of | llowing: | 8 |
| :---: | :---: | :---: |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |  |
| ENTR 3212 | Innovation for Social Change |  |
| ENTR 3217 | Global Family Business Leadership |  |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |  |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |  |
| ENTR 3306 | Global Entrepreneurship |  |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |  |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |  |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |  |
| ENTR 3520 | Impact Investing and Social Finance |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |
| MGMT 3302 | Negotiating in Business |  |

## Finance

Website (http://www.damore-mckim.neu.edu)
413 Hayden Hall
617.373.3616
617.373 .8798 (fax)

Olubunmi Faleye, Professor and Group
Coordinator, o.faleye@northeastern.edu
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 <br> Required Course | Title | Hours |
| :--- | :--- | ---: |
| FINA 3301 |  |  |
| or FINA 3303 |  |  |$\quad$| Corporate Finance |
| :--- |
| Investments |$\quad 4$

## Management

Website (http://www.damore-mckim.neu.edu)
112 Hayden Hall
617.373.2452
617.373 .2491 (fax)

Cynthia Lee, Professor and Group Coordinator, c.lee@northeastern.edu
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. These cover a wide number of possibilities 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 MANAGEMENTCode Title Hours

Required Course
MGMT 4501 Skills for Managerial Success 4

## Electives

Note: Only one non-MGMT course may be used as an elective.
Complete three of the following:

| MGMT 3302 | Negotiating in Business |
| :--- | :--- |
| MGMT 3315 | Managing Organizational Change and <br> Disruption |
| MGMT 3330 | Developing Leaders for Global <br> Sustainability |
| MGMT 3340 | Managing Healthcare Organizations: <br> Critical Challenges and New <br> Approaches |
| MGMT 3350 | Managing a Diverse Workforce |
| MGMT 3360 | Law and the Legal Process |
| MGMT 3420 | Managing Human Capital |
| MGMT 3510 | Locally |
| MGMT 3530 | Project Management Management Practices of Great <br> Organizations |
| MGMT 4310 | Human Resources and Workforce <br> Analytics |
| MGMT 4410 | Understanding Family Enterprise |
| ENTR 2215 | Social Responsibility of Business in an <br> Age of Inequality |
| ENTR 2414 | Corporate Entrepreneurship through <br> Global Growth, Acquisitions, and <br> Alliances |

## Management Information Systems

Website (http://www.damore-mckim.neu.edu)
314 Hayden Hall
617.373.3132
617.373 .3166 (fax)

Yang W. Lee, Associate Professor and Group
Coordinator, y.lee@northeastern.edu
In the global information age, success for individuals and for companies requires the ability to manage information effectively. To that end, the goal of the management information systems concentration is to teach future managers how to use information systems (IS) and information technology (IT) to help organizations and individuals perform more efficiently and effectively. This can lead the student in two career directions:

- To become a professional in the cross-functional business data, information management, data governance function of a company or in an IT or data-enabled strategic business consulting company
- To accelerate and enhance a career in another functional area such as finance, marketing, research and development/innovation, accounting, human resource, strategic management, or acquisition

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 advantage. Students have an opportunity to develop new, cutting-edge approaches that allow them to use the powerful resource of information to its greatest advantage. They also have the opportunity to develop technical and problem-solving skills that are in high demand by employers.

Managers in the IS function need to interact frequently with other managers throughout an organization. Therefore, students are encouraged to complete a dual concentration in management information systems 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 analyst, database designer and administrator, webmaster, software helpdesk expert, project specialist, consultant, network administrator, and IT specialist within other departments, such as financial services, accounting, marketing, or manufacturing.

## Concentration Requirements

CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| MISM 3403 | Data Management in the Enterprise | 4 |
| MISM 4501 <br> Electives | Business Systems Integration | 4 |
| Note: Only one non-MISM course may be used as an elective. |  |  |
| Complete two of the following: | 8 |  |
| MISM 2510 | Fundamentals of Information Analytics |  |
| MISM 3305 | Information Resource Management |  |
| MISM 3404 | Data Communications |  |
| MISM 3406 | Introduction to Web Design, Practices, |  |
| MISM 3501 | Information Visualization for Business |  |
| MISM 3515 | Data Mining for Business |  |
| MKTG 4508 | Digital Marketing |  |
| SCHM 3301 | Global Supply Chain Strategy |  |
| SCHM 3305 | Sourcing and Procurement |  |
| SCHM 3308 | Supply Chain Analytics |  |

## Marketing

Website (http://www.damore-mckim.neu.edu)
202 Hayden Hall
617.373.3260
617.373 .8366 (fax)

Bruce H. Clark, Associate Professor and Group
Coordinator, b.clark@northeastern.edu
According to the American Marketing Association, marketing is "an organizational function and a set of processes for creating, communicating, and delivering value to customers, and for managing
customer relationships in ways that benefit the organization and its stakeholders." Create something people want, tell them about it, and deliver it to them in a way so that everyone benefits.

The concentration in marketing offers students an opportunity to develop an understanding of the role of the marketing function in the organization as well as detailed insight into various aspects of marketing processes, including strategy, buyer behavior, market research and analytics, digital and mobile media, marketing communications, sales, services, and new product development. Students prepare for possible careers in areas such as brand and product management, consulting, digital marketing, entrepreneurship, marketing research, marketing communications, and sales and account management.

## Concentration Requirements

CONCENTRATION IN MARKETING
Code Title Hours
Required Courses

| MKTG 3401 | Marketing Research | 4 |
| :---: | :---: | :---: |
| MKTG 3301 | Marketing Management | 4 |
| or MKTG 4506 | Consumer Behavior |  |
| Electives |  |  |
| Complete two of the following: |  | 8 |


| MKTG 2301 | Marketing and Society |
| :--- | :--- |
| MKTG 3301 | Marketing Management (if not selected <br> as a required course) |
| MKTG 3501 | Marketing Analytics |
| MKTG 4220 | Marketing in Asia |
| MKTG 4420 | Sales Management |
| MKTG 4502 | Marketing in the Service Sector |
| MKTG 4504 | Advertising and Brand Promotion |
| MKTG 4506 | Consumer Behavior (if not selected as a <br> required course) |
| MKTG 4508 | Digital Marketing  <br> MKTG 4510 New Product Development <br> MKTG 4512 International Marketing |

## Supply Chain Management

Website (http://www.damore-mckim.neu.edu)
314 Hayden Hall
617.373 .3132
617.373 .3166 (fax)

Yang W. Lee, Associate Professor and Group
Coordinator, y.lee@northeastern.edu
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 the modes of transportation used to move the company's materials and products, inventory policies, warehousing needs, customer service standards, and the location of facilities.

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, information management, or finance.

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 or transportation services in the marketplace. Consulting firms and government agencies at the federal, state, and local levels provide other career options.

## Concentration Requirements

CONCENTRATION IN SUPPLY CHAIN MANAGEMENT Code Title Hours

| Required Courses |  |  |
| :---: | :---: | :---: |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation Management | 4 |
| Elective |  |  |
| Complete one of th | llowing: | 4 |
| SCHM 3308 | Supply Chain Analytics |  |
| SCHM 3320 | Demand Planning and Forecasting |  |
| SCHM 3330 | Sustainability and Supply Chain Management |  |
| SCHM 4401 | Advanced Problems 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'AmoreMcKim 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.

- Business Administration, Minor (p. 263)
- Business Analytics, Minor (p. 263)
- Emerging Markets, Minor (p. 264)
- Entrepreneurship, Minor (p. 264)
- Global Social Entrepreneurship, Minor (p. 265)
- Leadership and Human Capital, Minor (p. 265)
- Strategy, Minor (p. 266)
- Sustainable Business Practices, Minor (p. 266)


## 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
> Financial Accounting and Reporting

Hours
ACCT 1209
4

## Organizational Behavior

Code Title Hours

ORGB $3209 \quad$ Organizational Behavior

## Finance

## Title

Hours
FINA 2209
Financial Management (ACCT 1209 is a prerequisite)

## Marketing

Note: It is recommended that students complete Financial Accounting and Reporting (ACCT 1209) prior to taking Introduction to Marketing (MKTG 2209):

| Code | Title | Hours |
| :--- | :--- | ---: |
| MKTG 2209 | Introduction to Marketing | 4 |

## Business Elective

Code Title Hours

Complete one of the following courses or, with the approval 4 of the undergraduate dean's office, any business course for which the prerequisites have been met:

| BUSN 1110 | Fundamentals of Business |
| :--- | :--- |
| ENTR 1201 | The Entrepreneurial Universe |
| ENTR 2206 | Global Social Enterprise |
| ENTR 2301 | Innovation! |
| ENTR 2215 | Understanding Family Enterprise |
| ENTR 2414 | Social Responsibility of Business in an <br> Age of Inequality |
| FINA 1209 | Personal Finance |
| FINA 2720 | Sustainability in the Business <br> Environment <br> International Business and Global <br> 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 undergraduate students with any major and concentration. The minor program offers contemporary data-grounded courses from a business perspective. The goal of these courses is to help students develop business data capability that can be applied to all business and decisions contexts. The minor courses include both fundamental courses and courses geared toward more specific data analytics challenges. Each of these courses will include real-world examples and data sets, grounded in relevant theory and principles, and will be reinforced using various user-friendly tools to gain the necessary skills and knowledge for tomorrow's work environment.

## 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 in the minor may double count with one of the seven business concentrations.

## Required Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| MISM 2301 | Management Information Systems | 4 |
| Electives |  |  |
| Code |  |  |
| Complete three of the following: | Hours |  |
| MISM 2510 | Fundamentals of Information Analytics | 12 |
| MISM 3501 | Information Visualization for Business |  |
| MISM 3515 | Data Mining for Business |  |
| MGMT 4410 | Human Resources and Workforce | Analytics <br> MKTG 3501 |
| Marketing Analytics |  |  |
| IS 1500 | Introduction to Web Development |  |
| SCHM 3308 | Supply Chain Analytics |  |

## GPA Requirement

2.000 GPA required in the minor

## Emerging Markets, Minor

The minor in emerging markets introduces students to the challenges and opportunities that face companies in countries that are rapidly developing into more developed world economies. Students have an opportunity to combine course work that explores the dynamics of conducting business and generating innovations in emerging markets with a summer field project on-site in an area of the world where markets are rapidly developing. 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 |
| :--- | :--- |
| INTB 2501 | Competing to Win in Emerging Markets |

Hours
4

Hours
8

## Electives

Code Title Hours
A minimum of two courses must be ENTR courses.
Complete four of the following:
16

## 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 |  |


| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: |  |  |
| ENTR 4501 | Business Planning for Technology <br> Ventures | 4 |
| ENTR 4503 | Business Planning for Small and <br> Medium Enterprises |  |
| ENTR 4505 | Entrepreneurial Growth Strategy for <br> Technology Ventures |  |

Please note: Additional research courses may be accepted with approval from the undergraduate dean's office.

Modern Chinese History and Culture

| CLTR 1505 | Introduction to Latin American Culture |
| :--- | :--- |
| COMM 2303 | Global and Intercultural Communication |
| LPSC 2302 | Global Human Rights: A Social and |
|  | Economic Perspective |
| POLS 3405 | International Political Economy |
| POLS 3407 | International Organizations |
| POLS 3487 | Politics of Developing Nations |

## GPA Requirement

2.000 GPA required in the minor

## Entrepreneurship, Minor

This five-course (20 credit) Interdisciplinary minor guides students through the startup process. Students are exposed to innovation, marketing, and business modeling and given the opportunity to develop prototypes for their new ideas. They will then work in interdisciplinary teams to develop business plans. Support is provided to help students advance their ventures through IDEA, the venture incubator.

Depending on the participating college, one or two courses have been carefully selected as substitutes for D'Amore-McKim School of Business courses, allowing a student to apply the same course to both his or her own college degree and our entrepreneurship minor. We currently have partnerships with CAMD, COE, CCIS, Bouvé, and COS. This allows students to learn entrepreneurship from business school professors while at the same time innovate and prototype new products and systems within their area's faculty. This powerful combination leads to exciting new ventures.

## 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 not available to students in the D'Amore-McKim School of Business.

## Required Course

| ENTR 3330 | Lean Design and Development for <br> Entrepreneurs |
| :--- | :--- |
| ENTR 4510 | Management Consulting Abroad |
| CS 4500 | Software Development |
| CS 4520 | Mobile Application Development |
| CS 4550 | Web Development |
| ARTG 1250 | Design Process Context and Systems |
| ARTG 3462 | Experience Design 1 |
| GAME 2010 | The Business of Games <br> Engineering Design (engineering <br> students only) |
| GE 5100 | Product Development for Engineers <br> (engineering students only) |

## GPA Requirement

2.000 GPA required in the minor

## Global Social Entrepreneurship, Minor

This five-course ( 20 credits) interdisciplinary minor in global social entrepreneurship (GSE) is administered by the D'Amore-McKim School of Business through its Entrepreneurship and Innovation Group (ENT) in collaboration with the College of Social Sciences and Humanities (CSSH).

The minor consists of three on-campus courses and one two-course Dialogue of Civilizations Program (Dialogue). 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. For example, after a student completes Global Social Enterprise (ENTR 2206) (a D'Amore-McKim School of Business course) and a D'Amore-McKim School of Business Dialogue, then the remaining two courses must come from CSSH. If, alternatively, a student completes a qualified CSSH Dialogue, then he or she may thereafter take one or two elective courses from the D'Amore-McKim School of Business.

Finally, note that business students can pursue this minor or alternatively choose to pursue the ENT concentration with a track (concentration track) in social entrepreneurship, which requires three ENTR courses in social entrepreneurship and does not require a Dialogue. Students may also choose to pursue both the minor and the ENT concentration.

## 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.

## Required Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| ENTR 2206 | Global Social Enterprise | 4 |

## Research Courses

| Code | Title |
| :--- | :--- |
| Complete one of the following: |  |

## Hours

| ENTR 4512 | Social Entrepreneurship and |
| :--- | :--- |
| and ENTR 4514 | Sustainable Development in India <br> and Development Practice and Global <br> Citizenship in India |
| HUSV 4945 <br> and HUSV 4866 | Leadership and International Program <br> Development <br> and Intercultural Studies through <br> Human Services |

Please note: Additional research courses may be accepted with approval from the undergraduate dean's office.

## Electives

| Code <br> Complete two of the following: | Hours |
| :--- | :--- | ---: |
| ENTR 2414 | Social Responsibility of Business in an <br> Age of Inequality |
| ANTH 2305 | Global Markets and Local Culture |
| ENTR 3212 | Innovation for Social Change |
| ENTR 3520 | Impact Investing and Social Finance |
| ENTR 4506 | Advanced Studies in Social Enterprise |
| INTL 1101 | Globalization and International Affairs |
| INTL 3400 | International Conflict and Negotiation <br> HUSV 3570The Nonprofit Sector, Philanthropy, and <br> Social Change |
| LPSC 2302 | Global Human Rights: A Social and <br> Economic Perspective |
| POLS 3487 | Politics of Developing Nations <br> POLS 3406International Law |

## 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
$\left.\begin{array}{llr}\text { Code } & \text { Title } & \text { Hours } \\ \text { ORGB 3201 } \\ \text { or ORGB 3209 }\end{array} \quad \begin{array}{l}\text { Organizational Behavior } \\ \text { Organizational Behavior }\end{array}\right) \quad$ Hours

## 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 | Code | Title | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| STRT 4501 | Strategy in Action | 4 | Complete two of the following: |  | 8 |
| or INTB 4202 | Executing Global Strategy |  | CIVE 2334 | Environmental Engineering 1 |  |
| Electives |  | Hours | ECON 3423 | Environmental Economics |  |
|  |  |  |  | ECON 3425 | Energy Economics |  |
| Code | Title |  | ENVR 1101 | Environmental Science |  |
| Complete three of the following: |  | 12 | ENVR 1112 | Environmental Geology |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  | ENVR 1120 | Oceans and Coasts |  |
|  |  |  | ENVR 1200 | Dynamic Earth |  |
|  |  |  | ENVR 4515 | Sustainable Development |  |


| 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 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).

If you have questions regarding specific accelerated programs see the college's Dean's Office

## Programs

## Business Administration

- Business Administration, BSBA/Finance, MSF


## International Business

- International Business, BSIB/International Management, MS
- International Business, BSIB/Finance, MSF


## College of Computer and Information Science

Website (http://www.ccs.neu.edu/undergraduate)
Carla E. Brodley, PhD, Dean
Ben Hescott, PhD, Associate Dean of Students
Mark Erickson, MEd, Assistant Dean of Employer Relations
Alan Mislove, PhD, Associate Professor, Associate Dean, and Director of Undergraduate Programs
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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 College of Computer and Information Science 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), information science (BS), and cybersecurity (BS); combined majors with business administration, cognitive psychology, biology, biochemistry, mathematics, physics, environmental science, health sciences, game development, music composition and technology, linguistics, communication, design, media arts, journalism, criminal justice, economics, English, history, philosophy, political science, and sociology; and a combined major in computer science and information science. The BS in computer science emphasizes strong technical competence in computer science, mathematics, science, and electrical engineering. The BA in computer science combines computer science with a broad-based liberal arts education. The BS in information science integrates studies in computer science, behavioral science, business, and social science. The BS in data science combines computer science, information science, mathematics, statistics, and probability theory into an integrated curriculum. The BS in cybersecurity provides the fundamental knowledge of computer science with an essential focus on experiential learning through security-related courses. The BS in computer science with a concentration in cyber operations extends the regular BS in computer science by requiring a significant number of courses in security and in networks both wired and wireless. This program is one of the initial four programs selected in 2012 by the National Security Agency as a National Center of Academic Excellence in Cyber Operations Program.

## Academic Progression Standards

To progress to sophomore standing, students are required to earn:

- A minimum of 25 semester hours of credit
- A minimum overall and CS GPA of 1.800
- A grade of C or higher in First-Year Writing (ENGW 1111) or First-Year Writing for Multilingual Writers (ENGW 1102)

A deficit in any of these criteria after two semesters of enrollment will lead to student dismissal from CCIS and Northeastern.

## Additional requirements

- Students are permitted two attempts to earn a minimum grade of $\mathrm{C}-$ in the following courses:
- Discrete Structures (CS 1800)
- Fundamentals of Computer Science 1 (CS 2500)
- Fundamentals of Computer Science 2 (CS 2510)
- If a C - is not earned by the second attempt, a student will be dismissed from CCIS and Northeastern.
- If the following courses are required by the degree program, a minimum grade of $C$ - is required:
- Calculus for Business and Economics (MATH 1231)
- Calculus and Differential Equations for Biology 1 (MATH 1251)
- Calculus and Differential Equations for Biology 2 (MATH 1252)
- Intensive Calculus for Engineers (MATH 1340)
- Calculus 1 for Science and Engineering (MATH 1341)
- Calculus 2 for Science and Engineering (MATH 1342)


## Maintaining good standing

To remain in good academic standing and progress after the first year, students are required to fulfill:

- A minimum of 12 SH in each full-term semester (fall or spring)
- A minimum overall GPA of 2.000
- A minimum GPA of 2.000 in all CS/IS/DS courses
- A minimum GPA of 2.000 for business courses in the combined CS and business, IS and business, and cybersecurity and business majors (or the business portion of the combined major will be dropped)


## Program Length

The College of Computer and Information Science 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.

The Bachelor of Science in Computer Science with Concentration in Cyber Operations is one of the initial four programs selected in 2012 by the National Security Agency as a National Center of Academic Excellence in Cyber Operations Program.

## Programs

## Bachelor of Science in Computer Science (BSCS)

- Computer Science (p. 269)
- Computer Science with Concentration in Cyber Operations (p. 272)


## Bachelor of Arts in Computer Science (BACS)

- Computer Science (p. 274)


## Bachelor of Science (BS)

- Cybersecurity (p. 276)


## Minor

- Computer Science (p. 279)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 367)

## 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. The bachelor's degree in computer science is also offered with a concentration in cyber operations.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- <br> $\quad$ op | 1 |

Computer Science Fundamental Courses
A grade of C - or higher is required in computer science
fundamental courses:

| CS 1800 |  |  |
| :--- | :--- | ---: |
| and CS 1802 | Discrete Structures <br> and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 |  |
| and CS 2501 | and Lab for CS 2500 | 5 |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 | 5 |
| CS 2800 | Logic and Computation <br> and CS 2801 <br> and Lab for CS 2800 | 5 |
| Computer Science | Required Courses |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| CS 3700 | Networks and Distributed Systems | 4 |
| CS 3800 | Theory of Computation | 4 |
| CS 4400 | Programming Languages | 4 |
| CS 4500 | Software Development | 4 |
| and CS 4501 | and Recitation for CS 4500 | 4 |

Presentation Requirement

| THTR 1170 | The Eloquent Presenter | 1 |
| :--- | :--- | ---: |
| Computer Science Capstone | $4-5$ |  |
| Complete one of the following: |  |  |
| CS 4100 | Artificial Intelligence |  |
| CS 4300 | Computer Graphics |  |
| CS 4410 | Compilers |  |
| CS 4150 | Game Artificial Intelligence |  |
| CS 4550 | Web Development |  |
| CS 4991 | Research |  |
| IS 4900 | Information Science Senior Project |  |

## Computer Science Elective Courses

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, IS or DS classes that are not already
required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Supporting Courses

Code Title Hours

Mathematics Courses
MATH 1341 Calculus 1 for Science and Engineering 4 (a grade of $\mathrm{C}-$ or higher is required)

| MATH 1342 | Calculus 2 for Science and Engineering (a grade of C - or higher is required) | 4 |
| :---: | :---: | :---: |
| MATH 2331 | Linear Algebra | 4 |
| MATH 3081 | Probability and Statistics | 4 |
| Computing and Social Issues |  |  |
| Complete one of the following: |  | 4 |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| IA 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 21 st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |
| Electrical Engineering |  |  |
| EECE 2160 | Embedded Design: Enabling Robotics | 4 |
| Science Requirement |  |  |
| Complete two cours categories: | for one of the following science | 10 |
| Biology |  |  |
| 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 <br> and BIOL 2302 | Genetics and Molecular Biology and Lab for BIOL 2301 |  |
| Chemistry |  |  |
| CHEM 1211 <br> and CHEM 1212 <br> 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 |  |
| Geology/Environmental Science (Option 1) |  |  |
| 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 |  |
| Geology/Environmental Science (Option 2) |  |  |
| ENVR 1200 and ENVR 1201 | Dynamic Earth and Lab for ENVR 1200 |  |
| Then complete one of the following: |  |  |
| 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 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |  |
| ENVR 4500 and ENVR 4501 | Applied Hydrogeology and Lab for ENVR 4500 |  |
| Geology/Environmental Science (Option 3) |  |  |
| ENVR 1202 <br> and ENVR 1203 | History of Earth and Life and Interpreting Earth History |  |

PHYS 1147 and PHYS 1148
Sequence $B$
PHYS 1151 Physics for Engineering 1
and PHYS 1152
and PHYS 1153

PHYS 1155
and PHYS 1156
and PHYS 1157

## Sequence C <br> PHYS 1161

and PHYS 1162
and PHYS 1163
PHYS 1165
and PHYS 1166
and PHYS 1167

Ancient Marine Life and Lab for ENVR 5242

## Physics

Complete one of the following sequences:
Sequence A

| PHYS 1145 |  |
| :--- | :--- |
| and PHYS 1146 | Physics for Life Sciences 1 |
| and Lab for PHYS 1145 |  |
| PHYS 1147 |  |
| and PHYS 1148 | Physics for Life Sciences 2 <br> and Lab for PHYS 1147 |
| Sequence B |  |
| PHYS 1151 | Physics for Engineering 1 |
| and PHYS 1152 |  |
| and PHYS 1153 Lab for PHYS 1151 |  |
| and Interactive Learning Seminar for |  |
| PHYS 1151 |  |

## Computer Science Writing Requirement

| Code Title <br> College Writing  | Hours |  |
| :--- | :--- | ---: |
| ENGW 1111 | First-Year Writing | 4 |
| Advanced Writing in the Disciplines | 4 |  |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions <br> or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Code Title Hours

Complete eight general electives. 32

## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses

## Computer Science Credit Requirements

Complete 60 semester hours in the major. Acceptable courses for this requirement include all CS courses (except CS 5010) and IS 2000 and higher (except IS 4900).

## 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

135 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 <br> CS 2510 <br> and CS 2511 | 5 CS 3500 | 4 Elective | 4 |
| CS 1800 <br> and CS 1802 | 5 <br> CS 2800 <br> and CS 2801 | 5 Elective | 4 MATH 1342 | 4 |
| CS 2500 <br> and CS 2501 | 5 MATH 1341 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  |  |
| Elective | 4 |  | 8 | 8 |


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 3650 | 4 Co-op | Co-op | MATH 3081 | 4 |
| CS 3000 | 4 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
| CS 1210 | 1 |  | 0 |  |
|  | 17 |  |  |  |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 3700 | 4 Co-op | Co-op | MATH 2331 | 4 |
| CS 3800 | 4 |  | ENGW 3302 | 4 |
| Science <br> elective with <br> lab | 5 |  |  |  |
| THTR 1170 | 1 |  |  |  |
| Computing <br> and social <br> issues | 4 |  |  | 8 |


| Year 4 | Hours Spring | Hours |
| :--- | :---: | ---: |
| Fall | 4 CS 4500 <br> and CS 4501 | 4 |
| CS 4400 | 4 Computer <br> science <br> capstone | 4 |
| EECE 2160 | 5 Elective | 4 |
| Science <br> elective with <br> lab | 4 Computer <br> science <br> elective | 4 |
| Computer <br> elective | 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 | CS 2510 <br> and CS 2511 | 5 Vacation | 0 Vacation | 0 |
| CS 1800 <br> and CS 1802 | 5 CS 2800 <br> and CS 2801 | 5 |  |  |
| CS 2500 <br> and CS 2501 | 5 Elective | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  | 0 |
| Elective | 4 | 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 1341 | 4 |  |  |  |
| CS 3000 | 4 |  |  | 0 |
| Elective | 4 |  | 0 | 0 |
| CS 1210 | 1 |  |  |  |
|  | 17 | 0 | 0 |  |

Year 3

| Fall <br> CS 3800 | Hours Spring <br> 4 Co-op | Hours Summer 1 <br> 0 Co-op | Hours | Summer 2 MATH 2331 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CS 3650 | 4 |  |  | Elective | 4 |
| MATH 1342 | 4 |  |  |  |  |
| Science elective with lab | 5 |  |  |  |  |
| THTR 1170 | 1 |  |  |  |  |
|  | 18 | 0 | 0 |  | 8 |
| Year 4 |  |  |  |  |  |
| Fall | Hours Spring | Hours Summer 1 | Hours | Summer 2 | Hours |
| CS 3700 | 4 Co-op | 0 Co-op | 0 | Elective | 4 |
| MATH 3081 | 4 |  |  | Elective | 4 |
| ENGW 3302 | 4 |  |  |  |  |
| Science elective with lab | 5 |  |  |  |  |
|  | 17 | 0 | 0 |  | 8 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | :---: |
| CS 4400 | 4 <br> CS 4500 <br> and CS 4501 | 4 |
| EECE 2160 | 4 Computing <br> and social <br> issues | 4 |
| CS <br> undergraduate <br> elective | 4 Capstone | 4 |
| CS <br> undergraduatı <br> elective | 4 Elective | 4 |
|  | 16 | 16 |
| Total Hours: 137 |  |  |

Total Hours: 137

## Computer Science with Concentration in Cyber Operations, BSCS

The Bachelor of Science in Computer Science with Concentration in Cyber Operations 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, along with a particular focus on cyber operations.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Computer Science/Cyber Operations Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Coop | 1 |
| Computer Science Fundamental Courses |  |  |

A grade of C - or higher is required in computer science
fundamental courses:

| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| or CS 1801 | Recitation for CS 1800 |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | Logic and Computation and Lab for CS 2800 | 5 |


| Computer Science | Required Courses |  |
| :--- | :--- | :--- |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| CS 3700 | Networks and Distributed Systems | 4 |
| CS 3800 | Theory of Computation | 4 |
| CS 4400 | Programming Languages | 4 |
| CS 4500 | Software Development | 4 |

Computer Science Seminar
THTR $1170 \quad$ The Eloquent Presenter

## Computer Science Capstone

Complete one of the following:

| CS 4100 | Artificial Intelligence |
| :--- | :--- |
| CS 4300 | Computer Graphics |
| CS 4410 | Compilers |


| CS 4150 | Game Artificial Intelligence |  |
| :--- | :--- | :--- |
| CS 4550 | Web Development |  |
| CS 4991 | Research |  |
| IS 4900 | Information Science Senior Project |  |
| Required Courses for Cyber Operations Concentration | 4 |  |
| CS 4700 | Network Fundamentals | 4 |
| CS 4740 | Network Security | 4 |
| CS 5770 | Software Vulnerabilities and Security | 4 |
| CS 6710 | Wireless Network | 4 |
| IA 5010 | Foundations of Information Assurance | 4 |

## Supporting Courses

Code Title Hours

Mathematics Courses

| MATH 1341 | Calculus 1 for Science and Engineering <br> (a grade of C- or higher is required) | 4 |
| :--- | :--- | ---: |
| MATH 1342 | Calculus 2 for Science and Engineering <br> (a grade of C- or higher is required) | 4 |
| MATH 2331 | Linear Algebra | 4 |
| MATH 3081 | Probability and Statistics | 4 |
| Computing and Social Issues | 4 |  |


| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

Electrical Engineering
EECE $2160 \quad$ Embedded Design: Enabling Robotics 4

Science Requirement
Complete two courses for one of the following sciences: 10
Biology
BIOL 1111 General Biology 1
and BIOL 1112 and Lab for BIOL 1111
Then complete one of the following:
BIOL 1113 General Biology 2
and BIOL 1114 and Lab for BIOL 1113
BIOL 2301
and BIOL 2302
Genetics and Molecular Biology
and Lab for BIOL 2301
Chemistry
CHEM 1211 General Chemistry 1
and CHEM 1212 and Lab for CHEM 1211
and CHEM 1213 and Recitation for CHEM 1211
CHEM 1214 General Chemistry 2
and CHEM 1215 and Lab for CHEM 1214
and CHEM 1216 and Recitation for CHEM 1214
Geology/Environmental Science (Option 1)

| ENVR 1200 | Dynamic Earth |
| :--- | :--- |
| and ENVR 1201 | and Lab for ENVR 1200 |
| ENVR 1202 | History of Earth and Life |
| and ENVR 1203 | and Interpreting Earth History |



| Year 4 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| CS 4700 | 4 CS 4500 | 4 |
| CS 4740 | 4 CS 6710 | 4 |
| CS 5770 | 4 Computer <br> science <br> capstone | 4 |
| EECE 2160 | Computing <br> and social <br> issues | 4 |

Total Hours: 132

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

| Year 1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| CS 1800 and CS 1802 | 5 | $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | 5 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | Elective | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 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 |
| CS 3650 | 4 |  |  |  |
| MATH 1341 | 4 |  |  |  |
| CS 1210 | 1 |  | 0 | 0 |
| Elective | 4 | 0 | 0 |  |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 3000 | 4 Co-op | 0 Co-op | 0 MATH 2331 | 4 |
| CS 3700 | 4 |  | Elective | 4 |
| MATH 1342 | 4 |  |  |  |
| Science <br> elective with <br> lab | 5 |  | 8 |  |
| THTR 1170 | 1 | 0 | 0 | 8 |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | ---: | ---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 3800 | 4 Co-op | 0 Co-op | 0 MATH 3081 | 4 |
| CS 4400 | 4 |  | ENGW 3302 | 4 |
| CS 4700 | 4 |  |  | 8 |
| Science <br> elective with <br> lab | 5 |  | 0 | 8 |


| Year 5 |  |  |
| :--- | ---: | ---: |
| Fall | Hours Spring | Hours |
| CS 4740 | 4 CS 4500 | 4 |
| Computing <br> and social <br> issues | CS 5770 | 4 |
| IA 5010 | 4 CS 6710 | 4 |
| EECE 2160 | 4 Capstone | 4 |

Total Hours: 133

## Computer Science, BACS

The Bachelor of Arts in Computer Science offers a similar curriculum to the $B S$, 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Requirements for BA

All BA students are required to complete the BA requirements (p.40).

## Computer Science Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer ScienceOverview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | Logic and Computation and Lab for CS 2800 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| CS 3700 | Networks and Distributed Systems | 4 |
| CS 3800 | Theory of Computation | 4 |


| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 | 4 |
| :---: | :---: | :---: |
| Presentation Requirement |  |  |
| THTR 1170 | The Eloquent Presenter | 1 |
| Computer Science Capstone |  |  |
| Complete one of the | following: | 4-5 |
| CS 4100 | Artificial Intelligence |  |
| CS 4150 | Game Artificial Intelligence |  |
| CS 4300 | Computer Graphics |  |
| CS 4410 | Compilers |  |
| CS 4550 | Web Development |  |
| CS 4991 | Research |  |
| IS 4900 | Information Science Senior Project |  |
| Computer Science Elective Courses |  |  |
| With advisor approval, directed study, project study, and appropriate graduate-level courses may also be taken as upper-division electives. |  |  |
| Complete 4 credits that are not already required. Choose courses within the following ranges: |  | 4 |
| CS 2500 or higher, except CS 5010 |  |  |
| IS 2000 or higher, except IS 4900 |  |  |
| DS 2000 or higher, except DS 4900 |  |  |
| MATH 2321 | Calculus 3 for Science and Engineering |  |
| MATH 2331 | Linear Algebra |  |
| MATH 3000 to MA | TH 4581 but not MATH 4025 |  |
| Supporting Courses |  |  |
| Code | Title | Hours |
| Mathematics Courses |  |  |
| MATH 1341 | Calculus 1 for Science and Engineering (a grade of C - or higher is required) | 4 |
| MATH 1342 | Calculus 2 for Science and Engineering (a grade of C - or higher is required) | 4 |
| MATH 3081 | Probability and Statistics | 4 |
| Science Courses |  |  |
| Complete one course from one of the following groups: |  | 5 |
| Biology |  |  |
| BIOL 1111 <br> and BIOL 1112 | General Biology 1 and Lab for BIOL 1111 |  |
| 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 1152 and CHEM 1153 | General Chemistry for Engineers and Lab for CHEM 1151 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 |  |
| Physics |  |  |
| PHYS 1145 and PHYS 1146 | Physics for Life Sciences 1 and Lab for PHYS 1145 |  |

PHYS 1151 Physics for Engineering 1
and PHYS 1152 and Lab for PHYS 1151
and PHYS 1153 and Interactive Learning Seminar for PHYS 1151
PHYS $1161 \quad$ Physics 1
and PHYS 1162 and Lab for PHYS 1161
Computing and Social Issues
Complete one of the following: 4

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

## Computer Science Writing Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  |  |
| ENGW 1111 | First-Year Writing | 4 |

Advanced Writing in the Disciplines

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :---: | :--- |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete 10 general electives. | 40 |  |

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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 Spring/Summer 1

## Year 1

Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours

| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ |  | $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | 5 | Elective | 4 | Elective | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 2500 and CS 2501 |  | Foreign language course | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| Foreign language course | 4 |  |  |  |  |  |  |
|  | 19 |  | 18 |  | 8 |  | 8 |
| Year 2 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CS 3650 | 4 | Co-op |  | Co-op |  | MATH 1342 | 4 |
| CS 3000 | 4 |  |  |  |  | Elective | 4 |
| Elective | 4 |  |  |  |  |  |  |
| Linked language course | 4 |  |  |  |  |  |  |
| CS 1210 | 1 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 8 |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 3700 | 4 Co-op | Co-op | MATH 3081 | 4 |
| CS 3800 | 4 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Science <br> course with <br> lab | 5 |  |  |  |
| THTR 1170 | 1 |  |  | 8 |
|  | 18 | 0 | 0 | 8 |


| Year 4 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| CS or MATH <br> elective | CS 4500 <br> and CS 4501 | 4 |
| Computing <br> and social <br> issues <br> course | 4 Computer <br> science <br> capstone | 4 |
| ENGW 3302 | 4 Elective | 4 |
| Elective | 4 Elective | 4 |

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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 Vacation | 0 |
| CS 1800 and CS 1802 | 5 | $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | 5 |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | Foreign language course | 4 |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |



Total Hours: 136

## 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 securityrelated 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Cybersecurity Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science | Overview |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |
| Computer Science | Fundamental Courses |  |

A grade of C - or higher is required in computer science
fundamental courses:

| CS 1800 | Discrete Structures <br> and CS 1802 <br> and Seminar for CS 1800 | 5 |
| :--- | :--- | ---: |
| CS 2500 | Fundamentals of Computer Science 1 |  |
| and CS 2501 | and Lab for CS 2500 | 5 |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |
| Computer Science | Required Courses |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| CS 3700 | Networks and Distributed Systems | 4 |
| CS 3800 | Theory of Computation | 4 |

## Presentation Requirement

| THTR 1170 | The Eloquent Presenter | 1 |
| :--- | :--- | :--- |
| Cybersecurity Required Courses |  |  |
| CS 2550 | Foundations of Cybersecurity | 4 |
| CS 3740 | Systems Security | 4 |
| CS 4170 | The Law, Ethics, and Policy of Data and | 4 |
|  | Digital Technologies |  |
| or IA 5240 | Cyberlaw: Privacy, Ethics, and Digital Rights |  |
| CS 4740 | Network Security | 4 |
| CS 4770 | Cryptography | 4 |
| CS 4930 | Cybersecurity Capstone | 4 |
| or CS 4940 | Research Projects on National Security |  |

## Cybersecurity Electives

If courses require prerequistites, those should be taken using general electives.
Complete five courses from the following, at least one of
20-22
which must come from the cybersecurity and social issues elective list:

CS 2800
and CS 2801
CS 4710
Logic and Computation
and Lab for CS 2800
Mobile and Wireless Systems

| or CS 6710 | Wireless Network |
| :---: | :---: |
| CS 5770 | Software Vulnerabilities and Security |
| CS 4400 | Programming Languages |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 |
| CS 4240 | Large-Scale Parallel Data Processing |
| DS 4300 | Large-Scale Information Storage and Retrieval |
| DS 4400 | Machine Learning and Data Mining 1 |
| IA 5200 | Security Risk Management and Assessment |
| IA 5210 and IA 5211 | Information System Forensics and Lab for IA 5210 |
| IS 4300 | Human Computer Interaction |
| EECE 2322 <br> and EECE 2323 | Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322 |
| EECE 3324 | Computer Architecture and Organization |
| EECE 4534 <br> and EECE 4535 | Microprocessor-Based Design and Lab for EECE 4534 |
| MATH 3527 | Number Theory 1 |
| MATH 4575 | Introduction to Cryptography |
| MISM 2301 or MISM 2309 | Management Information Systems Management Information Systems |
| Cybersecurity and Social Issues Elective List |  |
| COMM 2551 | Free Speech in Cyberspace |
| CRIM 2200 | Criminology |
| CRIM 3400 | 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 |

## Concentration in Cyber Operations (Optional)

Code Title Hours

Cyber Operations Required Courses
CS $4710 \quad$ Mobile and Wireless Systems 4
CS $5770 \quad$ Software Vulnerabilities and Security 4
IA 5240 Cyberlaw: Privacy, Ethics, and Digital 4 Rights

## Electives

Complete two of the following: 8

| CS 4500 <br> and CS 4501 | Software Development <br> and Recitation for CS 4500 |
| :--- | :--- |
| CS 4240 | Large-Scale Parallel Data Processing |
| EECE 3324 | Computer Architecture and <br> Organization |


| EECE 4534 | Microprocessor-Based Design |
| :--- | :--- |
| IA 5200 | Security Risk Management and <br> Assessment |
| IA 5210 Information System Forensics <br> and IA 5211 and Lab for IA 5210 |  |

## Supporting Courses

| Code Title | Hours |
| :--- | :--- | :--- |
| Electrical Engineering Required Course |  |


| EECE 2160 | Embedded Design: Enabling Robotics | 4 |
| :--- | :--- | :--- |
| Mathematics Courses |  |  |
| 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

| College Writing |  |  |
| :--- | :--- | :--- |
| ENGW $1111 \quad$ First-Year Writing | 4 |  |

Advanced Writing in the Disciplines

| ENGW 3302 | Advanced Writing in the Technical |
| :--- | :--- |
| or ENGW 3315 | Professions <br> Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Code $\quad$ Title
Complete seven general electives.

Hours 28

## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses

## Computer Science Credit Requirements

Complete 80 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 coop.

## 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

$$
1 \text { CS } 2510 \quad 5 \text { CS } 3500 \quad 4 \text { Vacation }
$$

| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1801 \end{aligned}$ | 4 CS 2550 | 4 MATH 1342 | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 MATH 1341 | 4 |  |  |
| ENGW 1111 | 4 General elective 2 | 4 |  |  |
| General elective 1 | 4 |  |  |  |
|  | 18 | 17 | 8 | 0 |


| Year 2 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CS 1210 | 1 | CS 3700 |  | ENGW 3302 or 3315 | 4 | Co-op |  |
| CS 3650 | 4 | CS 3740 | 4 | MATH 3081 | 4 |  |  |
| CS 3800 | 4 | CS 4770 | 4 |  |  |  |  |
| CS 3000 | 4 | General elective 4 | 4 |  |  |  |  |
| General elective 3 | 4 | CS 1210 | 1 |  |  |  |  |
|  | 17 |  | 17 |  | 8 |  | 0 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | CS 4740 | 4 | General elective 5 | 4 | Co-op |  |
|  |  | IA 5240 | 4 | EECE 2160 | 4 |  |  |
|  |  | Cybersecurity elective | 4 |  |  |  |  |
|  |  | Cybersecurity elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours |  |  |
| Co-op |  | THTR 1170 |  | (If needed) |  |  |  |
|  |  | $\begin{aligned} & \text { CS } 4930 \text { or } \\ & 4940 \end{aligned}$ | 4 | General elective 6 | 4 |  |  |
|  |  | Cybersecurity elective | 4 | General elective 7 | 4 |  |  |
|  |  | Cybersecurity elective | 4 |  |  |  |  |
|  |  | Cybersecurity elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  |  |

Total Hours: 134
FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL
Year 1


## Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 3000 | 4 | CS 3700 | 4 | Vacation |  | Co-op |  |
| CS 3650 | 4 | CS 3740 | 4 |  |  |  |  |
| MATH 3081 | 4 | General elective 4 | 4 |  |  |  |  |
| General elective 3 | 4 | General elective 5 | 4 |  |  |  |  |
| THTR 1170 | 1 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 0 |  | 0 |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | CS 4740 | 4 | ENGW 3302 |  | Co-op |  |
|  |  | CS 3800 | 4 | General elective 7 | 4 |  |  |
|  |  | EECE 2160 | 4 |  |  |  |  |
|  |  | General elective 6 | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | IA 5240 | 4 Vacation | Co-op |  |
|  | CS 4770 | 4 |  |  |
| Cybersecurity <br> elective 1 <br> Cybersecurity <br> elective 2 | 4 | 4 | 0 | 0 |
| 0 | 16 | 0 |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :--- | ---: |
| Co-op | CS 4930 | 4 |
|  | Cybersecurity <br> elective 3 | 4 |
|  | Cybersecurity <br> elective 4 | 4 |
|  | Cybersecurity <br> elective 5 / <br> social issues | 4 |
| 0 | 16 |  |

Total Hours: 132

## 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 CCIS meaningful minor.

## Minor Requirements

Note: CCIS minors are only available to non-CCIS majors; students in CCIS-only or CCIS-combined degrees are not eligible for CCIS minors. A
student may receive at most one CCIS minor, regardless of how many CCIS 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 |
| :--- | :--- | ---: |
| Computer Science Fundamental Courses |  |  |
| A grade of C- or higher is required in computer science |  |  |
| fundamental courses: |  |  |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |

## Computer Science Electives

Code Title Hours

Complete three courses that are not already required in the 12
following ranges:
CS 2500 to CS 7999 but not CS 5010
IS $4300 \quad$ Human Computer Interaction
One course from CCIS meaningful minors list (see below).

## CCIS Meaningful Minors

The concept of "CCIS meaningful minors" allows students the chance to personalize a computer or information 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 CCIS. 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 CCIS if they wish.
Code Title Hours

Bouvé Health Sciences

| HINF 5101 | Introduction to Health Informatics and <br> Health Information Systems |
| :--- | :--- |
| HINF 5102 | Data Management in Healthcare |
| HINF 5300 | Personal Health Interface Design and <br>  <br> Development |
| HINF 5301 | Personal Health Technologies: Field <br>  |

Arts, Media and Design

| ARTD 2360 | Photo Basics |
| :--- | :--- |
| 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 4552 | Information Design 2 |
| 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 |
| MUST 3421 | Digital Audio Processing |
| Computer and I | ation Science |
| CS 1100 | Computer Science and Its Applications |
| CS 1800 | Discrete Structures |
| IS 1500 | Introduction to Web Development |
| 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 |
| 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 4563 | 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 |  |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |
| 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 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |
| D'Amore-McKim School of Business |  |
| ACCT 3403 | Accounting Information Systems |
| ENTR 4501 | Business Planning for Technology Ventures |
| FINA 4608 | Advanced Financial Strategy |
| MISM 2301 | Management Information Systems |
| MISM 3305 | Information Resource Management |
| MISM 3404 | Data Communications |
| MKTG 3401 | Marketing Research |
| MKTG 3501 | Marketing Analytics |
| MKTG 4508 | Digital Marketing |
| SCHM 2301 | Supply Chain and Operations Management |
| Statistics Courses |  |
| CRIM 3700 | Criminal Justice Statistics |
| 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 2285 | Introduction to Multisample Statistics |
| 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 |
| SOCL 2320 | Statistical Analysis in Sociology |

## Credit/GPA Requirement

20 semester hours required 2.000 GPA required in the minor

## Information Science

Unlocking the full potential of information technology-ensuring that it serves the goals and needs of users, clients, and society-is a tremendous challenge, one that requires a unique blend of knowledge and skills. The field of information science (IS) focuses on the relationship between computers, the people who use them, and the contexts in which they operate. IS seeks to further our understanding of:

1. information itself: where it comes from, how it is organized, and how it is used;
2. the design of computer applications that are usable, socially acceptable, and achieve the goals for which they were created;
3. the impact of information technology (IT) on human life and work; and
4. how the nature of the information, the goals of the users, and the relevant social policies and laws both influence and are influenced by the technical aspects of computer systems.

Information science majors have an opportunity to acquire a strong technical foundation by taking classes in mathematics, logic, and computer science and to acquire a strong foundation in behavioral science by taking classes in cognitive psychology, economics, and statistics. A course in the principles of information science introduces students to important intellectual frameworks such as decision theory, general systems theory, and social informatics and to topics of current importance such as digital copyright, trusted systems, and Internet privacy policy. Building on these foundations, the IS core develops expertise in the design, development, management, maintenance, and evaluation of large-scale information technology systems. Elective courses cover topics such as software project management, text/ hypertext retrieval and data mining, social information systems, health informatics, ubiquitous computing, artificial intelligence, information security, and e-commerce.

## Programs

## Bachelor of Science in Information Science (BSIS)

- Information Science (p. 281)


## Minor

- Information Science (p. 283)


## Information Science, BSIS

The program combines concepts and skills from computer science, behavioral and social sciences, and system design into an integrated curriculum that is focused on people. The course work covers information architecture; information system design and development; programming and software design; database design; systems and networks; information resource management; social informatics; quantitative and qualitative research methods; and human computer interaction.

Although there is no sharp boundary between computer science and information science, it may be said that CS is concerned with building the software and services infrastructure used by people and organizations worldwide, whereas IS is concerned with the information and software needs of a particular business, healthcare provider, government agency, or nonprofit.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

| Common Computer and Information Science Curriculum |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

Computer Science Fundamental Courses
A grade of C - is required:

| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| CS 3700 | Networks and Distributed Systems | 4 |
| Computing and Social Issues |  |  |
| Complete one of the following: |  | 4 |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| IA 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 21 st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |

## Common Information Science Curriculum

| Code | Title | Hours |
| :--- | :--- | ---: |
| Information Science Foundations |  |  |
| CS 3200 | Database Design | 4 |
| IS 2000 | Principles of Information Science | 4 |
| IS 3500 | Information System Design and | 4 |
|  | Development |  |

Human Computer Interaction

| IS 4300 | Human Computer Interaction | 4 |
| :--- | :--- | :---: |
| PSYC 1101 | Foundations of Psychology | 4 |
| Research and Data Analysis |  |  |
| PSYC 2320 | Statistics in Psychological Research | 4 |
| or ECON 2350 | Statistics | 4 |
| IS 4800 | Empirical Research Methods | 4 |
| IS 4900 | Information Science Senior Project | 5 |

## Information Science Concentrations

Complete one of the following concentrations:

- Information Systems Management (p. 282)
- Human Computer Interaction (p. 282)
- Research and Data Analysis (p. 282)


## Computer Science or Information Science Electives

Code Title

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, IS, or DS classes that are not already required. Choose courses within the following ranges:

$$
\text { CS } 2500 \text { or higher, except CS } 5010
$$

IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Computer Science English Requirement

| Code <br> College Writing | Title | Hours |
| :--- | :--- | ---: |
| ENGW 1111 | First-Year Writing | 4 |
| Advanced Writing in the Disciplines | 4 |  |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions | 4 |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |  |

## Required General Electives

Code Title
Complete nine general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses
Information Science Major Credit Requirement
Complete 73 semester hours in CS and IS for the major.

## Program Requirement

132 total semester hours required

| Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN INFORMATION SYSTEMS MANAGEMENT |  |  |
| Code | Title | Hours |
| Complete three of th | following: | 12 |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 |  |
| CS 4550 | Web Development |  |
| MISM 4501 | Business Systems Integration |  |
| ORGB 3201 <br> or ORGB 3209 | Organizational Behavior Organizational Behavior |  |
| CONCENTRATION IN HUMAN COMPUTER INTERACTION |  |  |
| Code | Title | Hours |
| Complete three of the following: 12 |  |  |
| PSYC 3466 | Cognition |  |
| CS 4100 | Artificial Intelligence |  |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 |  |
| CS 4520 | Mobile Application Development |  |
| CS 4550 | Web Development |  |
| CS 6120 | Natural Language Processing |  |

## Hours

| DS 4200 | Information Presentation and <br> Visualization |
| :--- | :--- |

CONCENTRATION IN RESEARCH AND DATA ANALYSIS

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete three of the following: | 12 |  |
| IS 4200 | Information Retrieval |  |
| CS 4100 | Artificial Intelligence |  |
| CS 4500 | Software Development |  |
| and CS 4501 | and Recitation for CS 4500 |  |
| CS 6120 | Natural Language Processing |  |
| DS 4000 or higher |  |  |

## 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | CS 3000 | 4 |
| CS 1800 and CS 1802 | 5 | CS 3200 | 4 | Elective | 4 |  |  |
| CS 2500 and CS 2501 |  | $\begin{aligned} & \text { ECON } 2350 \\ & \text { or PSYC } \\ & 2320 \end{aligned}$ | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| PSYC 1101 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 4 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IS 2000 | 4 | IS 3500 | 4 | Elective | 4 | Co-op |  |
| IS 4300 | 4 | CS 3650 | 4 | Elective | 4 |  |  |
| Elective |  | IS <br> concentr elective | 4 |  |  |  |  |
| Elective |  | CS/IS <br> concentra elective | 4 |  |  |  |  |
|  |  | CS 1210 | 1 |  |  |  |  |
|  | 16 |  | 17 |  | 8 |  | 0 |


| Year 3 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Fall | IS 4800 | 4 ENGW 3302 | 4 Co-op |  |
| Co-op | CS 3700 | 4 Elective | 4 |  |
|  | $\begin{array}{lllll}\text { IS } \\ \text { concentration } \\ \text { elective }\end{array}$ | 4 |  |  |
|  | Elective | 4 |  | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | IS 4900 | 5 |
|  | CS/IS <br> concentration <br> elective | 4 |
|  |  |  |


| IS <br> concentration <br> elective | 4 |
| :--- | :--- |
| Computing <br> and social <br> issues | 4 |
| Elective | 4 |
| 0 | 21 |

Total Hours: 134

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

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 3200 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | ECON 2350 <br> or PSYC <br> 2320 | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| PSYC 1101 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 0 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | ---: | :---: | :---: | ---: | :--- |
| IS 2000 | 4 | IS 3500 | 4 Elective | 4 Co-op |  |
| CS 3500 | 4 | IS 4300 | 4 Elective | 4 |  |
| Elective | 4 | CS 3000 | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |  |
|  | CS 1210 | 1 |  | 0 |  |
|  | 16 | 17 | 8 |  |  |

Year 3

| Fall <br> Co-op | Hours | Spring IS 4800 | Hours <br> 4 | Summer 1 <br> ENGW 3302 | Hours | Summer 2 <br> Co-op | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | IS concentration course | 4 | Elective | 4 |  |  |
|  |  | CS 3650 | 4 |  |  |  |  |
|  |  | CS/IS concentration elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 4
$\left.\begin{array}{llrll}\text { Fall } & \text { Hours } \text { Spring } & \text { Hours } & \text { Summer 2 } & \text { Hours } \\ \text { Co-op } & \text { CS } 3700 & 4 & \text { Co-op }\end{array}\right]$

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | IS 4900 | 5 |


| IS <br> concentration <br> course | 4 |
| :--- | :--- |
| Elective | 4 |
| Computing <br> and social <br> issues | 4 |
| 0 | 17 |

Total Hours: 134

## Information Science, Minor

CCIS minors 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. All with no prior programming experience needed. Looking to gain technical knowledge that directly applies to your major? You have the option to pursue a CCIS meaningful minor for both CS and IS.

## Minor Requirements

Note: CCIS minors are only available to non-CCIS majors; students in CCIS-only or CCIS-combined degrees are not eligible for CCIS minors. A student may receive at most one CCIS minor, regardless of how many CCIS 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 |
| :--- | :--- | ---: |
| Computer Science Fundamental Courses |  |  |
| A grade of C- or higher is required in computer science |  |  |
| fundamental courses. |  |  |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |

Information Science Required Course
IS $2000 \quad$ Principles of Information Science 4

## Information Science Electives

Code | Title | Hours |
| :--- | :--- |
| Complete two from the following: | 8 |$~$

| IS 1500 | Introduction to Web Development |
| :--- | :--- |
| IS 2000 to IS 4989 |  |
| CS $3200 \quad$ Database Design |  |

One course from CCIS meaningful minors (see below)

## CCIS Meaningful Minors

The concept of "CCIS Meaningful Minors" allows students the chance to personalize a computer or information 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 CCIS. 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 CCIS if they wish.

| Code | Title | Hours | LING 3450 | Syntax |
| :---: | :---: | :---: | :---: | :---: |
| Bouvé Health Sciences |  |  | LING 3452 | Semantics |
| HINF 5101 | Introduction to Health Informatics and Health Information Systems |  | MATH 1260 | Math Fundamentals for Games |
|  |  |  | MATH 2331 | Linear Algebra |
| HINF 5102 | Data Management in Healthcare |  | MATH 2341 | Differential Equations and Linear |
| HINF 5300 | Personal Health Interface Design and Development |  |  | Algebra for Engineering |
|  |  |  | MATH 3530 | Numerical Analysis |
| HINF 5301 | Personal Health Technologies: Field Deployment and System Evaluation |  | MATH 4606 | Mathematical and Computational Methods for Physics |
| Arts, Media and Design |  |  | PHYS 1130 | Computing, Data, and Science |
| ARTD 2360 | Photo Basics |  | PSYC 3452 | Sensation and Perception |
| ARTD 2370 | Animation Basics |  | PSYC 3458 | Biological Psychology |
| ARTD 2380 | Video Basics |  | PSYC 3464 | Psychology of Language |
| ARTG 2260 | Programming Basics |  | PSYC 3466 | Cognition |
| ARTG 2400 | Interaction Design 1: Responsive |  | Social Science and Humanities |  |
| ARTG 3250 | Physical Computing |  | ANTH 3418 | Wired/Unwired: Cybercultures and |
| ARTG 3451 | Information Design 1 |  |  | Technopolitics |
| ARTG 3700 | Interaction Design 2: Mobile |  | ECON 4653 | Mathematics for Economics |
| ARTG 4552 | Information Design 2 |  | ENGL 3340 | Technologies of Text |
| ARTG 5100 | Information Design Studio 1: Principles |  | PHIL 1105 | Science and Pseudoscience |
| ARTG 5110 | Information Design History |  | PHIL 1115 | Introduction to Logic |
| ARTG 5120 | Research Methods for Design |  | PHIL 1145 | Technology and Human Values |
| COMM 2105 | Social Networks |  | PHIL 2001 | Ethics and Evolutionary Games |
| JRNL 3610 | Digital Storytelling and Social Media |  | PHIL 4510 | Philosophy of Science |
| MUST 1220 | Introduction to Music Technology |  | PHIL 4515 | Advanced Logic |
| MUST 3421 | Digital Audio Processing |  | SOCL 3485 | Environment, Technology, and Society |
| Computer and Information Science |  |  | SOCL 4528 | Computers and Society |
| CS 1100 | Computer Science and Its Applications |  | D'Amore-McKim School of Business |  |
| CS 1800 | Discrete Structures |  | ACCT 3403 | Accounting Information Systems |
| IS 1500 | Introduction to Web Development |  | ENTR 4501 | Business Planning for Technology |
| Engineering |  |  |  | Ventures |
| BIOE 2365 | Bioengineering Measurement, Experimentation, and Statistics |  | SCHM 2301 | Supply Chain and Operations Management |
| EECE 2160 | Embedded Design: Enabling Robotics |  | FINA 4608 | Advanced Financial Strategy |
| EECE 2322 | Fundamentals of Digital Design and Computer Organization |  | MISM 2301 | Management Information Systems |
|  |  |  | MISM 3305 | Information Resource Management |
| EECE 3324 | Computer Architecture and Organization |  | MISM 3404 | Data Communications |
|  |  |  | MKTG 3401 | Marketing Research |
| EECE 4542 | Advanced Engineering Algorithms |  | MKTG 3501 | Marketing Analytics |
| EECE 5639 | Computer Vision |  | MKTG 4508 | Digital Marketing |
| EECE 5640 | High-Performance Computing |  | Statistics Cours |  |
| EECE 5644 | Introduction to Machine Learning and Pattern Recognition |  | CRIM 3700 | Criminal Justice Statistics |
|  |  |  | ECON 2350 | Statistics |
| Science |  |  | ECON 5105 | Math and Statistics for Economists |
| BIOL 2301 | Genetics and Molecular Biology |  | ENVR 2500 | Biostatistics |
| BIOL 3405 | Neurobiology |  | IE 3412 | Engineering Probability and Statistics |
| BIOL 5587 | Comparative Neurobiology |  | MATH 2280 | Statistics and Software |
| BINF 6200 | Bioinformatics Programming |  | MATH 2285 | Introduction to Multisample Statistics |
| BINF 6308 | Bioinformatics Computational Methods 1 |  | MATH 3081 | Probability and Statistics |
|  |  |  | MATH 4581 | Statistics and Stochastic Processes |
| BINF 6309 | Bioinformatics Computational Methods 2 |  | MGSC 2301 | Business Statistics |
| CHEM 5638 | Molecular Modeling |  | PHMD 3450 | Research Methodology and Biostatistics |
| ENVR 3300 | Geographic Information Systems |  | PHTH 2210 | Foundations of Biostatistics |
| ENVR 4563 | Advanced Spatial Analysis |  |  |  |


| POLS 2400 | Quantitative Techniques |
| :--- | :--- |
| PSYC 2320 | Statistics in Psychological Research |
| SOCL 2320 | Statistical Analysis in Sociology |

## GPA Requirement

20 semester hours required
2.000 GPA required in the minor

## 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 prepares students for careers or graduate studies in big data analysis, data science, and data analytics. The course work 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, and
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. 285)
- Data Science, Minor (p. 287)


## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

| Data Science Major Requirements |  |
| :--- | ---: |
| Code $\quad$ Title | Hours |
| Computer Science Overview |  |
| CS 1200 | Leadership Skill Development |

CS 1210
Professional Development for CCIS Coop

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 |  |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |


| Computer Science | Required Courses |  |
| :--- | :--- | :--- |
| IS 2000 | Principles of Information Science | 4 |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3520 | Programming in C++ | 4 |

Presentation Requirement
THTR $1170 \quad$ The Eloquent Presenter 1

Mathematics Foundations

| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| :--- | :--- | :--- |
| MATH 1342 | Calculus 2 for Science and Engineering | 4 |
| Statistics Foundations |  |  |
| Complete one of the following: | 4 |  |
| ECON 2350 | Statistics |  |
| ENVR 2500 | Biostatistics |  |
| MATH 3081 | Probability and Statistics |  |
| PSYC 2320 | Statistics in Psychological Research |  |

Data Science Required Courses

| DS 4100 | Data Collection, Integration, and <br> Analysis | 4 |
| :--- | :--- | ---: |
| DS 4200 | Information Presentation and <br> Visualization | 4 |
| DS 4300 | Large-Scale Information Storage and | 4 |
| Retrieval | 4 |  |
| DS 4400 | Machine Learning and Data Mining 1 | 4 |
| DS 4420 | Machine Learning and Data Mining 2 | 4 |
| DS 4900 | Data Science Senior Project | 4 |

Data-Science-Related Electives
Complete six courses from the categories $A$ and $B$, at least 24
three of which must be from Category B.
Category A: Data-Science-Related Electives in Computer and
Information Science

| IS 3500 | Information System Design and <br> Development <br> Information Retrieval |
| :--- | :--- |
| IS 4200 4300 | Human Computer Interaction |
| IS 4800 | Empirical Research Methods |
| CS 3000 | Algorithms and Data |
| CS 3740 | Systems Security |
| CS 4100 | Artificial Intelligence |
| CS 4120 | Natural Language Processing |
| CS 4240 | Large-Scale Parallel Data Processing |
| CS 4500 | Software Development <br> and CS 4501and Recitation for CS 4500 |

CS 4550 Web Development

| CS 6140 | Machine Learning |
| :---: | :---: |
| CS 6220 | Data Mining Techniques |
| Category B: Data-Science-Related Electives in Other Units ${ }^{1}$ |  |
| ARTG 3451 | Information Design 1 |
| ARTG 4552 | Information Design 2 |
| ARTG 5100 | Information Design Studio 1: Principles |
| ARTG 5110 | Information Design History |
| ARTG 5120 | Research Methods for Design |
| ARTG 5330 | Visualization Technologies 1 |
| 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 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 |
| 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 | Personal Health Technologies: Field Deployment and System Evaluation |
| IA 5010 | Foundations of Information Assurance |
| IA 5200 | Security Risk Management and Assessment |
| IE 5640 | Data Mining for Engineering Applications |
| ECON 2350 | Statistics |
| ENVR 2500 | Biostatistics |
| MATH 2331 | Linear Algebra |
| MATH 3081 | Probability and Statistics |
| MATH 4581 | Statistics and Stochastic Processes |
| MISM 3305 | Information Resource Management |
| MISM 3403 | Data Management in the Enterprise |
| MKTG 3401 | Marketing Research |
| MKTG 3501 | Marketing Analytics |
| PSYC 2320 | Statistics in Psychological Research |
| 1 The statistic Foundations student is pe see statistic | se options under Mathematics and Statistic so listed here as Data-Science-Related Ele d to take at most one additional statistics the perspective of a different department |

## Computer Science Writing Requirement

Code Title Hours

College Writing
ENGW 1111 First-Year Writing 4

Advanced Writing in the Disciplines

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :---: | :--- |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Code Title Hours

Complete eight general electives. 32

## Major GPA Requirement

Minimum 2.000 GPA required in all CS, IS, and DS 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
Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :---: | :---: | :---: | :---: |
| CS 1200 | $\begin{aligned} & 1 \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 CS 3200 | 4 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 IS 2000 | 4 CS 3500 | 4 |
| $\text { CS } 2500$ <br> and CS 2501 | 5 MATH 1342 | 4 |  |
| ENGW 1111 | 4 Elective | 4 |  |
| MATH 1341 | 4 |  |  |
|  | 19 | 17 | 8 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | :---: |
| CS 3520 | 4 DS 4200 | 4 ENGW 3302 | 4 Co-op |  |
| DS 4100 | 4 DS 4300 | 4 Elective | 4 |  |
| Statistics <br> course | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
|  | CS 1210 | 1 |  | 0 |



| Year 4 |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours |
| Data science elective | 4 | DS 4420 | 4 |
| Data science elective | 4 | DS 4900 | 4 |
| Data science elective | 4 | Data science elective | 4 |
| Elective | 4 | Elective | 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 |  |
| CS 1200 | Vacation <br> CS 2510 <br> and CS 2511 | Hours |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CS 3200 | 4 CS 1210 | 1 Vacation | Co-op |  |
| CS 3500 | 4 CS 3520 | 4 |  |  |
| DS 4100 | 4 DS 4200 | 4 |  |  |
| Statistics | 4 DS 4300 | 4 |  |  |
|  | Elective | 4 | 0 | 0 |

Year 3

| Fall | HoursSpring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | DS 4400 | 4 ENGW 3302 | 4 Co-op |  |
|  | DS-related <br> elective | 4 Elective | 4 |  |
|  | DS-related <br> elective | 4 |  |  |
|  | Elective | 4 |  | 0 |
|  | THTR 1170 | 1 | 8 |  |
| 0 | 17 |  |  |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | DS 4420 | 4 Elective | 4 Co-op |  |
|  | DS-related <br> elective | 4 Elective | 4 |  |
|  | DS-related <br> elective | 4 |  |  |
|  | Elective | 4 | 8 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :--- | ---: |
| Co-op | DS 4900 | 4 |
|  | DS-related <br> elective | 4 |
|  | DS-related <br> elective | 4 |
|  | Elective | 4 |
| 0 | 16 |  |

Total Hours: 134

## 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: CCIS minors are only available to non-CCIS majors; students in CCISonly or CCIS-combined degrees are not eligible for CCIS minors. A student may receive at most one CCIS minor, regardless of how many CCIS 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

Computer Science Fundamental Courses
A grade of C - or higher is required in computer science fundamental courses.
Complete one of the following options: 5-10
Fundamentals of Computer Science Option
CS $2500 \quad$ Fundamentals of Computer Science 1
and CS 2501 and Lab for CS 2500
CS $2510 \quad$ Fundamentals of Computer Science 2
and CS 2511 and Lab for CS 2510
Programming with Data Option

| DS 2000 | Programming with Data |
| :--- | :--- |
| and DS 2001 | and Practicum for DS 2000 |

Data Science Required Course
DS 4100 Data Collection, Integration, and 4

## Data Science Electives

Code Title

Complete three of the following. Only one course from the Meaningful Minor list may contribute toward the minor requirements:

```
DS 2010 to DS 4989
CS 3200 Database Design
```

Meaningful Minor list (see below)

## CCIS Meaningful Minors

The concept of "CCIS Meaningful Minors" allows students the chance to personalize a computer or information 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 CCIS. 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 CCIS if they wish.

## Code Title

Hours
Arts, Media and Design

| ARTG 3451 | Information Design 1 |
| :---: | :---: |
| ARTG 4552 | Information Design 2 |
| ARTG 5100 | Information Design Studio 1: Principles |
| ARTG 5110 | Information Design History |
| ARTG 5120 | Research Methods for Design |
| ARTG 5330 | Visualization Technologies 1 |
| 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 | Personal Health Technologies: Field Deployment and System Evaluation |
| D'Amore-McKim-Business |  |
| FINA 4608 | Advanced Financial Strategy |
| MISM 3305 | Information Resource Management |
| MISM 3403 | Data Management in the Enterprise |
| MKTG 3401 | Marketing Research |
| MKTG 3501 | Marketing Analytics |
| SCHM 2301 | Supply Chain and Operations Management |
| Computer and Information Science |  |
| IA 5010 | Foundations of Information Assurance |
| IA 5200 | Security Risk Management and Assessment |
| 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 3081 | Probability and Statistics |
| MATH 4581 | Statistics and Stochastic Processes |
| PSYC 2320 | Statistics in Psychological Research |
| Social Science and Humanities |  |
| ECON 2350 | Statistics |
| ECON 3916 | Intermediate Selected Topics in Microeconomics |
| POLS 2400 | Quantitative Techniques |

## GPA Requirement

2.000 GPA required in the minor

## Computer and Information Science Combined Majors

The college offers combined majors with business administration, cognitive psychology, biology, biochemistry, mathematics, physics, environmental science, health sciences, game development, music composition and technology, linguistics, communication, design, media arts, journalism, criminal justice, economics, English, history, philosophy, political science, and sociology, and a combined major in computer science and information science. Each of the combined majors offers the opportunity for intense study in two disciplines with appropriate breadth in the liberal arts. Students take nine to 13 courses in each discipline (or a related discipline) 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 Information Science (p. 289)
- Computer Science and Biology (p. 293)
- Computer Science and Business Administration (p. 234)
- Computer Science and Cognitive Psychology (p. 301)
- Computer Science and Communication Studies (p. 125)
- Computer Science and Criminal Justice (p. 307)
- Computer Science and Design (p. 80)
- Computer Science and Economics (p. 312)
- Computer Science and English (p. 314)
- Computer Science and Environmental Science (p. 318)
- Computer Science and Game Development (p. 83)
- Computer Science and History (p. 322)
- Computer Science and Journalism (p. 170)
- Computer Science and Linguistics (p. 327)
- Computer Science and Mathematics (p. 330)
- Computer Science and Media Arts (p. 84)
- Computer Science and Music with Concentration in Music Technology (p. 188)
- Computer Science and Philosophy (p. 337)
- Computer Science and Physics (p. 339)
- Computer Science and Political Science (p. 342)
- Computer Science and Sociology (p. 344)
- Cybersecurity and Business Administration (p. 239)
- Cybersecurity and Criminal Justice (p. 351)
- Cybersecurity and Economics (p. 352)
- Data Science and Biochemistry (p. 354)
- Data Science and Health Science (p. 355)
- Information Science and Business Administration (p. 249)
- Information Science and Cognitive Psychology (p. 360)
- Information Science and Environmental Science (p. 362)
- Information Science and Journalism (p. 173)


## Bachelor of Science in Computer Engineering (BSCompE)

- Computer Engineering and Computer Science (p. 290)


## Computer Science and Information Science, BS

The computer science and information science combined major is designed for students looking for a thorough immersion in both fields. Students will focus on the fundamentals and theories of computing plus the management of information-while taking all required courses for the computer science and information science undergraduate degree programs.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

| Computer Science Courses |  |
| :---: | :---: |
| Code | Title |
| Computer Science Overview |  |
| CS 1200 | Leadership Skill Development |
| CS 1210 | Professional Development for CCIS Coop |
| Computer Science Fundamental Courses |  |

A grade of C - or higher is required in computer science
fundamental courses.

| CS 1800 | Discrete Structures |  |
| :--- | :--- | :---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 <br> and CS 2501 | Fundamentals of Computer Science 1 <br> and Lab for CS 2500 | 5 |
| CS 2510 <br> and CS 2511 | Fundamentals of Computer Science 2 <br> and Lab for CS 2510 | 5 |
| CS 2800 <br> and CS 2801 | Logic and Computation <br> and Lab for CS 2800 | 5 |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| CS 3700 | Networks and Distributed Systems | 4 |
| CS 3800 | Theory of Computation | 4 |
| CS 4400 | Programming Languages | 4 |
| CS 4500 | Software Development <br> and CS 4501 | and Recitation for CS 4500 |

## Information Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses in Information Science |  |  |
| IS 2000 | Principles of Information Science | 4 |
| IS 3500 | Information System Design and | 4 |
|  | Development | 4 |
| IS 4300 | Human Computer Interaction | 4 |
| IS 4800 | Empirical Research Methods | 5 |
| IS 4900 | Information Science Senior Project | 4 |

Computing and Social Issues
Complete one of the following: 4

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

## Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Psychology | Foundations of Psychology | 4 |
| PSYC 1101 | Calculus 1 for Science and Engineering |  |
| Calculus | (A grade of C- or higher is required) | 4 |
| MATH 1341 | Calculus 2 for Science and Engineering | 4 |
| MATH 1342 | Linear Algebra | 4 |
| MATH 2331 |  | 4 |
| Statistics | Statistics in Psychological Research | 4 |
| PSYC 2320 <br> or ECON 2350 | Statistics |  |

## Computer Science Writing Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  |  |
| ENGW 1111 | First-Year Writing | 4 |

Advanced Writing in the Disciplines
ENGW 3302 Advanced Writing in the Technical 4
or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

## Required General Electives

Code Title

Complete seven general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses

## Program Requirement

133 total semester hours required

## Plan of Study

## Four Years, Two Co-ops in Summer/Fall

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | CS 2510 <br> and CS 2511 | 5 | CS 3200 | 4 | PSYC 2320 | 4 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | 5 | CS 3500 | 4 | Elective | 4 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | MATH 1341 | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| PSYC 1101 | 4 |  |  |  |  |  |  |
|  | 19 |  | 18 |  | 8 |  | 8 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| IS 2000 | 4 IS 3500 | 4 MATH 2331 | 4 Co-op |  |
| MATH 1342 | 4 CS 3650 | 4 Elective | 4 |  |
| CS 3000 | 4 IS 4300 | 4 |  |  |
| Computing <br> and social <br> issues | 4 Elective | 4 |  |  |


| Year 3 |  |  |  | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hour |
| Co-op | CS 3700 | 4 Elective | 4 Co-op |  |
|  | IS 4800 | 4 Elective | 4 |  |
|  | ENGW 3302 | 4 |  | 0 |
|  | CS 3800 | 4 | 8 | 4 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | CS 4400 | 4 |
|  | CS 4500 | 4 |
|  | IS 4900 | 5 |
|  | Elective | 4 |
|  | 17 |  |

Total Hours: 135

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

Year 1

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| CS 1200 | 1 CS 2510 | 5 |
|  | and CS 2511 |  |


| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | $\begin{aligned} & 5 \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 ECON 2350 | 4 |
| ENGW 1111 | 4 Elective | 4 |
| PSYC 1101 | 4 |  |
| 19 |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: | :---: |
| IS 2000 | 4 IS 3500 | 4 MATH 2331 | 4 Co-op |  |
| CS 3500 | 4 CS 3650 | 4 Elective | 4 |  |
| CS 3200 | 4 MATH 1342 | 4 |  |  |
| MATH 1341 | 4 CS 3000 | 4 |  |  |
|  | CS 1210 | 1 | 8 | 0 |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | IS 4300 | 4 Elective | 4 Co-op |  |
|  | IS 4800 | 4 Elective | 4 |  |
|  | CS 3700 | 4 |  |  |
|  | Elective | 4 |  | 0 |

Year 4

| Fall | Hours Spring | Hours | Summer 2 | Hours |
| :--- | :--- | ---: | :--- | :--- |
| Co-op | CS 4400 | 4 | Co-op |  |
|  | ENGW 3302 | 4 |  |  |
|  | CS 3800 | 4 |  |  |
|  | Elective | 4 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :--- | ---: |
| Co-op | IS 4900 | 5 |
|  | CS 4500 | 4 |
|  | Computing <br> and social <br> issues | 4 |
|  | Elective | 4 |
| 0 | 17 |  |

Total Hours: 135

## Computer Engineering and Computer Science, BSCompE

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Major GPA Requirement

2.000 minimum GPA in EECE courses

## Engineering

Complete 48 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| EECE 2150 | Circuits and Signals: Biomedical Applications | 5 |
| EECE 2160 | Embedded Design: Enabling Robotics | 4 |
| Computer Engineering Fundamentals |  |  |
| EECE 2322 <br> and EECE 2323 | Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322 | 5 |
| EECE 2540 | Fundamentals of Networks | 4 |
| CS 3000 | Algorithms and Data | 4 |
| Electrical Engineering Fundamentals |  |  |
| Complete one of the following: |  | 4 |
| EECE 2412 <br> and EECE 2413 | Fundamentals of Electronics and Lab for EECE 2412 |  |
| EECE 2520 | Fundamentals of Linear Systems |  |
| EECE 2530 <br> and EECE 2531 | Fundamentals of Electromagnetics and Lab for EECE 2530 |  |
| Capstone Courses |  |  |
| EECE 4790 | Electrical and Computer Engineering Capstone 1 | 4 |
| EECE 4792 | Electrical and Computer Engineering Capstone 2 | 4 |
| EECE Technical Electives |  |  |
| Complete two of th | following: | 8 |


| EECE 2750 | Enabling Engineering |
| :--- | :--- |
| EECE 4991 | Research |


| EECE 4992 | Directed Study |  |
| :---: | :---: | :---: |
| EECE 4993 | Independent Study |  |
| GE 4608 | Nanotechnology in Engineering |  |
| ENGR 5670 | Sustainable Energy: Materials, Conversion, Storage, and Usage |  |
| EECE 2412 to | E 2530 |  |
| EECE 3324 | E 4698 |  |
| EECE 5155 | E 5698 |  |
| CS/IS Technica | tives | 8 |
| Complete two | following: |  |
| CS 2550 | Foundations of Cybersecurity |  |
| CS 3200 | Database Design |  |
| CS 3540 | Game Programming |  |
| CS 3700 | Networks and Distributed Systems |  |
| CS 3740 | Systems Security |  |
| CS 3800 | Theory of Computation |  |
| CS 4850 | Building Game Engines |  |
| CS 4100 to CS 4410 |  |  |
| CS 4510 to CS 4650 |  |  |
| CS 4740 to CS 4760 |  |  |
| IS 4200 to IS 4700 |  |  |
| Supplemental Credit |  |  |
| 3 semester hours from the following course count toward the engineering requirement: |  | 3 |
| GE 1501 | Cornerstone of Engineering 1 |  |
| 3 semester hours from the following course count toward the engineering requirement: |  | 3 |
| GE 1502 | Cornerstone of Engineering 2 |  |
| Computer Science Requirements |  |  |
| Code | Title | Hours |
| Computer Science Introductory Courses |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| CS 2510 <br> and CS 2511 | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| CS 2800 <br> and CS 2801 | Logic and Computation and Lab for CS 2800 | 5 |
| Computer Science Upper-Level Courses |  |  |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| CS 4500 <br> and CS 4501 | Software Development and Recitation for CS 4500 | 4 |

## Professional Development

Code Title Hours

## Required Professional Development

GE $1000 \quad$ Introduction to the Study of Engineering 1
EECE 2000 Introduction to Engineering Co-op 1
Education
EECE $3000 \quad$ Professional Issues in Engineering 1
Additional Required Courses
The remaining credit from the following course will apply to 1 the professional development area:

GE $1501 \quad$ Cornerstone of Engineering 1

## Integrative Courses

The following courses are taken in the major and count toward the integrative requirement:

| Code | Title | Hours |
| :--- | :--- | ---: |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| MATH 1342 | Calculus 2 for Science and Engineering | 4 |
| MATH 3081 | Probability and Statistics | 4 |
| CS 1800 | Discrete Structures | 4 |
| PHYS 1151 | Physics for Engineering 1 |  |
| and PHYS 1152 | and Lab for PHYS 1151 | 4 |
| EECE 4790 | Electrical and Computer Engineering <br> Capstone 1 | 4 |
| EECE 4792 | Electrical and Computer Engineering <br> Capstone 2 | 4 |

## Supporting Courses: Mathematics/Science

Complete 35 semester hours in mathematics and science as indicated below.

| Code | Title |
| :--- | :--- | ---: |
| Required Mathematics/Science |  |
| CHEM 1151 |  |
| and CHEM 1153 |  |$\quad$| General Chemistry for Engineers |
| :--- |
| and Recitation for CHEM 1151 |$\quad$ Hours


| mathematics/science requirement: |
| :---: |
| GE $1502 \quad$ Cornerstone of Engineering 2 |

## Writing Requirements and NUpath Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Writing |  |  |
| A grade of C or higher is required: |  |  |
| ENGW 1111 | First-Year Writing | 4 |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions | 4 |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |  |

## NUpath Requirements through General Electives

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.

## Required General Electives

Code Title
Complete two academic, nonremedial, nonrepetitve courses,
Hours
each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

139 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 <br> (FQ) | 4 | MATH 1342 <br> (FQ) | 4 Vacation | 0 Vacation | 0 |
| CHEM 1151 |  | PHYS 1151 <br> (ND) | 3 |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |
| ENGW 1111 <br> (WF) | 4 | General elective | 4 |  |  |
|  | 17 |  | 17 | 0 | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 2341 | 4 | EECE 2160 | 4 | Vacation | 0 | Co-op | 0 |
| PHYS 1155 <br> (ND) | 3 | $\begin{aligned} & \text { CS } 2510 \text { (ND, } \\ & \text { AD) } \end{aligned}$ | 4 |  |  |  |  |
| PHYS 1156 <br> (AD) | 1 | CS 2511 | 1 |  |  |  |  |
| PHYS 1157 | 1 | CS 2800 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \text { (ND, } \\ & \text { FQ) } \end{aligned}$ | 4 | CS 2801 | 1 |  |  |  |  |
| CS 2501 | 1 | EECE 2000 | 1 |  |  |  |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { (FQ) } \end{aligned}$ | 4 | General elective | 4 |  |  |  |  |
| CS 1802 | 1 |  |  |  |  |  |  |
|  | 19 |  | 19 |  | 0 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 EECE 2150 | 5 ENGW 3302 | 4 Co-op | 0 |
|  |  | (WD) |  |  |
|  | CE | 4 CS $3500($ ND, | 4 |  |
|  | fundamental <br> course | AD) |  |  |



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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

Code Title Hours

Computer Science Overview

| CS 1200 | Leadership Skill Development ${ }^{1}$ |
| :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- <br> op $^{2}$ |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.
$\left.\begin{array}{llr}\text { CS 1800 } & \begin{array}{l}\text { Discrete Structures } \\ \text { and CS 1802 }\end{array} & 5 \\ \text { and Seminar for CS 1800 }\end{array}\right)$

Presentation Requirement

## THTR 1170 The Eloquent Presenter

Computer Science 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, IS, or DS classes that are not 4 already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900
${ }^{1}$ Students entering through the biology department may take Biology at Northeastern (BIOL 1000).
${ }^{2}$ Students entering through the biology department may take Professional Development for Co-op (EESC 2000).

## Biology Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Foundations of Biology |  |  |
| BIOL 1107 and BIOL 1108 | Foundations of Biology and Lab for BIOL 1107 | 5 |
| Inquiries |  |  |
| BIOL 2299 | Inquiries in Biological Sciences | 4 |
| Molecular Biology |  |  |
| BIOL 2301 <br> and BIOL 2302 | Genetics and Molecular Biology and Lab for BIOL 2301 | 5 |
| BIOL 3611 <br> and BIOL 3612 | Biochemistry and Lab for BIOL 3611 | 5 |
| Techniques in Biology |  |  |
| BIOL 2309 | Biology Project Lab | 4 |
| Chemistry |  |  |
| CHEM 1161 <br> and CHEM 1162 <br> and CHEM 1163 | General Chemistry for the Biological Sciences 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 |
| Biology Capstone |  |  |
| BIOL 4701 | Biology Capstone | 4 |
| Intermediate and Advanced Biology Electives |  |  |
| Complete two biology courses (with corequisite labs if offered). Choose one of these two courses from the following list: |  | 9-10 |
| BIOL 2321 <br> and BIOL 2322 | Microbiology and Lab for BIOL 2321 |  |
| BIOL 2327 | Human Parasitology |  |
| BIOL 3401 | Comparative Vertebrate Anatomy |  |
| EEMB 2302 <br> and EEMB 2303 | Ecology and Lab for EEMB 2302 |  |
| EEMB 2400 | Introduction to Evolution |  |
| EEMB 2616 and EEMB 2617 | Invertebrate Zoology and Lab for EEMB 2616 |  |
| EEMB 2700 and EEMB 2701 | Marine Biology and Lab for EEMB 2700 |  |
| Choose the second elective from the following list: |  | 4-5 |
| BIOL 2311 to 4999, EEMB 2290 to 5515, EEMB 5520 to 5534,EEMB 5548 to 5569, EEMB 2400 |  |  |
| Biology Integrative Course |  |  |
| Complete one of the following: |  | 4-5 |
| 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 |  |
| EEMB 5548 | Sociobiology |  |

## Supporting Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Calculus |  |  |
| Complete two calculus courses with a grade of C - or higher: |  |  |
| MATH 1251 | Calculus and Differential Equations for Biology 1 | 4 |
| MATH 1252 | Calculus and Differential Equations for Biology 2 | 4 |
| Probability and Statistics |  |  |
| Complete one of the | ollowing: | 4-5 |
| MATH 3081 | Probability and Statistics |  |
| ENVR 2500 and ENVR 2501 | Biostatistics and Lab for ENVR 2500 |  |
| Computing and Social Issues |  |  |
| Complete one of th | following: | 4 |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| IA 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 21 st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |
| Intermediate or Advanced Science |  |  |
| Complete one cours | 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 PS | C 5999 |  |

## Writing Requirements

Code Title Hours

| College Writing |  |
| :--- | :--- |
| ENGW $1111 \quad$ First-Year Writing | 4 |

Advanced Writing in the Disciplines

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :--- | :--- |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Complete five general electives.

## 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.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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 |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | BIOL 2299 | 4 | BIOL 2302 | 1 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | ENGW 1111 | 4 | Elective | 4 |  |  |
| BIOL 1107 <br> and <br> 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 | 4 CS 1210 | 1 Elective | 4 Co-op |  |
| CHEM 2311 <br> and <br> CHEM 2312 | CHEM 2313 <br> and | 5 BIOL 2309 | 4 |  |
| CS 3200 | 4 CS 3000 2314 |  |  |  |
| MATH 1251 | 4 BIOL 3611 | 4 |  |  |
|  | BIOL 3612 | 1 |  | 0 |

Year 3

| Fall <br> Co-op | Hours | Spring <br> CS 3800 | Hours 4 | Summer 1 <br> ENGW 3302 | Hours | Summer 2 <br> Co-op | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Computing and social issues | 4 | ENVR 2500 <br> and <br> ENVR 2501 <br> (or MATH <br> 3081) | 5 |  |  |
|  |  | BIOL elective | 5 |  |  |  |  |
|  |  | BIOL integrative elective | 4 |  |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |  |
|  | 0 |  | 18 |  | 9 |  | 0 |


| Year 4 <br> Fall <br> Co-op | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
|  | CS 4500 <br> and CS 4501 | 4 Elective | 4 Co-op |  |
|  | BIOL 4701 | 4 Elective | 4 |  |
|  | BIOL elective | 4 |  |  |
|  | Computer <br> science <br> elective | 4 |  | 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 Vacation | 0 |
| $\text { CS } 2500$ <br> and CS 2501 | 5 | BIOL 2299 | 4 |  |  |  |
| BIOL 1107 <br> and <br> 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 |


| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CS 3500 | 4 | CS 3000 | 4 Vacation | 0 Co-op | 0 |
| CS 3200 | 4 | BIOL 2301 | 4 |  |  |
| CHEM 2311 <br> and <br> CHEM 2312 | 5 | BIOL 2302 | 1 |  |  |
| MATH 1252 |  | CHEM 2313 and CHEM 2314 | 5 |  |  |
|  |  | CS 1210 | 1 |  |  |
|  |  | Elective | 4 |  |  |
|  | 17 |  | 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 |
|  | THTR 1170 | 1 BIOL 3611 | 4 |  |
|  | BIOL 2309 | 4 BIOL 3612 | 1 |  |
|  | Elective | 4 |  |  |
|  | BIOL elective | 4 |  | 0 |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours


|  | 5 |  |  |
| :--- | :--- | :--- | :--- |
| ENVR 2500 <br> and <br> ENVR 2501 <br> (or MATH <br> $3081)$ | 4 |  |  |
| Computing <br> and social <br> issues | 18 | 8 | 0 |
| 0 |  |  |  |

Year 5


Total Hours: 142

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | BIOL 2299 | 4 |  |  |  |  |
| BIOL 1107 <br> and <br> 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 | 4 |  |  |  |
| CS 1210 | 1 |  |  |  |
| MATH 1252 | 4 |  |  |  |
| BIOL 2301 | 4 |  |  |  |
| BIOL 2302 | 1 |  |  |  |
|  | 19 | 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 <br> and | 5 |  | ENGW 3302 | 4 |
| CHEM 2314 |  |  |  |  |
| 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 |  |  |  |
| THTR 1170 | 1 |  |  | 8 |
| CS 3200 | 4 | 0 | 0 | 8 |

Year 5


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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | ---: | ---: |
| Computer Science | Overview |  |
| CS 1200 | Leadership Skill Development | 1 |

CS 1210
Professional Development for CCIS Coop

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 |  |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 4500 | Software Development | 4 |
| and CS 4501 | and Recitation for CS 4500 |  |

Complete two of the following: 8

| CS 3650 | Computer Systems |
| :--- | :--- |
| CS 3700 | Networks and Distributed Systems |
| DS 4100 | Data Collection, Integration, and <br> Analysis |
| DS 4200 | Information Presentation and <br> Visualization |
| DS 4300 | Large-Scale Information Storage and <br> Retrieval |

## Presentation Requirement

THTR 1170 The Eloquent Presenter

## Computer Science Elective Courses

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, IS, or DS classes that are not 4 already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Business Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Business | Courses |  |
| 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 |
| Choose one of the following: |  |  |
| STRT 4501 |  | Strategy in Action |
| STRT 4516 | External Case Competition Challenge | 4 |

${ }^{1}$ Strategy in Action (STRT 4501), and External Case Competition444

[^6]
## Business Concentration

Complete a four-course business concentration from the following list. Requirements for the concentrations are listed below (p. 236).

- Accounting (p. 236)
- Entrepreneurship and Innovation (p. 236)
- Finance (p. 236)
- Management (p. 237)
- Marketing (p. 237)
- Supply Chain Management (p. 237)


## Integrative Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| Information Resource | Management |  |
| MISM 2301 | Management Information Systems | 4 |

Supporting Courses
Code Title
Hours
Mathematics

| MATH 1341 <br> or MATH 1231 | Calculus 1 for Science and Engineering <br> Calculus for Business and Economics | 4 |
| :--- | :--- | ---: |
| Economics |  | 4 |
| ECON 1115 | Principles of Macroeconomics | 4 |
| ECON 1116 | Principles of Microeconomics |  |
| Computing and Social Issues |  |  |
| Complete one of the following: | 4 |  |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |  |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |  |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |  |
| PHIL 1145 | Technology and Human Values |  |
| SOCL 1280 | The 21st-Century Workplace |  |


| Code | Title | Hours |
| :---: | :---: | :---: |
| College Writing |  |  |
| 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 four general electives.

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Computer Science GPA Requirement

Minimum 2.000 GPA required in all CS 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 coop.

## Program Requirement

133 total semester hours required

| Concentrations |  |  |
| :--- | :--- | ---: |
| CONCENTRATION IN ACCOUNTING  <br> Code Title | Hours |  |
| Required Courses |  | 4 |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 |  |
| Electives |  | 8 |
| Complete two of the following: |  |  |


| ACCT 3403 | Accounting Information Systems |
| :--- | :--- |
| ACCT 3416 | Strategic Cost Analysis for Decision <br> Making |
| ACCT 4412 | Auditing and Other Assurance Services |
| ACCT 4414 | Income Tax Determination and <br> Planning |

CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION
Code Title Hours

Note: The following courses do not count toward this concentration:

| ENTR 1201 | The Entrepreneurial Universe |  |
| :---: | :---: | :---: |
| ENTR 3308 | Business Economic History of South Africa |  |
| ENTR 3318 |  |  |
| ENTR 3328 |  |  |
| ENTR 3338 | Field Research in Sustainable Energy in Iceland |  |
| ENTR 3346 |  |  |
| ENTR 4510 | Management Consulting Abroad |  |
| ENTR 4514 | Development Practice and Global Citizenship in India |  |
| Introductory Course |  |  |
| ENTR 2301 or ENTR 2303 | Innovation! <br> Entrepreneurial Marketing and Selling | 4 |
| Capstone Course |  |  |
| Complete one of th | ollowing: | 4 |



| or MKTG 450 | Consumer Behavior |  |
| :---: | :---: | :---: |
| Electives |  |  |
| 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 | Marketing in the Service Sector |  |
| 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 |  |


| CONCENTRATION IN SUPPLY CHAIN MANAGEMENT |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Required Courses |  |  |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation Management | 4 |

Elective
Complete one of the following:

| SCHM 3308 | Supply Chain Analytics |
| :--- | :--- |
| SCHM 3320 | Demand Planning and Forecasting |
| SCHM 3330 | Sustainability and Supply Chain <br> Management |
| SCHM 4401 | Advanced Problems in Supply Chain <br> Management |

## Plan of Study

## Sample Patterns:

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

## Year 1



| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| ACCT 2301 | 4 Business <br> concentration | 4 MKTG 2201 | 4 Co-op |  |
|  | 1 |  |  |  |
| CS 3500 | 4 CS 3000 | 4 Elective | 4 |  |


| MGSC 2301 | 4 Computing <br> and social <br> issues | 4 |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Elective | 4 CS 1210 | 1 |  |  |
|  | Elective | 4 | 8 | 0 |

Year 3

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | :--- | ---: | :---: | :---: | Hours

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :--- | :---: | ---: |
| Co-op | CS 3700 | 4 STRT 4501 | 4 |
|  | CS 4500 <br> and CS 4501 | 4 ENGW 3302 | 4 |
|  | Business <br> concentration <br> 3 | 4 |  |
|  | Business <br> concentartion <br> 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 | 4 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 |  | 0 |
|  | Elective | 4 | 0 |  |
| Year 3 | 16 | 17 |  |  |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | 0 CS 3650 | 4 ORGB 3201 | 4 Co-op | 0 |


| Business <br> concentration <br> 1 | 4 MKTG 2201 | 4 |  |
| :--- | :--- | :--- | :--- |
| MISM 2301 | 4 |  |  |
| ENGW 3302 | 4 |  |  |
| THTR 1170 | 1 | 8 | 0 |
| 0 | 17 | 8 |  |


| 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 |  |  |  |  |
|  |  | CS/IS/DS elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |


| Year 5 <br> Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 STRT 4501 | 4 |
|  | Business <br> concentration <br> 4 | 4 |
|  | CS 4500 <br> and CS 4501 | 4 |
| Computing <br> and social <br> 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 | 5 CS 2510 | 5 | Vacation | 0 Vacation |$\quad 0$


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 3500 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| MATH 1341 | 4 |  |  |  |
| ACCT 1201 | 4 |  |  |  |
| MGSC 2301 | 4 |  | 0 | 0 |
| CS 1210 | 1 | 0 |  |  |
|  | 17 |  |  |  |


| 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 |  |  |  |
| THTR 1170 | 1 | 0 | 0 | 8 |
|  | 17 |  |  |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | ---: | Hours

Year 5

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| CS/IS/DS elective | 4 | STRT 4501 | 4 |
| Business concentration 2 | 4 | CS 4500 and CS 4501 | 4 |
| Business concentration 3 | 4 | Computing and social issues | 4 |
| CS 3700 |  | Business concentration 4 | 4 |

$16 \quad 16$

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

Code Title Hours
Computer Science Overview

Professional Development for CCIS Coop

Computer Science Fundamental Courses
A grade of C - or higher is required in computer science fundamental courses.

| CS 1800 | Discrete Structures |
| :--- | :--- |
| and CS 1802 | and Seminar for CS 1800 |
| CS 2500 | Fundamentals of Computer Science 1 |
| and CS 2501 | and Lab for CS 2500 |
| CS 2510 | Fundamentals of Computer Science 2 <br> and CS 2511 <br> and Lab for CS 2510 |
| Computer ScienceRequired Courses |  |
| CS 3000 | Algorithms and Data |
| CS 4100 | Object-Oriented Design <br> Artificial Intelligence (Integrative <br> course) |
| CS 4500 | Software Development <br> and Recitation for CS 4500 (Integrative <br> course) |
| IS 4300 | Human Computer Interaction <br> (Integrative course) |

Presentation Requirement
THTR 1170 The Eloquent Presenter 1

## Computer Science 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 twelve credits of CS, IS or DS classes that are not 12
already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Psychology Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| PSYC 1101 | Foundations of Psychology | 4 |
| PSYC 2320 | Statistics in Psychological Research | 4 |
| PSYC 3464 | Psychology of Language | 4 |
| PSYC 3466 | Cognition | 4 |
| Advanced Psychology |  |  |
| PSYC 3452 <br> or PSYC 3458 | Sensation and Perception Biological Psychology | 4 |
| Laboratory in Psychology |  |  |
| Complete one of the following: |  | 4 |
| PSYC 4610 | Laboratory in Psycholinguistics |  |
| PSYC 4612 | Laboratory in Cognition |  |
| PSYC 4622 | Laboratory in Sensation and Perception |  |
| Seminar in Psychology |  |  |
| Complete one of th | 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 |  |

Complete two of the following:

| PSYC 3402 | Social Psychology |
| :--- | :--- |
| PSYC 3404 | Developmental Psychology |
| PSYC 3450 | Learning and Motivation |
| PSYC 3451 | Learning Principles and Behavior <br> Analysis |
| PSYC 3452 | Sensation and Perception |
| PSYC 3458 | Biological Psychology |
| PSYC 4512 | Neuropsychology |
| PSYC 4520 | Language and the Brain |
| 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 |
| PSYC 4658 | Psychology |
| PSYC 4660 | Seminar in Psycholinguistics 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

## Calculus

A grade of C - or higher is required:
MATH 1341 Calculus 1 for Science and Engineering 4

Computing and Social Issues
Complete one of the following: 4

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21 st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

## Computer Science Writing Requirement

Code Title Hours

## College Writing

ENGW 1111 First-Year Writing 4
Advanced Writing in the Disciplines
ENGW 3302 Advanced Writing in the Technical Professions

Psychology Electives

or ENGW 3315 | Interdisciplinary Advanced Writing in the |
| :--- |
| Disciplines |

| Required General Electives |  |
| :--- | ---: |
| Code $\quad$ Title | Hours |
| Complete eight general electives. | 32 |

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | PSYC 3466 | 4 | Elective | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | MATH 1341 | 4 |  |  |  |  |
| PSYC 1101 | 4 | Elective | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| PSYC 2320 | 4 CS elective | 4 Elective | 4 Co-op |  |
| CS 3000 | 4 IS 4300 | 4 Elective | 4 |  |
| Elective | 4 <br> PSYC <br> elective | 4 |  |  |
| PSYC 3464 | 4 <br> PSYC 3452 <br> or 3458 | 4 |  | 0 |
|  | CS 1210 | 1 | 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 | 4 Elective | 4 |  |
|  | elective |  |  |  |
|  | CS elective | 4 |  |  |



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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | PSYC 3466 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 | 4 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 |  | 0 |
|  | CS elective | 4 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 | IS 4300 | 4 Elective | 4 Co-op |$\quad 0$

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 CS 4100 | 4 Elective | 4 Co-op | 0 |
|  | CS elective | 4 Elective | 4 |  |
|  | PSYC lab <br> elective | 4 |  |  |
| PSYC <br> elective | 4 |  | 0 |  |
| 0 | 16 | 8 |  |  |


| Year 5 |  |  |
| :--- | :---: | :---: |
| Fall | Hours Spring | Hours |
| Co-op | O CS 4500 <br> and CS 4501 | 4 |
|  | PSYC <br> seminar | 4 |
|  | Computing <br> and social <br> issues <br> Elective | 4 |
| 0 | 4 |  |

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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| MATH 1341 | 4 |  |  |  |
| PSYC 2320 | 4 |  | 0 | 0 |
| Elective | 4 |  | 0 |  |
| CS 1210 | 1 | 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 |  |  |  |
| THTR 1170 | 1 |  |  | 8 |
| CS elective | 4 | 0 | 0 |  |
|  | 17 |  |  |  |

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 <br> elective | 4 |  |  |  |
| CS elective | 4 |  | 0 | 8 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| CS 4100 | 4 CS 4500 |  |
| and CS 4501 |  |  |$\quad 4$|  | 4 PSYC |  |
| ---: | :--- | ---: |
| CS elective | seminar | 4 |


| PSYC lab <br> elective | 4 Computing <br> and social <br> issues | 4 |
| :--- | :---: | :---: |
| PSYC <br> 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science | Overview |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- <br> op | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| CS 1800 | Discrete Structures <br> and CS 1802 <br> and Seminar for CS 1800 | 5 |
| :--- | :--- | ---: |
| CS 2500 | Fundamentals of Computer Science 1 |  |
| and CS 2501 | and Lab for CS 2500 | 5 |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |
| Computer Science | Required Courses |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 4500 | Software Development <br> and CS 4501 | and Recitation for CS 4500 |
| CS 4550 | Web Development | 4 |

Presentation Requirement
THTR 1170 The Eloquent Presenter 1
Computer Science Elective Courses

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

| Complete 12 credits of CS, IS, or DS classes that are not |
| :--- |
| already required. Choose courses within the following ranges: |
| CS 2500 or higher, except CS 5010 |
| DS 2000 or higher, except DS 4900 |
| IS 2000 or higher, except IS 4900 |

## Communication Studies Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Communication Studies Common Requirements |  |  |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 or COMM 2301 | Public Speaking Communication Research Methods | 4 |
| 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 th | 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 3330 Argumentation Theory
COMM 3400 Rhetoric of Science
COMM 3414 Great Speakers and Speeches 2, 1930Present
COMM 3415 Communication Criticism
COMM $3445 \quad$ Public Relations Principles
COMM 3501 Free Speech: Law and Practice
COMM 3530 Communication and Sexualities
COMM 3532 Theories of Conflict and Negotiation
COMM 3610 Communication, Politics, and Social Change
COMM 4535 Nonverbal Social Interaction
COMM $4605 \quad$ Youth and Communication Technology
COMM 4631 Crisis Communication and Image Management

## Communication Studies Electives

Complete three courses in the following range: ${ }^{1}$
COMM 1131 to COMM 4996

1 Special Topics in Communication Studies (COMM 4912), and Junior/ Senior Honors Project 1 (COMM 4970) are excluded.

## Supporting Courses

Code Title Hours

Mathematics
MATH 1341 Calculus 1 for Science and Engineering 4
Computing and Social Issues
Complete one of the following:

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

## Writing Requirements

Code Title
Hours
College Writing
ENGW 1111 First-Year Writing 4
Advanced Writing in the Disciplines
Complete one of the following:
ENGW 3302 Advanced Writing in the Technical Professions
ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines
COMM $3409 \quad$ Advocacy Writing ${ }^{1}$
2 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 eight general electives.

## 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.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS, IS, and COMM courses

## 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 Vacation | 0 |
| CS 1800 and CS 1802 | 5 | CS 3200 | 4 |  |  |  |
| CS 2500 and CS 2501 | 5 | COMM 1112 <br> or 2301 | 4 |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |
| COMM 1101 | 4 |  |  |  |  |  |
|  | 19 |  | 17 |  | 0 | 0 |



| ar 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall H | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CS 3000 | 4 | Co-op | 0 | Co-op | 0 | Elective | 4 |
| CS elective | 4 |  |  |  |  | Elective | 4 |
| Communication studies cluster course | - 4 |  |  |  |  |  |  |
| Communicatir 4 studies writingintensive course |  |  |  |  |  |  |  |
|  | 16 |  | 0 |  | 0 |  | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Advanced <br> writing | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Communicatir <br> studies <br> elective | 4 |  | Elective | 4 |
| CS elective | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 8 |
|  | 16 |  |  |  |

Year 5

| Fall Hours Spring |  | Hours |  |
| :---: | :---: | :---: | :---: |
| Communication studies writingintensive course | 4 CS 4000 | 1 |  |
| Communicatii studies elective | 4 CS 4500 | 4 |  |
| CS elective | $\begin{aligned} & 4 \text { CS } 4550 \\ & \text { and CS } 4501 \end{aligned}$ | 4 |  |
| Computing and social issues | 4 Communicati studies elective | 4 | 4 |
|  | Elective | 4 |  |
|  | 16 | 17 |  |
| Total Hours: 134 |  |  |  |

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 3200 | 4 | MATH 1341 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | COMM 1112 <br> or 2301 | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| COMM 1101 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| CS 1210 | 1 Co-op | 0 Co-op | 0 Elective | 4 |
| Communicati studies foundation course | 14 |  | Elective | 4 |
| CS elective | 4 |  |  |  |
| CS 3000 | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 17 | 0 | 0 | 8 |

Year 3


| Year 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Fall Hour | Spring Hour | Hours | Summer 1 | Hours |
| CS elective | CS 4500 and CS 4501 | 4 | Elective | 4 |
| Communicatii 4 CS $4550 \quad 4$ Electivestudieswriting-intensivecourse |  |  |  |  |
| Communication studies elective | Communication studies elective | n 4 |  |  |
| Computing and social issues | Communicatis studies elective | 4 |  |  |
| 16 |  | 16 |  | 8 |

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. 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |
| or CRIM 2000 | Co-op Integration Seminar 1 |  |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science
fundamental courses:
CS 1800 Discrete Structures 5
and CS 1802 and Seminar for CS 1800

| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| :--- | :--- | ---: |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| IS 2000 | Principles of Information Science | 4 |

Presentation Requirement
THTR 1170 The Eloquent Presenter 1
Computer Science Elective Courses
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, IS, or DS courses
that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Criminal Justice Courses

| Code | Title | Hours |
| :--- | :--- | :--- |
| Criminal Justice Required Courses |  |  |
| CRIM 1100 | Introduction to Criminal Justice | 4 |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| CRIM 3600 | Criminal Justice Research Methods | 4 |
| CRIM 3700 | Criminal Justice Statistics | 4 |


| Criminal Justice Required Capstone |  |
| :--- | :--- |
| CRIM 4949 | Senior Capstone Seminar |

Thematic Elective
Complete one course from the following: 4

| CRIM 1300 | The Death Penalty |
| :--- | :--- |
| CRIM 1400 | Human Trafficking |
| CRIM 1500 | Corruption, Integrity, and Accountability |
| CRIM 1700 | Crime, Media, and Politics |

Survey Elective
Complete one course from the following: 4

| CRIM 3010 | Criminal Violence |
| :--- | :--- |
| CRIM 3030 | Global Criminology |
| CRIM 3040 | Psychology of Crime |
| CRIM 3050 | Organized Crime |
| CRIM 3100 | Criminal Law |
| CRIM 3200 | Youth Crime and Justice |
| CRIM 3300 | Punishment in the Age of Mass <br> Incarceration |
| CRIM 3400 | Corporate Security: Securing the Private <br> Sector |
| CRIM 3500 | Policing a Democratic Society |
| System-Wide Elective |  |
| Complete one course from the following: |  |


| CRIM 4010 | Gender, Crime, and Justice |
| :--- | :--- |
| CRIM 4020 | Race, Crime, and Justice |

## Criminal Justice Elective

Complete one additional CRIM elective.

| Integrative Course Requirement |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Complete one | from the following: | 4 |
| CRIM 4040 | Crime Prevention |  |
| CRIM 4630 | Political Crime and Terrorism |  |
| CRIM 4800 | Crime Mapping |  |
| CRIM 4900 | Advanced Seminar in Criminology and Criminal Justice |  |

Supporting Course
Code Title Hours

| Computing and Social Issues | Hours |
| :--- | :--- |
| Complete one of the following: | 4 |


| SOCL 4528 | Computers and Society |
| :--- | :--- |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 1280 | The 21 st-Century Workplace |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| PHIL 1145 | Technology and Human Values |


| PHIL 1145 | Technology and Human Values |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br>  |


| Computer Science English Requirement <br> Code <br> College Writing | Title | Hours |
| :--- | :--- | ---: |
| ENGW 1111  First-Year Writing <br> or ENGW 1102 First-Year Writing for Multilingual Writers  | 4 |  |

Advanced Writing in the Disciplines
Complete one of the following:

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :--- | :--- |
| ENGW 3308 | Advanced Writing in the Social <br> Sciences |
| ENGW 3315 | Interdisciplinary Advanced Writing in <br> the Disciplines |

## Required General Electives <br> Code Title

Hours
28

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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.

## Program Requirement

133 total semester hours required

## Plan of Study

Sample Patterns:

## Four Years, 2 Co-ops in Spring/Summer 1

Year 1


Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | ---: | Hours

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| CS elective 1 | 4 | Co-op | Co-op | Elective | 4 |
| CRIM 3700 | 4 |  | Elective | 4 |  |
| CJ survey | 4 |  |  |  |  |
| elective |  |  |  |  |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | ---: |
| CS elective 3 | 4 CS elective 4 | 4 Elective | 4 |
| CJ system- <br> wide elective | 4 CRIM 4949 | 4 Elective | 4 |
| CJ elective | 4 Elective | 4 |  |
| Computing <br> and social <br> issues | 4 CJ <br> integrative <br> course | 4 |  |
|  | 16 | 16 | 8 |

Five Years, 3 Co-ops in Spring/Summer 1
Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | IS 2000 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | CRIM 2100 | 4 |  |  |  |  |
| CRIM 1100 | 4 | CRIM 2200 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 0 |  | 0 |
| Year 2 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CS 1210 or CRIM 2000 | 1 | Co-op |  | Co-op |  | Vacation |  |
| CS 3000 | 4 |  |  |  |  |  |  |
| CS 3200 | 4 |  |  |  |  |  |  |
| CS 3500 | 4 |  |  |  |  |  |  |
| CRIM 3600 | 4 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CRIM 3700 | 4 Co-op | Co-op | ENGW 3302, <br> $3308, ~ o r ~$ | 4 |
|  |  |  | 3315 |  |
| CS elective 1 | 4 |  |  | 4 |
| CJ thematic <br> elective | 4 |  |  |  |
| CJ survey <br> elective | 4 |  |  | 8 |
| THTR 1170 | 1 | 0 | 0 |  |
|  | 17 |  |  |  |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS elective 2 | 4 Co-op | Co-op | Elective | 4 |
| CJ system- <br> wide elective | 4 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Computing <br> and social <br> issues | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| CJ | 4 CS elective 4 | 4 |
| integrative <br> course |  |  |
| CJ elective | 4 CRIM 4949 | 4 |
| Elective | 4 Elective | 4 |
| CS 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview | Leadership Skill Development | 1 |
| CS 1200 | Art and Design at Northeastern |  |
| or ARTF 1000 | Professional Development for CCIS Co- |  |
| CS 1210 | op | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science
fundamental courses.

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | :--- |
| and CS 1802 | and Seminar for CS 1800 |  |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |

and CS 2501 and Lab for CS 2500
CS $2510 \quad$ Fundamentals of Computer Science $2 \quad 5$
and CS 2511 and Lab for CS 2510
Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | ---: |
| CS 3500 | Object-Oriented Design | 4 |
| CS 4500 | Software Development <br> and CS 4501 | 4 |
| IS 4300 | Human Computer Interaction | 4 |

Presentation Requirement
THTR 1170 The Eloquent Presenter

## Computer Science Elective Courses

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, IS, or DS classes that are not 8 already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Design Requirements

| Code |  |  |
| :--- | :--- | ---: |
| Design Courses | Title | Hours |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| ARTF 2223 | 5D Fundamentals: Experience and <br> Drawing (with optional ARTF 2224) | 4 |
| ARTG 1250 | Design Process Context and Systems | 4 |
| ARTG 2260 | Programming Basics <br> ARTG 2250 | Typography 1 (with optional <br> ARTG 2251) |
| ARTG 3350 | Typography 2 | 4 |
| ARTG 3451 | Information Design 1 | 4 |

Art + Design History
Complete one of the
Complete one of the following:

| ARTH 1100 | Interactive Media and Society |
| :--- | :--- |
| ARTH 1111 | Global Art and Design History: |
|  | Renaissance to Modern |
| ARTH 2210 | Modern Art and Design History |
| ARTH 2211 | Contemporary Art and Design History |
| ARTH 2212 | Survey of the Still and Moving Image |
| ARTH 2215 | History of Graphic Design |

Degree Capstone Project
Complete one of the following:
ARTG 4550 Design Degree Project 1
and ARTG 4551 and Design Degree Project 2
ARTG 4700 Interaction Team Degree Project 1
and ARTG 4701 and Interaction Team Degree Project 2

## Design Options

Complete one of the following options:

| Code | Title | Hours |
| :---: | :---: | :---: |
| Interaction Design Option |  |  |
| ARTG 2400 | Interaction Design 1: Responsive (with optional ARTG 2401) | 4 |
| ARTG 3700 | Interaction Design 2: Mobile | 4 |
| Code | Title | Hours |
| Graphic and Information Design Option |  |  |
| ARTG 2252 | Graphic Design 1 | 4 |
| ARTG 3450 | Graphic Design 2 | 4 |
| Code | Title | Hours |
| Experience Design Option |  |  |
| ARTG 3462 | Experience Design 1 | 4 |
| ARTG 3463 | Experience Design 2 | 4 |
| Degree-Focused Electives |  |  |
| Code | Title | Hours |
| Complete two | s from the following lists: | 8 |
| Art + Design |  |  |
| ARTF 1120 | Observational Drawing |  |
| ARTF 1121 | Conceptual Drawing |  |
| ARTF 1124 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125) |  |


| ARTF 2220 | 4D Fundamentals: Sequence and Drawing (with optional ARTF 2221) |
| :---: | :---: |
| ARTD 2100 | Narrative Basics |
| ARTD 2360 | Photo Basics (with optional ARTD 2361) |
| ARTD 2370 | Animation Basics (with optional ARTD 2371) |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |
| ARTG 2252 | Graphic Design 1 |
| ARTG 2300 | Business Literacy for Design and Media |
| ARTG 2400 | Interaction Design 1: Responsive (with optional ARTG 2401) |
| ARTG 3450 | Graphic Design 2 |
| ARTG 3250 | Physical Computing |
| ARTG 3351 | Time-Based Design |
| ARTG 3450 | Graphic Design 2 |
| ARTG 3460 | Identity and Brand Design |
| ARTG 3462 | Experience Design 1 |
| ARTG 3463 | Experience Design 2 |
| ARTG 3700 | Interaction Design 2: Mobile |
| ARTG 4552 | Information Design 2 |
| ARTG 4553 | Environmental Information Design |
| ARTG 4554 | Typography 3 |
| ARTE 4901 | Special Topics in Art and Design Studio |
| 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 |
| IS 2000 | Principles of Information Science |
| DS 4100 | Data Collection, Integration, and Analysis |
| 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 |
| CS 4991 | Research |


| CS 4992 | Directed Study |
| :--- | :--- |
| CS 4993 | Independent Study |

## Integrative Requirement <br> Code Title

The following courses are used in the major but also count as the integrative requirement:

| IS 4300 | Human Computer Interaction |
| :--- | :--- |
| ARTG 2260 | Programming Basics |

## Supporting Course

Code
Computing and Social Issues
Complete one of the following: $\quad$ Hours

| Computer Science Writing Requirement |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| College Writing |  | 4 |
| ENGW 1111 | First-Year Writing |  |


| Advanced Writing in the Disciplines |  |
| :--- | :--- |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Code Title

Complete six general electives.

## 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.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses

## Program Requirement

131 total semester hours required

## Plan of Study <br> 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 | $1$ | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | ARTG 1250 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ |  | ARTF 2223 <br> (with optional ARTF 2224) | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |

4 ARTF 11224
(with
optional
ARTF 1123)

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| CS 1210 | 1 Co-op 1 | Co-op 1 | Elective | 4 |
| CS 3500 | 4 |  | Elective | 4 |
| Design option course 1 | 4 |  |  |  |
| CS 3000 | 4 |  |  |  |
| ARTG 2250 <br> (with optional ARTG 2251) | 4 |  |  |  |
|  | 17 | 0 | 0 | 8 |


| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IS 4300 | 4 Co-op 2 |  | Co-op 2 |  | ENGW 3302 <br> or 3315 | 4 |
| ARTG 2260 | 4 |  |  |  | Elective | 4 |
| Degreefocused elective | 4 |  |  |  |  |  |
| Art + design history elective | 4 |  |  |  |  |  |
| THTR 1170 | 1 |  |  |  |  |  |
|  | 17 | 0 |  | 0 |  | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | :---: |
| ARTG 3350 | 4 Co-op 3 | Co-op 3 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Design <br> capstone 1 | Design <br> capstone 2* | 4 |
| ARTG 3451 | 4 CS elective | 4 |
| CS 4500 | 4 Elective | 4 |
| and CS 4501 | 4 Elective | 4 |
| CS elective | 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation |  |
| CS 1800 and CS 1802 | 5 | ARTG 1250 | 4 | CS 3000 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ |  | ARTF 2223 <br> (with optional ARTF 2224) | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| ARTF 1122 <br> (with optional ARTF 1123) | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ARTG 2260 | 4 Co-op 1 | Co-op 1 |  | ENGW 3302 | 4 |
| ARTG 2250 <br> (with optional ARTG 2251) | 4 |  |  | Elective | 4 |
| Design option course 1 | 4 |  |  |  |  |
| Degreefocused elective 1 | 4 |  |  |  |  |
| CS 1210 | 1 |  |  |  |  |
|  | 17 | 0 | 0 |  | 8 |


| Year 3 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| THTR 1170 | 1 | Co-op 2 | Co-op 2 | Elective | 4 |
| IS 4300 | 4 |  | Elective | 4 |  |
| Design <br> option <br> course 2 | 4 |  |  |  |  |
| Art + design <br> history <br> elective | 4 |  |  |  |  |



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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Computer Science Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Computer Science Overview |  |  |
| $\text { CS } 1200$ <br> or ECON 1000 | Leadership Skill Development Economics at Northeastern | 1 |
| CS 1210 | Professional Development for CCIS Coop | 1 |
| Computer Science Fundamental Courses |  |  |
| A grade of C - or higher is required in 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 <br> and CS 2511 | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 | Supporting Courses |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Code | Title | Hours |
| CS 2800 | Logic and Computation | 5 | Mathematics |  |  |
| and CS 2801 | and Lab for CS 2800 |  | MATH 1231 | Calculus for Business and Economics | 4 |
| Computer Science Required Courses |  |  | or MATH 1341 | Calculus 1 for Science and Engineering |  |
| CS 3000 | Algorithms and Data | 4 | Computing and Social Issues |  |  |
| CS 3200 | Database Design | 4 | Complete one of the following: |  | 4 |
| CS 3500 | Object-Oriented Design | 4 | SOCL 4528 | Computers and Society |  |
| IS 2000 | Principles of Information Science | 4 | SOCL 3485 | Environment, Technology, and Society |  |
| Presentation Requirement |  |  | SOCL 1280 | The 21 st-Century Workplace |  |
| THTR 1170 | The Eloquent Presenter | 1 |  | Wired/Unwired: Cybercultures and |  |
| Computer Science Elective Courses |  |  |  | Technopolitics |  |
| With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives. |  |  | PHIL 1145 | Technology and Human Values |  |
|  |  |  | IA 5240 | Cyberlaw: Privacy, Ethics, and Digital Rights |  |
| Complete 12 credits of CS, IS, or DS classes that are not already required. Choose courses within the following ranges: |  |  | INSH 2102 | Bostonography: The City through Data, Texts, Maps, and Networks |  |
| CS 2500 or higher, except CS 5010 |  |  |  |  |  |
| IS 2000 or higher, except IS 4900 |  |  | Computer Science English Requirement |  |  |
| DS 2000 or higher, except DS 4900 |  |  | Code | Title | Hours |
| Economics Requirements |  |  | College Writing |  |  |
| Code Title |  | Hours | ENGW 1111 | First-Year Writing | 4 |
|  |  | or ENGW 1102 | First-Year Writing for Multilingual Writers |  |
| Required Economics Courses |  |  | Advanced Writing in the Disciplines |  |  |
| ECON 1115 | Principles of Macroeconomics |  | 4 | Complete one course from the following: |  |  |
| ECON 1116 | Principles of Microeconomics | 4 | ENGW 3302 |  |  |
| ECON 2315 | Macroeconomic Theory | 4 |  | Professions |  |
| ECON 2316 | Microeconomic Theory | 4 | ENGW 3308 | Advanced Writing in the Social Sciences |  |
| ECON 2350 | Statistics | 4 |  |  |  |
| ECON 2560 | Applied Econometrics | 4 | ENGW 3315 | Interdisciplinary Advanced Writing inthe Disciplines |  |
| Economics Electives |  |  |  |  |  |
| Complete four economics electives with no more than two below 3000: |  | 16 | Required General Electives |  |  |
| ECON 1230 | Healthcare and Medical Economics |  | Code | Title | Hours |
| ECON 1240 | Economics of Crime |  | Complete six general electives. |  | 24 |
| ECON 1290 | History of the Global Economy |  | Major GPA Requirement |  |  |
| ECON 3420 | Urban Economic Issues |  | Minimum 2.000 GPA required in all CS and IS courses |  |  |
| ECON 3423 | Environmental Economics |  |  |  |  |  |  |
| ECON 3424 | Law and Economics |  | NUpath Requirements Satisfied |  |  |
| ECON 3425 | Energy Economics |  | - Engaging with the Natural and Designed World |  |  |
| ECON 3440 | Public Finance |  | - Conducting Formal and Quantitative Reasoning |  |  |
| ECON 4635 | International Economics |  | - Analyzing and Using Data |  |  |
| ECON 4681 | Information Economics and Game |  | - Exploring Creative Expression and Innovation <br> - Writing in the First Year |  |  |
|  | Theory |  |  |  |  |  |  |
| Economics Capstone |  |  | - Advanced Writing in the Disciplines |  |  |
| ECON 4692 | Senior Economics Seminar | 4 | - Writing-Intensi | in the Major |  |
| Integrative Course Requirement |  |  | - Demonstrating Thought and Action in a Capstone |  |  |
| Code | Title | Hours | Integrating Knowledge and Skills Through Experience is satisfied through co-op. |  |  |
| The following courses are used in other areas of the major. |  |  |  |  |  |  |  |
| IS 2000 | Principles of Information Science | 4 | Program Requirement |  |  |
| ECON 2560 | Applied Econometrics | 4 | 133 total semester hours required |  |  |

## Plan of Study

Sample Patterns:

## Four Year, Two Co-ops in Summer 2/Fall

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3200 |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | IS 2000 | 4 | CS 3500 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | ECON 1116 | 4 |  |  |  |  |
| ECON 1115 | 4 | MATH 1231 or 1341 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | 5 | CS 1210 |  | $\begin{aligned} & \text { ENGW 3302, } \\ & 3308,3311 \text {, } \\ & \text { or } 3315 \end{aligned}$ | 4 | Co-op |  |
| CS 3000 | 4 | CS elective 1 | 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 | CS elective 2 | 4 Elective | 4 Co-op |  |
|  | ECON <br> elective 2 | 4 Elective | 4 |  |
|  | Computing <br> and social <br> issues <br> requirement | 4 |  |  |
|  | ECON 2560 | 4 |  | 0 |
|  | THTR 1170 | 1 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | :---: |
| Co-op | CS elective 3 | 4 |  |
|  | ECON 4692 | 4 Elective | 4 |
|  | ECON <br> elective 3 | 4 Elective | 4 |
|  | ECON <br> elective 4 | 4 |  |
| 0 | 16 | 8 |  |

Total Hours: 135

## Five Year, Three Co-ops in Summer 2/Fall

| Year 1 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 1200 | 1 CS 2510 | 5 Vacation | Vacation |  |
|  | and CS 2511 |  |  |  |


| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 IS 2000 | 4 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 ECON 1116 | 4 |  |  |
| ECON 1115 | $\begin{aligned} & 4 \text { MATH } 1231 \\ & \text { or } 1341 \end{aligned}$ | 4 |  |  |
| ENGW 1111 | 4 |  |  |  |
|  | 19 | 17 | 0 | 0 |



Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | CS elective 1 |  | ENGW 3302, 3308, 3311, or 3315 | 4 | Co-op |  |
|  |  | ECON <br> elective 2 | 4 | Elective | 4 |  |  |
|  |  | Computing and social issues requirement | 4 |  |  |  |  |
|  |  | ECON 2560 | 4 |  |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | CS elective 2 | 4 Elective | 4 Co-op |  |
|  | ECON <br> elective 3 | 4 Elective | 4 |  |
|  | ECON <br> elective 4 | 4 |  |  |
|  | Elective | 4 |  | 0 |

Year 5


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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Computer Science Courses

Code Title Hours

Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |

Computer Science Fundamental Courses
A grade of C - or higher is required in computer science
fundamental courses.

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 |  |
| CS 2500 Fundamentals of Computer Science 1 | 5 |  |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 <br> and CS 2511 | Fundamentals of Computer Science 2 <br> and Lab for CS 2510 | 5 |

Computer Science Required Courses
CS $3000 \quad$ Algorithms and Data 4

| CS 3200 | Database Design | 4 |
| :--- | :--- | :--- |
| CS 3500 | Object-Oriented Design | 4 |

## Computing Focus

Students are required to complete one of the following foci 8
(two courses total):
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 4100 | Data Collection, Integration, and <br> Analysis |
| DS 4200 | Information Presentation and <br> Visualization |

## Presentation Requirement

THTR 1170
The Eloquent Presenter 1

Computer Science/Information Science Elective Course

| IS 2000 | Principles of Information Science |
| :--- | :--- |
| or CS 4500 | Software Development |

Computer Science Elective Courses
With advisor 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, IS, or DS classes that are not
already required. Choose courses within the following ranges:

$$
\text { CS } 2500 \text { or higher, except CS } 5010
$$

IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900
English Requirements
Code Title
Hours
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
Foundational Courses
ENGL 1400 Introduction to Literary Studies 4

ENGL 1160 Introduction to Rhetoric 4
or ENGL 1410 Introduction to Writing Studies
Diversity
Complete one of the following courses. This course may also 4
be used to fulfill an additional English requirement below:

| ENGL 2150 | Literature and Digital Diversity |
| :---: | :---: |
| ENGL 2296 | Early African-American Literature |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2760 | Writing in Global Contexts |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in Literature |
| 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 forlir | ollowing: |


| ENGL 1600 | Introduction to Shakespeare |
| :--- | :--- |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |


| ENGL 4020 | Topics in 17th- and 18th-Century Literatures |  |
| :---: | :---: | :---: |
| Nineteenth-, Twentieth-, and Twenty-First-Century Literature |  |  |
| Complete one of the f | following: | 4 |
| ENGL 2260 | Romantic Poetry |  |
| ENGL 2330 | The American Renaissance |  |
| ENGL 2340 | American Realism |  |
| ENGL 3619 | Emerson and Thoreau |  |
| ENGL 3720 | 19th-Century Major Figure |  |
| ENGL 4040 | Topics in 19th-Century Literatures |  |
| ENGL 2301 | The Graphic Novel |  |
| ENGL 2410 | Contemporary American Literature |  |
| 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 21 st-Century Major Figure |  |
| Theories and Methods |  |  |
| Complete one of the f | following: | 4 |


| Complete one of the following: |  | 4 |
| :---: | :---: | :---: |
| ENGL 1140 | Grammar: The Architecture of English |  |
| ENGL 1160 | Introduction to Rhetoric |  |
| ENGL 1410 | Introduction to Writing Studies |  |
| 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 4100 | Topics in Literary Criticism |  |
| ENGL 4400 | Opening the Archive |  |
| 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 1120 | Trouble in Utopia |
| ENGL 1130 | Animals, Objects, Humans |
| ENGL 1450 | Reading and Writing in the Digital Age |
| ENGL 1500 | British Literature to 1800 |
| ENGL 1502 | American Literature to 1865 |
| ENGL 1503 | American Literature 1865 to Present |
| ENGL 2150 | Literature and Digital Diversity |
| ENGL 2370 | The Modern Short Story |
| ENGL 2380 | The Modern Novel |
| ENGL 2400 | Modern Poetry |


| ENGL 2420 | Contemporary Poetry |
| :--- | :--- |
| ENGL 2430 | Contemporary Fiction |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2510 | Horror Fiction |
| ENGL 2520 | Science Fiction |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2620 | What Is Nature? (Abroad) |
| ENGL 2690 | Boston in Literature |
| ENGL 3427 | The Literature of Science |
| ENGL 3487 | Film and Text (Abroad) |
| ENGL 3582 | Children's Literature |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in |
| ENGL 4070 | Literature |
| Writing |  |

Complete one of the following:4
ENGL $2700 \quad$ Creative Writing
ENGL 2710 Style and Editing
ENGL 2730 Digital Writing
ENGL $2740 \quad$ Writing and Community Engagement
ENGL 2760 Writing in Global Contexts
ENGL $2770 \quad$ Writing to Heal
ENGL $2780 \quad$ Visual Writing: Writing Visuals
ENGL $2850 \quad$ 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 Topics in Writing
ENGL $3382 \quad$ Publishing in the 21 st Century
ENGL 3384 The Writer's Marketplace

## Capstone

ENGL $4710 \quad$ Capstone Seminar 4 or ENGL 4720

English Electives
Complete two additional ENGL electives. 8

## 4 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 $\quad$ Title | Hours |
| :--- | ---: |
| Complete one of the following: | 4 |

SOCL 4528 Computers and Society

SOCL 3485 Environment, Technology, and Society

| SOCL 1280 | The 21st-Century Workplace |
| :--- | :--- |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| PHIL 1145 | Technology and Human Values |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br>  |


| Computer Science Writing Requirement |  |  |
| :--- | :--- | ---: |
| Code <br> College Writing | Title | Hours |
| ENGW 1111 | First-Year Writing |  |
| or ENGW 1102 | First-Year Writing for Multilingual Writers |  |

Advanced Writing in the Disciplines

| Complete one course from the following: |  |
| :--- | :--- |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| ENGW 3309 | Advanced Writing in the Humanities |
| ENGW 3310 | Advanced Writing in Literature |
| ENGW 3315 | Interdisciplinary Advanced Writing in <br> the Disciplines |

## Required General Electives

```
Code Title
Hours
```

Complete eight general electives

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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.

## Program Requirement

132 total semester hours required

## Plan of Study

## Sample Patterns:

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

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 |  | Vacation |  |
| CS 1800 and CS 1802 | 5 | ENGL 1160 <br> or 1410 | 4 | Elective | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | Elective | 4 |  |  |  |  |


| ENGL 1400 |  | English literary period 1 | 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |
| Year 2 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CS 3000 | 4 | Strand elective 1 | 4 | $\begin{aligned} & \text { ENGW 3302, } \\ & 3309,3310 \text {, } \\ & \text { or } 3315 \end{aligned}$ |  | Co-op |  |
| CS 3200 | 4 | CS 1210 | 1 | Elective | 4 |  |  |
| English literary period 2 | 4 | IS 2000 <br> (or English <br> 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 |  |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours |  |  |
| Co-op |  | CS 4500 <br> (or English <br> Category or Elective) | 4 | Elective | 4 |  |  |
|  |  | $\begin{aligned} & \text { ENGL } 4710 \\ & \text { or } 4720 \end{aligned}$ | 4 | Elective | 4 |  |  |
|  |  | CS 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 | 5 Vacation | Vacation |  |



Year 2
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { CS } 3000 & 4 \text { CS } 3200 & 4 \text { Vacation } & \text { Co-op }\end{array}\right]$

Year 3
$\left.\begin{array}{llccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \begin{array}{l}\text { Strand } \\ \text { elective 1 }\end{array} & \begin{array}{l}\text { ENGW 3302, } \\ 3309,3310, \\ \text { or 3315 }\end{array} & 4 \text { Co-op }\end{array}\right]$

| Year 4 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Strand <br> elective 2 | 4 Elective | 4 Co-op |  |
|  | Computing <br> and social <br> issues | 4 Elective | 4 |  |
|  | Elective | 4 |  |  |
|  | Elective | 4 | 8 | 0 |
| 0 | 16 |  | 4 |  |

## Year 5



[^7]
## Computer Science and Environmental Science, BS

The computer science and environmental science combined major focuses on geological processes that greatly impact the earth, atmosphere, and water in oceans, lakes, and rivers. Understanding these processes requires acquisition and computational analysis of large amounts of data-underscoring the natural relationship between computer science and environmental 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Computer Science Courses
Code Title Hours

Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |

Computer Science Fundamental Courses
A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 | Discrete Structures |  |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 <br> and CS 2501 | and Lab for CS 2500 |
| CS 2510 Fundamentals of Computer Science 2 <br> and CS 2511 and Lab for CS 2510 5 |  |  |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3800 | Theory of Computation | 4 |
| CS 4500 | Software Development | 4 |
| and CS 4501 | and Recitation for CS 4500 |  |

Presentation Requirement
THTR $1170 \quad$ The Eloquent Presenter 1

## Computer Science 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, IS, or DS classes that are not
already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

| Environmental Science Courses |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Environmental Science Required Courses |  |  |
| ENVR 1200 and ENVR 1201 | Dynamic Earth and Lab for ENVR 1200 | 5 |
| ENVR 5210 or ENVR 5250 | Environmental Planning Geology and Land-Use Planning | 4 |
| ENVR 4900 <br> or ENVR 4997 | Earth and Environmental Science Capstone <br> Senior Thesis | 1 |
| Complete one of the following sequences: |  | 5 |
| ENVR 1202 and ENVR 1203 | History of Earth and Life and Interpreting Earth History |  |
| ENVR 2310 and ENVR 2311 | Earth Materials and Lab for ENVR 2310 |  |
| Environmental Science Integrative Courses |  |  |
| Complete at least two of the following: |  | 8-10 |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |  |
| ENVR 3418 | Geophysics |  |
| ENVR 4500 and ENVR 4501 | Applied Hydrogeology and Lab for ENVR 4500 |  |
| Environmental Science Electives |  |  |
| If you complete more than two environmental science integrative courses (above), they will count as environmental science electives. |  |  |
| Complete four of the following: |  | 16-20 |
| ENVR 1101 | Environmental Science |  |
| ENVR 2340 and ENVR 2341 | Earth Landforms and Processes and Lab for ENVR 2340 |  |
| ENVR 4504 | Environmental Pollution |  |
| ENVR 4563 | Advanced Spatial Analysis |  |
| ENVR 5190 | Soil Science |  |
| ENVR 5201 | Geologic Field Seminar |  |
| ENVR 5230 and ENVR 5231 | Structural Geology and Lab for ENVR 5230 |  |
| 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 |  |

## Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Calculus |  | 4 |
| MATH 1251 | Calculus and Differential Equations for <br> Biology 1 | 4 |
| or MATH 1341 | Calculus 1 for Science and Engineering |  |
| MATH 1252 | Calculus and Differential Equations for <br> Biology 2 | 4 |
| MATH MATH 1342 | Calculus 2 for Science and Engineering | 4 |

CHEM 1211 General Chemistry 1 5
and CHEM 1212 and Lab for CHEM 1211
and CHEM 1213 and Recitation for CHEM 1211
CHEM 1214
and CHEM 1215
and CHEM 1216

Computing and Social Issues
Complete one of the following: 4

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

## Computer Science English Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| 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 <br> Professions |
| :--- | :--- |
| ENGW 3315 | Interdisciplinary Advanced Writing in <br> the Disciplines |

## Required General Electives

Code Title Hours
Complete six general electives. 24

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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

138 total semester hours required

## Plan of Study

## Sample Patterns:

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

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 |  | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { ENVR } 1202 \\ & \text { or } 2310 \end{aligned}$ | 4 | Elective | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | ENVR 1203 or 2311 | 1 |  |  |  |  |
| ENVR 1200 <br> (ENVR <br> 1201 (Lab if offered)) | 4 | CS 3200 | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
|  | 19 |  | 18 |  | 8 |  | 0 |

## Year 2

$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \begin{array}{l}\text { ENVR 5210 } \\ \text { or 5250 }\end{array} & \begin{array}{c}\text { 4 CHEM 1214 } \\ \text { and } \\ \text { CHEM 1215 } \\ \text { and } \\ \text { CHEM 1216 }\end{array} & \begin{array}{c}5 \text { MATH 1252 } \\ \text { or 1342 }\end{array} & 4 \text { Co-op }\end{array}\right]$

Year 3
$\left.\begin{array}{llccc}\text { Fall } & \text { Hours } \begin{array}{l}\text { Spring } \\ \text { Co-op }\end{array} & \text { Hours Summer } 1 & \text { Hours Summer 2 } & \text { Hours } \\ & \begin{array}{l}\text { ENVR } \\ \text { elective }\end{array} & 4 \text { MATH 3081 } & 4 \text { Co-op }\end{array}\right]$

## Year 4



|  | ENVR <br> integrative | 4 |  |
| :--- | :--- | :---: | :--- |
|  | ENVR <br> elective | 4 |  |
| Computing <br> and social <br> issues | 4 | 8 |  |
| 0 | 17 |  |  |
| Total Hours: 138 |  |  |  |

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

| Year 1 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 |  | Hours

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CS 3500 | 4 CHEM 1214 <br> and <br> CHEM 1215 | 5 Vacation | 0 Co-op | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 MATH 1251 <br> or 1341 | 4 MATH 3081 | 4 Co-op | 0 |
|  | ENVR <br> integrative <br> (take lab if <br> offered) | 4 Elective | 4 |  |
| ENVR <br> elective | 4 |  |  |  |
| THTR 1170 | 1 | 8 | 0 |  |
|  | Elective | 4 | 8 | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 CS 3800 | 4 Elective | 4 Co-op | 0 |


|  |  | MATH 1252 or 1342 | 4 | Elective | 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ENGW 3302 | 4 |  |  |  |
|  |  | ENVR integrative | 4 |  |  |  |
|  | 0 |  | 16 |  | 8 | 0 |
| Year 5 |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |
| Co-op |  | $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 |  |  |  |
|  |  | ENVR 4900 <br> ( ENVR 4997 <br> (if short <br> of credit <br> hours)) | 1 |  |  |  |
|  |  | ENVR elective | 4 |  |  |  |
|  |  | ENVR elective | 4 |  |  |  |
|  |  | Computing and social issues | 4 |  |  |  |
|  | 0 |  | 17 |  |  |  |

Total Hours: 138

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- <br> op | 1 |
|  |  |  |
| Computer Science Fundamental Courses |  |  |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| 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 |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 | 4 |
| CS 4850 | Building Game Engines (Integrative course) | 4 |
| Computer Science Elective Course |  |  |
| CS 4150 | Game Artificial Intelligence (Integrative course) | 4 |
| or IS 4300 | Human Computer Interaction |  |

Presentation Requirement

| THTR 1170 | The Eloquent Presenter |
| :--- | :--- | :--- |

## Game Design Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Game Design |  | 4 |
| GAME 1110 | Games and Society | 4 |
| GAME 2010 | The Business of Games | 4 |
| GAME 2500 | Foundations of Game Design | 4 |
| GAME 3700 | Rapid Idea Prototyping for Games | 4 |
| GAME 3800 | Game Concept Development and |  |
|  | Production | 4 |
| GAME 4700 | Game Design Capstone 1 | 4 |
| GAME 4701 | Game Design Capstone 2 |  |

Game Design Elective
Complete one GAME course other than GAME 2150, GAME 4 3150 , or GAME 3250.
Computer Science/Game-Related Electives
Complete two courses from the following:
Any course in GAME subject area except GAME 2150,
GAME 3150, or GAME 3250
Any course in the ARTD, ARTE, ARTF, ARTG, ARTH, and
ARTS subject areas
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900
MATH 1342 Calculus 2 for Science and Engineering
ECON 2350 Statistics
or PSYC 2320 Statistics in Psychological Research


## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | :--- |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development |  |
| CS 1210 | Professional Development for CCIS Co- |  |
| op |  |  |$\quad 1$

## Presentation Requirement

THTR 1170 The Eloquent Presenter 1

## Computer Science Elective Courses

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, IS, or DS courses
that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## History Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| History Required Courses |  |  |
| HIST 1200 | Historical Research and Writing | 1 |
| HIST 1201 | First-Year Seminar | 4 |
| HIST 2301 | The History Seminar | 4 |
| HIST 2302 | Historical Writing | 1 |
| History Electives |  |  |
| Complete one | ctory course from the following: | 4 |
| AFAM 1140 | Introduction to African-American History |  |
| 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 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 |  |
| 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 1270 | Ancient Greece |  |
| HIST 1271 | Ancient Rome |  |
| HIST 1285 | Introduction to Russian Civilization |  |
| HIST 1389 | History of Espionage 1: Antiquity to World War II |  |
| HIST 2330 | Colonial and Revolutionary America |  |
| Complete three intermediate/advanced-level courses: |  | 12 |
| Select from any HIST course numbered 2303 or above. |  |  |
| 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 |  |
| Public history concentrators may also select from the following: |  |  |
| HIST 4903 | Fieldwork in History 1 |  |

## Cluster Requirement

Note: Four of the six courses chosen as history electives must create a history cluster of related courses. The history cluster is subject to department approval.

## Integrative Course Requirement

Code Title Hours

HIST 2211 The World Since 19454

## Supporting Courses

Code Title Hours
Research Methods

| Complete one course from the following: |  |
| :--- | :--- |
| ECON 2350 | Statistics |
| POLS 2400 | Quantitative Techniques |
| PSYC 2320 | Statistics in Psychological Research |
| SOCL 2320 | Statistical Analysis in Sociology |
| ENVR 3300 | Geographic Information Systems |
| ENVR 5260 | Geographical Information Systems |
| Computing and Social Issues |  |
| Complete one of the following: |  |


| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |


| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |  |
| :--- | :--- | :--- |
| PHIL 1145 | Technology and Human Values |  |
| SOCL 1280 | The 21st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |
| Computer Science Writing Requirement |  |  |
| Code |  |  |
| College Writing | Title | Hours |
| ENGW 1111 | First-Year Writing |  |
| or ENGW 1102 | First-Year Writing for Multilingual Writers |  |

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 eight general electives.
Hours

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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.

## Program Requirement

135 total semester hours required

## Plan of Study

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

$\left.\begin{array}{lccccc}\text { Year 2 } & & & & \\ \text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { CS 3000 } & 4 \text { CS 1210 } & 1 \text { Elective } & 4 \text { Co-op }\end{array}\right]$

Year 3
$\left.\begin{array}{llccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \begin{array}{ll}\text { CS elective } 2\end{array} & 4 \text { Elective } & 4 \text { Co-op }\end{array}\right]$

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :--- | ---: | ---: |
| Co-op | CS elective 3 | 4 Elective | 4 |
| History <br> capstone <br> seminar <br> or senior <br> project | 4 Elective | 4 |  |
| History <br> integrative <br> requirement <br> CS 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 3200 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | IS 2000 | 4 |  |  |  |  |
| ENGW 1111 |  | 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 | 4 |  |  |  |
| HIST 2301 | 4 |  |  |  |
| HIST 2302 | 1 |  |  | 0 |
| Research <br> methods <br> requirement | 4 | 0 | 0 |  |

Year 3


## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CS elective 2 | 4 Co-op | Co-op | Elective | 4 |
| Intermediate <br> history <br> elective 2 | 4 |  | Elective | 4 |
| Computing <br> and social <br> issues | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |

## Year 5

| Fall | HoursSpring | Hours |
| :--- | :---: | ---: |
| CS elective 3 | 4 CS elective 4 | 4 |
| Intermediate <br> history <br> elective 3 | 4 Advanced <br> history <br> elective | 4 |
| Elective | 4History <br> capstone <br> seminar <br> or senior <br> project <br> Elective | 4 |
|  | History <br> integrative <br> 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Computer Science Courses
Code Title Hours

Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 | Discrete Structures |  |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 <br> and CS 2501 | Fundamentals of Computer Science 1 <br> and Lab for CS 2500 | 5 |
| CS 2510 Fundamentals of Computer Science 2 <br> and CS 2511 and Lab for CS 2510 5 | 5 |  |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 4500 | Software Development | 4 |
| and CS 4501 | and Recitation for CS 4500 |  |

Presentation Requirement
THTR 1170 The Eloquent Presenter 1
Computer Science Elective Courses
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 CS, IS, or DS classes that are not 16
already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900
At least one of these must be from the following list:

| IS 4200 | Information Retrieval |
| :--- | :--- |
| IS 4300 | Human Computer Interaction |

## Journalism Major Requirements

Students transferring from outside institutions must complete a minimum of five 4-credit journalism courses at Northeastern, and these must include:



Total Hours: 135

## 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation | 0 |
| CS 1800 and CS 1802 | 5 | JRNL 1101 <br> and <br> JRNL 1102 | 5 | MATH 1341 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | CS 3200 | 4 |  |  |  |  |
| JRNL 1150 | 4 | HIST 1130 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 18 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CS 1210 | 1 Co-op | Co-op | Elective | 4 |
| JRNL 2201 | 4 |  | Elective | 4 |
| CS 3000 | 4 |  |  |  |
| Computer <br> science <br> elective | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 8 |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Computer | 4 Co-op | Co-op | Elective | 4 |
| science <br> elective |  |  |  |  |
| Computer <br> science <br> elective | 4 |  | Elective | 4 |


| JRNL 2301 | 4 |  |  |  |
| :--- | :---: | :---: | :--- | :--- |
| JRNL 2350 | 4 |  |  |  |
| THTR 1170 | 1 |  |  | 8 |
|  | 17 | 0 | 0 | 8 |

Year 4

| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 JRNL 4650 | 4 | Elective | 4 |  |  |
| JRNL 3610 | 4 Computing and social issues | 4 | Elective | 4 |  |  |
| JRNL 3550 | 4 Journalism elective | 4 |  |  |  |  |
| CS elective | 4 Journalism elective | 4 |  |  |  |  |
|  | 16 | 16 |  | 8 |  | 0 |

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

Code Title Hours

## Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | :--- |
| and CS 1802 | and Seminar for CS 1800 |  |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  | and Lab for CS 2500


| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| :---: | :---: | :---: |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| 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 |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 | 4 |
| Presentation Requirement |  |  |
| THTR 1170 | The Eloquent Presenter | 1 |
| Computer Science Elective Courses |  |  |
| With advisor approval, directed study, project study, and appropriate graduate-level courses may also be taken as upper-division electives. |  |  |
| Complete 4 credits of CS, IS, or DS courses that are not already required. Choose courses within the following range: |  |  |
| CS 2500 or higher, except CS 5010 |  |  |
| IS 2000 or higher, except IS 4900 |  |  |
| DS 2000 or higher, except DS 4900 |  |  |
| Linguistics Requirements |  |  |
| Code |  | Hours |
| Introductory Linguistics |  |  |
| LING 1150 | Introduction to Language and Linguistics | 4 |
| Intermediate/Advanced Linguistics |  |  |
| LING 2350 | Linguistic Analysis (Integrative course) | 4 |
| LING 3412 | Language and Culture | 4 |
| LING 3422 | Phonology | 4 |
| LING 3450 | Syntax (Integrative course) | 4 |
| Intermediate/Advanced Linguistics Elective |  |  |
| LING 3424 | Morphology | 4 |
| or 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 or PSYC 4658 | Seminar in Linguistics Seminar in Psycholinguistics | 4 |
| Linguistics Elective |  |  |
| Complete one of the following: |  | 4 |
| DEAF 2700 | ASL Linguistics |  |


| LING 3420 | Phonetics |
| :--- | :--- |
| 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 4654 | Seminar in Linguistics |
| PSYC 3466 | Cognition |
| PSYC 4520 | Language and the Brain |
| 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

Mathematics Requirement
MATH 1341 Calculus 1 for Science and Engineering 4
Computing and Social Issues
Complete one of the following:

| PHIL 1145 | Technology and Human Values |
| :--- | :--- |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |

## Computer Science Writing Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  |  |
| ENGW 1111 | First-Year Writing | 4 |

Advanced Writing in the Disciplines

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :--- | :--- |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Complete five general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 3500 | 4 CS 1210 | 1 Elective | 4 Co-op |  |
| MATH 1341 | 4 CS 3000 | 4 Elective | 4 |  |
| LING 3412 | 4 CS 3800 | 4 |  |  |
| PSYC 3464 | 4 LING 3422 | 4 |  |  |
|  |  |  |  |  |
|  | PSYC 2320 | 4 | 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 |  |
|  | LING 3450 | 4 |  |  |
|  | ENGW 3302 | 4 |  |  |
|  | THTR 1170 | 1 |  | 0 |

## Year 4

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| CS 4500 | 4 CS 4100 | 4 |


| LING <br> seminar | 4 CS elective | 4 |
| :--- | :--- | :--- |
| Computing <br> and social <br> issues | 4 LING elective | 4 |
| LING 3424 or <br> 3452 | 4 LING lab <br> (or directed <br> study) | 4 |
|  | 16 | 16 |

Total Hours: 134

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



Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CS 3500 | 4 CS 1210 | 1 Vacation | 0 Co-op | 0 |
| MATH 1341 | 4 CS 3000 | 4 |  |  |
| LING 3412 | 4 CS 3800 | 4 |  |  |
| PSYC 3464 | 4 LING 3422 | 4 |  |  |
|  | PSYC 2320 | 4 | 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 |  |
|  | LING 3450 | 4 |  |  |
|  | ENGW 3302 | 4 |  |  |
|  | THTR 1170 | 1 |  | 0 |


| Year 4 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Fall | 0 CS 4100 | 4 Elective | 4 Co-op | 0 |
| Co-op | CS elective | 4 Elective | 4 |  |
|  | LING lab <br> (or directed <br> study) | 4 |  |  |
|  | LING 3424 or <br> 3452 | 4 | 8 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | 0 CS 4500 | 4 |
|  | LING | 4 |
|  | seminar |  |


| Computing <br> and social <br> issues | 4 |  |
| :--- | ---: | ---: |
|  | LING elective | 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science | Overview |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |
| Computer Science |  | Fundamental Courses |

A grade of C - or higher is required in computer science
fundamental courses.

| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | Discrete Structures and Seminar for CS 1800 (Integrative course) | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | Logic and Computation and Lab for CS 2800 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3800 | Theory of Computation | 4 |
| CS 4300 | Computer Graphics (Integrative course) 1 | 4 |
| CS 4500 | Software Development | 4 |

and CS 4501 and Recitation for CS 4500
Presentation Requirement

College Writing
ENGW 1111 First-Year Writing 4
Advanced Writing in the Disciplines
ENGW 3302 Advanced Writing in the Technical 4
Professions
or ENGW 3315
Interdisciplinary Advanced Writing in the Disciplines

THTR 1170
The Eloquent Presenter

## Computer Science 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 eight credits of CS, IS or DS classes that are not 8 already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900
${ }^{1}$ CS 4300 satisfies the capstone requirement.

## Mathematics Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Calculus Courses | Calculus 1 for Science and Engineering |  |
| MATH 1341 | (a grade of C- or higher is required) | 4 |
| MATH 1342 | Calculus 2 for Science and Engineering <br> (a grade of C- or higher is required) | 4 |
| MATH 2321 | Calculus 3 for Science and Engineering | 4 |


| Mathematics Courses |  |  |
| :--- | :--- | ---: |
| MATH 2331 | Linear Algebra | 4 |
| MATH 2341 | Differential Equations and Linear | 4 |
|  | Algebra for Engineering |  |
| 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

## Supporting Course

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 4 |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| IA 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 21st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |

## Computer Science Writing Requirement

Code Title Hours4Complete one of the following4

## Required General Electives

Code Title
Complete seven general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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 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 CS elective | 4 |  |  |
| CS 3800 | 4 MATH 3527 | 4 |  |  |
|  | MATH <br> elective | 4 |  |  |
|  | 16 | 17 | 8 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Co-op | Math <br> elective | 4 Elective | 4 Co-op |  |
|  | CS 4300 | 4 Elective | 4 |  |
|  | ENGW 3302 | 4 |  |  |
|  | MATH 3175 | 4 |  |  |
|  | THTR 1170 | 1 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :--- | :---: | ---: |
| Co-op | CS 4500 <br> and CS 4501 | 4 Elective | 4 |
|  | CS elective | 4 Elective | 4 |
| Math <br> elective | 4 |  |  |
| Computing <br> and social <br> issues | 4 | 8 |  |
| 0 | 16 |  |  |

Total Hours: 135

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



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 | 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 |  |  |
|  | THTR 1170 | 1 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Co-op | $\begin{aligned} & 0 \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 Elective | 4 Co-op | 0 |
|  | MATH 3527 | 4 Elective | 4 |  |
|  | MATH elective | 4 |  |  |
|  | CS elective | 4 |  |  |
|  | 0 | 16 | 8 | 0 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | 0 CS elective | 4 |


| Computing <br> and social <br> issues | 4 |
| :--- | :--- | :--- |
| MATH <br> elective | 4 |
| MATH <br> 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 |
| :--- | :---: | :---: | :---: | ---: |
| CS 1800 <br> and CS 1802 | CS 2510 <br> and CS 2511 | 5 Vacation | 0 Vacation | 0 |
| CS 2500 <br> and CS 2501 | CS 2800 <br> and CS 2801 | 5 |  |  |
| MATH 1341 | 4 MATH 1342 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  |  |
| CS 1200 | 1 | 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 | 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 |  |  |  |
| THTR 1170 | 1 |  |  | 8 |
|  | 17 | 0 | 0 |  |


| 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 |  |  | 8 |
|  | 16 | 0 | 0 | 8 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| CS 4500 <br> and CS 4501 | 4 CS elective |  |$\quad 4$| MATH 3175 |
| :--- | | 4Computing <br> and social <br> issues |
| ---: |
| MATH <br> elective |
| 4MATH <br> elective |


| CS elective | 4 MATH <br> elective | 4 |
| :--- | :---: | :---: |
| 16 |  | 16 |
| Total Hours: 135 |  |  |
| 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 humancomputer 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- <br> $\quad$ op | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 |  |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 Fundamentals of Computer Science 2 <br> and CS 2511 and Lab for CS 2510 | 5 |  |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 4300 | Computer Graphics | 4 |
| CS 4500 | Software Development | 4 |
| and CS 4501 | and Recitation for CS 4500 |  |
| IS 4300 | Human Computer Interaction | 4 |

Presentation Requirement
THTR 1170 The Eloquent Presenter

## Computer Science Elective Courses

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, IS, or DS classes that are not already required. Choose courses within the following ranges: |  |
| :---: | :---: |
| CS 2500 or higher, except CS 5010 |  |
| IS 2000 or higher, except IS 4900 |  |
| DS 2000 or higher, except DS 4900 |  |
| Computer Science Writing Requirement |  |
| Code | Title |
| College Writing |  |
| ENGW 1111 | First-Year Writing |
| Advanced Writing in the Disciplines |  |
| ENGW 3302 | Advanced Writing in the Technical Professions |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the Disciplines |

## Media Arts Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Media Arts Courses |  |  |
| ARTF 1120 | Observational Drawing | 4 |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing (with optional ARTF 1123) | 4 |
| ARTF 1124 | 3D Fundamentals: Structure and Drawing (with optional ARTF 1125) | 4 |
| ARTD 2100 | Narrative Basics | 4 |
| ARTF 2220 | 4D Fundamentals: Sequence and Drawing (with optional ARTF 2221) | 4 |
| Media Arts Electives |  |  |
| Complete six of the following: |  | 24 |
| ARTF 2223 | 5D Fundamentals: Experience and Drawing (with optional ARTF 2224) |  |
| Basics |  |  |
| ARTD 2360 | Photo Basics (with optional ARTD 2361) |  |
| ARTD 2370 | Animation Basics (with optional ARTD 2371) |  |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |  |
| Photography |  |  |
| ARTD 3460 | Photography 1 |  |
| ARTD 4565 | Photography 2 |  |
| ARTD 4660 | Studio Photography |  |
| ARTD 4661 | Alternative Photographic 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 |  |
| ARTD 4577 | Digital Sculpture and Model Making |  |
| Video |  |  |
| ARTD 3480 | Video: Sound and Image |  |
| ARTD 5582 | Collaborative Video and Community Engagement |  |
| History |  |  |
| ARTH 2212 | Survey of the Still and Moving Image |  |

Media Arts Capstone Requirement

| ARTD 4530 | Media Arts Degree Project 1 | 4 |
| :--- | :--- | :--- |
| ARTD 4670 | Media Arts Degree Project 2 | 4 |

## Supporting Courses

Code Title Hours

Mathematics Requiremen
MATH $2331 \quad$ Linear Algebra 4

Computing and Social Issues
Complete one of the following: 4

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | 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 five 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


## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses

## Program Requirement

131 total semester hours required

| Sample Pattern, Five Years, Three Co-ops in Spring/Summer |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CS 1200 | 1 | $\text { CS } 2510$ <br> and CS 2511 | 5 | CS 3500 |  | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 3200 | 4 | Elective | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | ARTF 1120 | 4 |  |  |  |  |
| ARTF 1122 <br> (with optional ARTF 1123) |  | ARTF 1124 <br> (with optional ARTF 1125) | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |


| Year 2 |  |  |  | Hours Summer 2 |
| :--- | :---: | :---: | :---: | ---: | Hours


| Year 3 |  |  |  | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | :---: | ---: | ---: | Hours


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 4300 | 4 Co-op | 0 Co-op | 0 | 0 |
| Media arts <br> elective | 4 ENGW 3302 | 4 |  |  |
| Computer <br> science <br> elective | 4 |  |  | 0 |
| Media arts <br> elective | 4 | 4 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ARTD 4530 | 4 ARTD 4670 | 4 |
| $(*)$ | $(*)$ |  |


| CS 4500 <br> and CS 4501 | 4 Computing <br> and social <br> issues | 4 |
| :--- | :--- | :--- |
| Media arts <br> elective | 4 Elective |  |
| Media arts <br> elective | 4 Elective | 4 |
|  | 16 | 16 |
| Total Hours: 138 |  |  |
| *lndicates 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 | 4 | CS 3500 | 4 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 2511 | 1 | Elective | 4 |  |  |
| CS 2500 | 4 | CS 3200 | 4 |  |  |  |  |
| CS 2501 | 1 | ARTF 1120 | 4 |  |  |  |  |
| ARTF 1122 <br> (with optional ARTF 1123) | 4 | ARTF 1124 <br> (with optional ARTF 1125) | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |

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 |  | Elective | 4 |
| CS 3000 | 4 |  |  |  |
| ARTF 2220 <br> (with <br> optional <br> ARTF 2221) | 4 |  |  | 8 |
| ARTD 2100 | 4 | 0 | 0 | 8 |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| THTR 1170 | 1 | Co-op | 0 | Co-op | 0 | Elective | 4 |
| CS 4300 | 4 | ENGW 3302 | 4 |  |  | Media arts elective | 4 |
| Computer science elective | 4 |  |  |  |  |  |  |
| Media arts elective | 4 |  |  |  |  |  |  |
| Media arts elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 4 |  | 0 |  | 8 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | ---: |
| ARTD 4530 | 4 ARTD 4670 | 4 Elective | 4 |
| CS 4500 | 4 Computing | 4 Elective | 4 |
| and CS 4501 | and social <br> issues |  |  |


| Computer <br> science <br> elective | 4 Media arts <br> elective | 4 |  |
| :--- | :---: | :---: | :---: |
| Media arts <br> elective | 4 Media arts <br> elective | 4 | 8 |
|  | 16 | 16 |  |

Total Hours: 138
*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 digital sound 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

Code Title Hours

Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science
fundamental courses:

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | :---: |
| and CS 1802 | and Seminar for CS 1800 |  |
| CS 2500 <br> and CS 2501 | Fundamentals of Computer Science 1 <br> and Lab for CS 2500 | 5 |
| CS 2510 Fundamentals of Computer Science 2 <br> and CS 2511 and Lab for CS 2510 5 | 5 |  |


| Computer Science Required Courses |  |  |
| :--- | :--- | :--- |
| CS 3000 | Algorithms and Data | 4 |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 4500 | Software Development <br> and CS 4501 | 4 |


| IS 4300 | Human Computer Interaction <br> (Integrative) | 4 |
| :--- | :--- | :--- |

## Presentation Requirement

THTR $1170 \quad$ The Eloquent Presenter 1

Computer Science Elective Courses
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, IS, or DS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Music Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Music Theory and Composition |  |  |
| MUSC 1201 | Music Theory 1 | 4 |
| MUSC 1202 | Music Theory 2 | 4 |
| MUSC 3541 | Music Analysis Seminar | 4 |
| MUST 1301 | Introduction to Composition | 4 |
| Music in Context |  | 4 |
| MUSC 1001 | Music in Everyday Life | 4 |
| Contemporary |  | 4 |
| Complete one of the following: |  |  |


| MUSC 2101 | Black Popular Music |
| :--- | :--- |
| MUSC 2310 | Popular Music Since 1945 |
| MUSC 2315 | History of Electronic Music |
| MUSC 2320 | 40,000 Years of Music Technology |
| MUSC 3560 | Topics in Music since 1900 |
| MUSI 3401 | Hip Hop in the Music Industry |
| Music Technology |  |
| MUST 1220 | Introduction to Music Technology |
| MUST 2431 | Computer Music Fundamentals |
| MUSC 2350 | Acoustics and Psychoacoustics of |

## Music Industry

Complete one of the following: 4

| MUSI 1230 | Introduction to Music Industry |
| :--- | :--- |
| MUSI 2331 | Music Recording 2 |
| MUSI 3335 | Copyright Law for Musicians |

Music Technology Electives
Complete two of the following: 8
MUST $4520 \quad$ Interactive Music Programming
MUST $4610 \quad$ Composition for Electronic Instruments
MUST 4XXX Composing with Image and Sound
MUST 4XXXX Spatial Audio
MUST 3540 Special Topics in Music Technology
Music Technology Capstone
MUST 4611 Music Technology Capstone/Senior Recital

## Foundations of Psychology

| Code | Title |
| :--- | :--- |
| PSYC 1101 | Foundations of Psychology |


| Computing and Social Issues |  |
| :--- | :--- |
| Code Title | Hours |

Complete one of the following: 4

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

## Computer Science English Requirement

| Code <br> College Writing | Title | Hours |
| :--- | :--- | :--- |
| ENGW 1111 First-Year Writing |  |  |
| Advanced Writing in the Disciplines |  |  |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions <br> Interdisciplinary Advanced Writing in the <br> Disciplines |  |

## Required General Electives

## Code Title

## Hours

Complete five general electives.

## 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.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses

## Program Requirement

133 total semester hours required

## Plan of Study

Hours 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 |  | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | MUST 1220 <br> (*) | 4 | CS 3200 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | MUSC 1202 <br> (*) | 4 |  |  |  |  |
| MUSC 1201 <br> (*) | 4 | MUSC 2350 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 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 1301 <br> $(*)$ | 4 |  |  | 8 |
| Elective | 4 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MUSC 3541 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| MUST 2431 | 4 |  |  |  |
| Contemporary <br> music | 4 |  |  |  |
| requirement* | 4 |  |  | 0 |
| Computer <br> science <br> elective | 4 | 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 |  |  |  |
| THTR 1170 | 1 |  |  |  |
| Music technology elective* | 4 |  |  |  |
| Computer science elective | 4 |  |  |  |
|  | 17 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| CS 4500 | 4 MUST 4611 | 4 |
| and CS 4501 | $(*)$ |  |
| Music <br> technology <br> elective* | 4 Elective | 4 |


| Computing <br> and social <br> issues | 4 Music <br> industry <br> 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

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 1301 <br> (*) | 4 |  |  |  |
| Computer <br> science <br> elective | 4 |  |  |  |
|  | 17 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MUSC 3541 | 4 Co-op | 0 Co-op | 0 PSYC 1101 | 4 |
| MUST 2431 | 4 |  | Elective | 4 |
| Contemporary <br> music | 4 |  |  |  |
| requirement* | 4 |  |  |  |
| Music <br> technology <br> elective* | 4 |  |  |  |



| Computer <br> science <br> elective | 4 |  |  |
| :--- | :---: | :---: | :---: |
|  | 17 | 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

Computer Science Courses
Code Title Hours

Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science
fundamental courses:

| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\text { CS } 2510$ <br> and CS 2511 | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| Computer Science Required Courses |  |  |
| $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | Logic and Computation and Lab for CS 2800 | 5 |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3800 | Theory of Computation | 4 |




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

| Year 1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1801 \end{aligned}$ | 4 | $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | 5 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | PHIL 2325, POLS 2325, or PHIL 2330 | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| $1215$ |  |  |  |  |  |  |  |
|  | 18 |  | 18 |  | 0 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| CS 3000 | 4 CS elective 1 | 4 Vacation | Co-op |  |
| CS 3500 | 4 PHIL elective | 4 |  |  |
|  | 1 |  |  |  |
| PHIL 1145 | 4 PHIL elective | 4 |  |  |
|  | 2 | 4 |  | 0 |
| Elective | 4 Elective | 4 | 0 |  |
|  | CS 1210 | 1 | 17 |  |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | CS 3800 | 4 ENGW 3302, | 4 Co-op |  |
|  |  | $3309, ~ o r ~$ <br> 3315 |  |  |
|  |  | 4 Elective | 4 |  |
|  |  | 4 |  |  |
|  | PHIL 4515 |  |  |  |
|  | PHIL elective | 4 |  |  |


| Elective | 4 |  |  |
| :--- | :---: | :---: | :---: |
| THTR 1170 | 1 |  |  |
| 0 | 17 | 8 | 0 |


| Year 4 <br> Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | CS elective 2 | 4 Elective | 4 Co-op |  |
|  | PHIL <br> intermediate/ <br> advanced <br> elective | 4 Elective | 4 |  |
|  | Elective | 4 |  |  |
|  | Elective | 4 | 8 | 0 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | CS 4500 | 4 |
|  | PHIL | 4 |
|  | capstone |  |
|  | Elective | 4 |
|  | Elective | 4 |
| 0 | 16 |  |

Total Hours: 134

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\text { CS } 2510$ <br> and CS 2511 | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | Logic and Computation and Lab for CS 2800 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3800 | Theory of Computation | 4 |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 | 4 |
| Computer Science Senior Seminar |  |  |
| THTR 1170 | The Eloquent Presenter | 1 |
| Physics Courses |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| 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 |
| Intermediate Physics |  |  |
| PHYS 2303 | Modern Physics | 4 |
| PHYS 2305 | Thermodynamics and Statistical Mechanics | 4 |
| PHYS 2371 <br> and PHYS 2372 | Electronics and Lab for PHYS 2371 (Integrative course) | 4 |
| Advanced Physics |  |  |
| PHYS 3600 | Advanced Physics Laboratory | 4 |
| PHYS 3602 | Electricity and Magnetism | 4 |

## Capstone and Electives


already required. Choose courses within the following ranges:

$$
\text { CS } 2500 \text { or higher, except CS } 5010
$$

IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 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 |
| :--- | :--- | ---: |
| Calculus |  | 4 |
| MATH 1341 | Calculus 1 for Science and Engineering <br> (a grade of C- or higher is required) | 4 |
| MATH 1342 | Calculus 2 for Science and Engineering <br> (a grade of C- or higher is required) | 4 |

## Additional Mathematics Requirements

| MATH 2341 | Differential Equations and Linear <br> Algebra for Engineering | 4 |
| :--- | :--- | :--- |
| MATH 4525 | Applied Analysis | 4 |

Supporting Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: |  |  |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics | 4 |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |  |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |  |
| PHIL 1145 | Technology and Human Values |  |
| SOCL 1280 | The 21st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |

## Computer Science Writing Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  | 4 |
| ENGW 1111 | First-Year Writing | 4 |
| Advanced Writing in the Disciplines |  |  |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions | 4 |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |  |

## Required General Electives

| Code | Title | Hours |
| :--- | ---: | ---: |
| Complete six general electives. | 24 |  |

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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 <br> CS 2510 <br> and CS 2511 | 5 CS 3500 | 4 Vacation |  |
| CS 1800 <br> and CS 1802 | 5 MATH 1342 | 4 MATH 2321 | 4 |  |
| CS 2500 <br> and CS 2501 | 5 PHYS 1165 | 4 |  |  |
| MATH 1341 | 4 PHYS 1166 | 1 |  |  |
| PHYS 1161 | 4 ENGW 1111 | 4 |  |  |
| PHYS 1162 | 1 |  | 8 | 0 |


| Year 2 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| and CS 2801 |  |  |  | Elective | 4 | Co-op |  |
| MATH 2341 | 4 | PHYS 3602 | 4 | Elective | 4 |  |  |
| PHYS 2371 | 3 | Computing and social issues | 4 |  |  |  |  |
| PHYS 2372 | 1 | PHYS 2305 | 4 |  |  |  |  |
| PHYS 2303 | 4 | CS 1210 | 1 |  |  |  |  |
|  | 17 |  | 17 |  | 8 |  | 0 |

Year 3
$\left.\begin{array}{llccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \text { CS } 3800 & 4 \text { PHYS 3600 } & 4 \text { Co-op }\end{array}\right]$

| PHYS <br> elective | 4 |  |
| :--- | ---: | ---: | :--- |
| ENGW 3302 | 4 | 8 |
| 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | MATH 1342 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 | 4 CS 3000 | 4 Vacation | 0 Co-op | 0 |
| PHYS 2303 | 4 MATH 2321 | 4 |  |  |
| PHYS 2371 | 3 PHYS 2305 | 4 |  |  |
| PHYS 2372 | 1 MATH 2341 | 4 |  |  |
| CS 2800 <br> and CS 2801 | 5 CS 1210 | 1 |  | 0 |
|  | 17 | 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 |  |  |
|  | THTR 1170 | 1 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Co-op | $\begin{aligned} & 0 \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 Elective | 4 Co-op | 0 |
|  | MATH 4525 | 4 Elective | 4 |  |
|  | PHYS elective | 4 |  |  |
|  | Computing and social issues | 4 |  |  |
|  | 0 | 16 | 8 | 0 |

Year 5
Fall Hours Spring Hours
Co-op $\quad 0$ CS or PHYS 4

| PHYS | 4 |
| :--- | :--- |
| elective if |  |
| CS capstone |  |
| (CS elective |  |
| if PHYS |  |
| capstone) |  |$\quad$| Elective |
| :--- |
| Elective |
| 0 |

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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 | 4 | Co-op | 0 | Co-op |  | Vacation | 0 |
| PHYS 2303 | 4 |  |  |  |  |  |  |
| PHYS 2371 | 3 |  |  |  |  |  |  |
| PHYS 2372 | 1 |  |  |  |  |  |  |
| and CS 2801 |  |  |  |  |  |  |  |
| CS 1210 | 1 |  |  |  |  |  |  |
|  | 18 |  | 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 2305 | 4 |
| CS 3000 | 4 |  | PHYS 3600 | 4 |
| MATH 2341 | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
|  | 16 | 0 | 0 |  |

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 |  |  |  |
| THTR 1170 | 1 |  |  | 8 |
|  | 17 | 0 | 0 |  |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| CS 4500 | 4 CS or PHYS | 4 |
| and CS 4501 | capstone |  |


| MATH 4525 | 4 PHYS <br> elective if <br> CS capstone <br> (CS elective <br> if PHYS <br> capstone) | 4 |
| :--- | :--- | :--- |
| PHYS <br> elective | 4 Elective | 4 |
| Computing <br> and social <br> issues | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 137

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Computer Science Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Coop | 1 |
| Computer Science Fundamental Courses |  |  |
| A grade of C - or higher is required in computer science fundamental courses. |  |  |
| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 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


| POLS 1150 and POLS 1151 | 4 POLS 1160 and POLS 1161 | 4 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| POLS 1155 <br> and <br> POLS 1156 | 4 |  |  |  |
|  | 19 | 17 | 8 | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 3000 | 4 | CS 1210 | 1 | $\begin{aligned} & \text { ENGW } 3302 \text {, } \\ & 3308,3311 \text {, } \\ & \text { or } 3315 \end{aligned}$ | 4 | Co-op |  |
| POLS 2399 | 4 | CS elective 1 | 4 | Elective | 4 |  |  |
| POLS theory elective | 4 | POLS 2400 | 4 |  |  |  |  |
| Elective | 4 | POLS <br> elective 1 | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 16 |  | 17 |  | 8 |  | 0 |

Year 3


## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :--- | :---: | :---: |
| Co-op | CS elective 3 | 4 |  |
|  | POLS 4701 | 4 Elective | 4 |
|  | POLS <br> elective 4 | 4 Elective | 4 |
|  | POLS <br> integrative <br> requirement | 4 |  |
|  | 0 | 16 | 8 |

Total Hours: 134

## Five Year, Three Co-ops in Summer 2/Fall

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | IS 2000 | 4 |  |  |  |  |
| CS 1200 | 1 | ENGW 1111 | 4 |  |  |  |  |
| POLS 1150 <br> and POLS 1151 | 4 | POLS 1160 and POLS 1161 | 4 |  |  |  |  |


| POLS 1155 <br> and <br> POLS 1156 | 4 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 19 | 17 | 0 | 0 |

Year 2
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { CS } 3000 & 4 \text { CS } 1210 & 1 & \text { Vacation } & \text { Co-op }\end{array}\right]$

Year 3
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \text { CS elective 1 } & \begin{array}{l}4 \\ \text { ENGW 3302, } \\ 3308,3311, \\ \text { or 3315 }\end{array} & 4 \text { Co-op }\end{array}\right]$

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | CS elective 2 | 4 Elective | 4 Co-op |  |
|  | POLS <br> elective 3 | 4 Elective | 4 |  |
|  | POLS <br> integrative <br> requirement | 4 |  |  |
|  | Elective | 4 | 8 | 0 |

Year 5
Fall Hours Spring Hours
Co-op CS elective 3 4

|  | POLS 4701 | 4 |
| :--- | ---: | ---: |
| POLS |  |  |
| elective 4 |  |  | $4^{\text {Elective }}$| 4 |
| :--- |
| 0 |

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer ScienceOverview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science

## fundamental courses:

| CS 1800 | Discrete Structures |  |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 | 5 |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |


| Computer Science Required Courses |  |  |
| :--- | :--- | :--- |
| CS 3000 | Algorithms and Data | 4 |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| IS 2000 | Principles of Information Science | 4 |

Computer Science Writing-Intensive Requirement
Complete one of the following:

| CS 4500 | Software Development |
| :--- | :--- |
| IS 3500 | Information System Design and <br> Development |
| DS 4200 | Information Presentation and <br> Visualization (Take DS 4100 either as <br> a prerequisite of or concurrently with <br> DS 4200.) |

Presentation Requirement
THTR $1170 \quad$ The Eloquent Presenter 1

## Computer Science Elective Courses

With advisor 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, IS, or DS classes
that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Sociology Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Sociology Required Courses |  |  |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | 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 |

## Integrative Course Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | 4 |  |
| SOCL 1280 | The 21st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br>  | Technopolitics |


| Computer Science Writing Requirement  <br> Code Title | Hours |  |
| :--- | :--- | ---: |
| 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 <br> Professions |
| :--- | :--- |
| ENGW 3308 | Advanced Writing in the Social <br> Sciences |
| ENGW 3315 | Interdisciplinary Advanced Writing in <br> the Disciplines |

## Required General Electives

Code Title Hours
Complete eight general electives. 32

## Major GPA Requirements

Minimum 2.000 GPA required in all CS and IS courses, and a 2.000 average GPA requirement across all sociology classes is required.

## 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.

## 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3200 | 4 | Vacation |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | IS 2000 | 4 | CS 3500 | 4 |  |  |
| CS 1200 | 1 | SOCL 2320 | 4 |  |  |  |  |
| ENGW 1111 | 4 | ANTH 1101 | 4 |  |  |  |  |
| SOCL 1101 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |

Year 2
\(\left.$$
\begin{array}{lcccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\
\text { CS 3000 } & 4 \text { Co-op } & \text { Co-op } & \begin{array}{l}\text { ENGW 3302, } \\
3308, ~ o r ~\end{array}
$$ \& 4 <br>

\& \& \& 3315\end{array}\right]\)|  |
| :--- |
| CS 1210 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CS elective 1 | 4 Co-op | Co-op | Elective | 4 |
| SOCL 2300 | 4 |  | Elective | 4 |
| Sociology <br> introductory <br> elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| THTR 1170 | 1 |  |  | 8 |
|  | 17 | 0 | 0 |  |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | ---: |
| CS elective 2 | 4 SOCL 4600 | 4 Elective | 4 |
| Sociology <br> intermediate | 4 CS writing- <br> intensive <br> requirement | 4 Elective | 4 |
| elective | 4 Sociology |  |  |
| Elective | advanced <br> elective | 4 |  |



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



Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| CS 3000 | 4 Co-op | Co-op | Vacation |  |
| CS 3500 | 4 |  |  |  |
| CS 1210 | 1 |  |  |  |
| SOCL 2321 | 4 |  |  | 0 |
| ANTH 2305 | 4 | 0 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| CS 3200 | 4 Co-op | Co-op | ENGW 3302, <br> 3308, or <br> 3315 | 4 |  |
|  |  |  | Elective | 4 |  |
| Elective | 4 |  |  |  |  |
| SOCL 2300 | 4 |  |  |  |  |
| Sociology <br> introductory <br> elective | 4 |  |  | 8 |  |
| THTR 1170 | 1 |  |  |  |  |
|  | 17 | 0 | 0 |  |  |

Year 4

| Fall CS elective 1 | Hours Spring <br> 4 Co-op | Hours | Summer 1 <br> Co-op | Hours | Summer 2 <br> Elective | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sociology intermediate elective | 4 |  |  |  | Elective | 4 |
| Elective | 4 |  |  |  |  |  |
| Integrative requirement | 4 |  |  |  |  |  |
|  | 16 | 0 |  | 0 |  | 8 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| CS elective 2 | 4 SOCL 4600 | 4 |
| Sociology <br> advanced | 4 CS writing- <br> intensive <br> elective | 4 |
| Elequirement |  |  |


| Elective | 4 Elective | 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Cybersecurity Major Requirements

| Code | Title | Hours |
| :--- | :--- | :---: |
| Computer Science | Overview |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science
fundamental courses.

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | :---: |
| and CS 1802 | and Seminar for CS 1800 |  |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| CS 3700 | Networks and Distributed Systems | 4 |

Cybersecurity Required Courses

| CS 2550 | Foundations of Cybersecurity | 4 |
| :---: | :--- | :---: |
| CS 3740 | Systems Security | 4 |
| CS 4170 | The Law, Ethics, and Policy of Data and | 4 |
| or IA 5240 | Digital Technologies |  |
| CS 4740 | Cyberlaw: Privacy, Ethics, and Digital Rights |  |
|  | Network Security | 4 |

## Cybersecurity Electives

If courses require prerequisites, those should be taken using general electives.

Complete one course from the following:

| CS 2800 | Logic and Computation |
| :---: | :---: |
| CS 4240 | Large-Scale Parallel Data Processing |
| CS 4400 | Programming Languages |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 |
| CS 4710 | Mobile and Wireless Systems |
| CS 5770 | Software Vulnerabilities and Security |
| CS 6710 | Wireless Network |
| DS 4300 | Large-Scale Information Storage and Retrieval |
| DS 4400 | Machine Learning and Data Mining 1 |
| IA 5200 | Security Risk Management and Assessment |
| IA 5210 and IA 5211 | Information System Forensics and Lab for IA 5210 |
| IS 4300 | Human Computer Interaction |
| EECE 2160 | Embedded Design: Enabling Robotics |
| 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 2200 | Criminology |
| CRIM 3030 | Global Criminology |
| CRIM 3400 | 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 |
| 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 |

## Presentation Requirement

THTR 1170 The Eloquent Presenter

## Business Requirements

Code Title Hours

| Accounting |  | 4 |
| :--- | :--- | ---: |
| ACCT 1201 | Financial Accounting and Reporting | 4 |
| ACCT 2301 | Managerial Accounting |  |
| Finance |  | 4 |
| FINA 2201 | Financial Management | 4 |

## Organizational Behavior

| ORGB 3201 | Organizational Behavior | 4 |
| :--- | :--- | :---: |
| Marketing | Introduction to Marketing | 4 |
| MKTG 2201 | Business Statistics | 4 |
| Statistics |  | 4 |
| MGSC 2301 | Strategy in Action | 4 |
| STRT 4501 <br> or STRT 4516 | External Case Competition Challenge |  |

## Business Concentration

Complete a four-course business concentration from the following list. Requirements for the concentrations are listed below. (p. 241)

- Accounting (p. 241)
- Entrepreneurship and Innovation (p. 241)
- Finance (p. 241)
- Management (p. 242)
- Marketing (p. 242)
- Supply Chain Management (p. 242)


## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Integrative Requirement

| Code | Title |
| :--- | :--- |
| MISM 2301 | Management Information Systems |

Hours

## Supporting Courses

Code Title Hours
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:

| ECON 1115 | Principles of Macroeconomics |
| :--- | :--- |
| ECON 1116 | Principles of Microeconomics |

## Writing Requirements

| Code <br> College Writing | Title | Hours |
| :--- | :--- | ---: |
| ENGW 1111 <br> or ENGW 1102 | First-Year Writing | 4 |

Advanced Writing in the Disciplines
Complete one of the following:

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :--- | :--- |
| ENGW 3308 | Advanced Writing in the Social <br> Sciences |
| ENGW 3315 | Interdisciplinary Advanced Writing in <br> the Disciplines |

## Required General Electives

Code Title Hours
Complete four general electives.

4 Cybersecurity GPA Requirement
Minimum 2.000 GPA required in all computer and information science 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 coop.

## Program Requirement

133 semester hours required

## Business Concentrations

CONCENTRATION IN ACCOUNTING
Code Title Hours

## Required Courses

| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| :--- | :--- | :--- |
| ACCT 4501 | Financial Reporting and Analysis 2 |  |
| Electives |  | 4 |
| Complete two of the following: | 8 |  |
| ACCT 3403 | Accounting Information Systems |  |
| ACCT 3416 | Strategic Cost Analysis for Decision <br> Making |  |
| ACCT 4412 | Auditing and Other Assurance Services |  |
| ACCT 4414 | Income Tax Determination and |  |

CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION Code Title

Hours
Note: The following courses do not count toward this concentration:

| ENTR 1201 | The Entrepreneurial Universe |
| :--- | :--- |
| ENTR 3308 | Business Economic History of South <br> Africa |
| ENTR 3318 | Field Research in Sustainable Energy in <br> Iceland |
| ENTR 3328 | Management Consulting Abroad |
| ENTR 3338 | Development Practice and Global <br> ENTR 3346 |
| ENTR 4510 | Innonship in India |


| Capstone Course |  |  |
| :---: | :---: | :---: |
| Complete one of the following: |  | 4 |
| ENTR 4501 | Business Planning for Technology Ventures |  |
| ENTR 4503 | Business Planning for Small and Medium Enterprises |  |
| ENTR 4505 | Entrepreneurial Growth Strategy for Technology Ventures |  |
| ENTR 4506 | Advanced Studies in Social Enterprise |  |
| Electives |  |  |
| Note: Only one non-ENTR course may be used as an elective. |  |  |
| Complete two of the following: |  | 8 |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |  |
| ENTR 3212 | Innovation for Social Change |  |
| ENTR 3217 | Global Family Business Leadership |  |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |  |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |  |
| ENTR 3306 | Global Entrepreneurship |  |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |  |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |  |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |  |
| ENTR 3520 | Impact Investing and Social Finance |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |
| MGMT 3302 | Negotiating in Business |  |
| CONCENTRATION IN FINANCE |  |  |
| Code | Title | Hours |
| Required Course |  |  |
| FINA 3301 or FINA 3303 | Corporate Finance Investments | 4 |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| $\begin{aligned} & \text { ENTR } 3520 \\ & \text { or FINA } 2720 \end{aligned}$ | Impact Investing and Social Finance Sustainability in the Business Environment |  |
| 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 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 4983 | Special Topics in Finance |
| FINA 4602 | Turnaround Management |
| FINA 4604 | Fixed-Income Securities |
| FINA 4608 | Advanced Financial Strategy |
| FINA 4610 | Entrepreneurial Finance, Innovation |

## CONCENTRATION IN MANAGEMENT

Code Title Hours

## Required Course

MGMT $4501 \quad$ Skills for Managerial Success 4

## Electives

Note: Only one non-MGMT course may be used as an elective.
Complete three of the following: 12

| MGMT 3302 | Negotiating in Business |
| :--- | :--- |
| MGMT 3315 | Managing Organizational Change and <br> Disruption |
| MGMT 3330 | Developing Leaders for Global <br> Sustainability |
| MGMT 3340 | Managing Healthcare Organizations: <br> Critical Challenges and New <br> Approaches |
| MGMT 3350 | Managing a Diverse Workforce |
| MGMT 3360 | Law and the Legal Process |
| MGMT 3420 | Managing Human Capital |
| MGMT 3510 | Managing Global Teams Virtually and <br> Locally |
| MGMT 3530 | Project Management |
| MGMT 4310 | The Management Practices of Great <br> Organizations |
| MGMT 4410 | Human Resources and Workforce <br> Analytics |
| ENTR 2215 | Understanding Family Enterprise |
| ENTR 2414 | Social Responsibility of Business in an <br> Age of Inequality |
| ENTR 4225 | Corporate Entrepreneurship through <br> Global Growth, Acquisitions, and <br> Alliances |


| CONCENTRATION IN MARKETING <br> Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| MKTG 3401 | Marketing Research |  |
| MKTG 3301 <br> or MKTG 4506 <br> Electives | Marketing Management <br> Consumer Behavior | 4 |
| Complete two of the following: | 4 |  |
| MKTG 2301 | Marketing and Society |  |


| CONCENTRATION IN SUPPLY CHAIN MANAGEMENT <br> Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation <br>  <br>  <br>  <br>  Management |  |


| Elective |  |
| :--- | :--- |
| Complete one of the following: |  |
| SCHM 3308 | Supply Chain Analytics |
| SCHM 3320 | Demand Planning and Forecasting |
| SCHM 3330 | Sustainability and Supply Chain <br> Management |
| SCHM 4401 | Advanced Problems in Supply Chain <br> Management |

## Plan of Study

Sample Patterns:

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



| 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 | CS 3740 | 4 | Elective 3 | 4 |  |  |
| ACCT 2301 | 4 | Business concentra 1 | 4 |  |  |  |  |
| MGSC 2301 | 4 | Elective 2 | 4 |  |  |  |  |
|  |  | CS 1210 | 1 |  |  |  |  |
| 16 |  | 17 |  |  | 8 |  | 0 |

Year 3
$\left.\begin{array}{llrc} & \text { Hours } \begin{array}{ll}\text { Spring } & \text { Hours Summer } 1\end{array} & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \begin{array}{ll}\text { CS 4170 or } \\ \text { IA 5240 }\end{array} & 4 \text { FINA 2201 } & 4 \text { Co-op }\end{array}\right]$

Year 4

| Fall | HoursSpring | Hours Summer 1 | Hours |
| :--- | :--- | :---: | ---: |
| Co-op | ENGW 3302 | 4 STRT 4501 | 4 |
|  | MISM 2301 | 4 Elective 4 | 4 |
|  | Business <br> concentration <br> 4 | 4 |  |
|  | Cybersecurity <br> elective | 4 | 8 |
| 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 | CS 2510 <br> and CS 2511 | 5 Vacation | Vacation |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| CS 3500 | 4 CS 1210 | 1 Vacation | Co-op |  |
| CS 3650 | 4 CS 3700 | 4 |  |  |
| ACCT 2301 | 4 CS 3000 | 4 |  |  |
| MGSC 2301 | 4 Business <br> concentration | 4 |  |  |
|  | 1 |  |  |  |



| 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 |  |
| Computer Science Senior Seminar | 1 |  |
| THTR 1170 | The Eloquent Presenter |  |

## Supporting Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| MATH 1341 | Calculus 1 for Science and Engineering |  |
| Computer Science Writing Requirement |  |  |
| Code | Title | Hours |
| College Writing |  |  |
| Complete one of | ollowing: | 4 |
| ENGW 1111 | First-Year Writing |  |
| ENGW 1102 | First-Year Writing for Multilingual Writers |  |
| Advanced Writing in the Disciplines |  |  |
| Complete one of | ollowing: | 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 |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| CRIM 1100 | Introduction to Criminal Justice | 4 |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| CRIM 3600 | Criminal Justice Research Methods | 4 |
| CRIM 3700 | Criminal Justice Statistics | 4 |
| Thematic Elective |  |  |
| 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 |  |
| Survey Elective |  |  |
| Complete one of the following: |  | 4 |
| CRIM 3010 | Criminal Violence |  |
| CRIM 3030 | Global Criminology |  |
| CRIM 3040 | Psychology of Crime |  |
| CRIM 3100 | Criminal Law |  |
| CRIM 3200 | Youth Crime and Justice |  |
| CRIM 3300 | Punishment in the Age of Mass Incarceration |  |

## System-Wide Elective

Complete one of the following:

| CRIM 4010 | Gender, Crime, and Justice |
| :--- | :--- |
| CRIM 4020 | Race, Crime, and Justice |

Criminal Justice Elective
Complete one CRIM course. 4
Criminal Justice Capstone
Complete one of the following: 4

| CRIM 4949 | Senior Capstone Seminar |
| :--- | :--- |
| CS 4930 | Cybersecurity Capstone |
| CS 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 |
| :--- | :--- | ---: |
| Cybersecurity Integrative Course |  |  |
| CS 4170 | The Law, Ethics, and Policy of Data and | 4 |
| or IA 5240 | Digital Technologies |  |
|  | Cyberlaw: Privacy, Ethics, and Digital Rights |  |

Criminal Justice Integrative Course
Complete one of the following: 4

| CRIM 4040 | Crime Prevention |
| :--- | :--- |
| CRIM 4630 | Political Crime and Terrorism |
| CRIM 3050 | Organized Crime |
| CRIM 3400 | Corporate Security: Securing the Private <br> Sector |
| CRIM 3500 | Policing a Democratic Society |
| CRIM 5900 | Topics in Criminal Justice and <br> Criminology |

## Required General Electives

Code Title Hours

Complete six general electives. 24

## Cybersecurity GPA Requirement

Minimum 2.000 GPA required in all computer and information science courses.

## Program Requirement

133 total semester hours required.

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).
Cybersecurity Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Computer Science Overview |  |  |
| $\begin{aligned} & \text { CS } 1200 \\ & \text { or ECON } 1000 \end{aligned}$ | Leadership Skill Development Economics at Northeastern | 1 |
| CS 1210 | Professional Development for CCIS Coop | 1 |
| Discrete Structures |  |  |
| A grade of C- or higher is required: |  |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | Discrete Structures and Seminar for CS 1800 | 5 |
| Computer Science Fundamentals Courses |  |  |
| A grade of C - or higher is required in each course: |  |  |
| CS 2500 <br> and CS 2501 | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| CS 2510 <br> 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 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| CS 3700 | Networks and Distributed Systems | 4 |
| Cybersecurity Required Courses |  |  |
| CS 2550 | Foundations of Cybersecurity | 4 |
| CS 3740 | Systems Security | 4 |
| CS 4740 | Network Security | 4 |
| CS 4170 | The Law, Ethics, and Policy of Data and Digital Technologies | 4 |
| or IA 5240 | Cyberlaw: Privacy, Ethics, and Digital Rights |  |

## Cybersecurity Elective

Complete one of the following:

| CS 2800 | Logic and Computation |
| ---: | :--- |
| CS 4710 | Mobile and Wireless Systems |
| or CS 6710 | Wireless Network |
| CS 5770 | Software Vulnerabilities and Security |
| CS 4770 | Cryptography |
| CS 4400 | Programming Languages |
| CS 4500 | Software Development |
| CS 4240 | Large-Scale Parallel Data Processing |
| DS 4300 | Large-Scale Information Storage and <br> Retrieval |
| DS 4400 | Machine Learning and Data Mining 1 |
| IA 5200 | Security Risk Management and <br>  |


| IA 5210 |  |
| :--- | :--- |
| and IA 5211 | Information System Forensics <br> and Lab for IA 5210 |
| IS 4300 | Human Computer Interaction |
| EECE 2160 | Embedded Design: Enabling Robotics |
| EECE 2322 | Fundamentals of Digital Design and <br> Computer Organization <br> and Lab for EECE 2322 |
| EECE 3324 | Computer Architecture and <br> Organization |
| EECE 4534 | Microprocessor-Based Design <br> and Lab for EECE 4534 |
| MATH 3527 4535 | Number Theory 1 |
| MATH 4575 | Introduction to Cryptography |
| COMM 2551 | Free Speech in Cyberspace |
| CRIM 2200 | Criminology |
| CRIM 3030 | Global Criminology |
| CRIM 4040 | Crime Prevention |
| CRIM 3400 | Corporate Security: Securing the Private <br> Sector |
| 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 |

## Computer Science Senior Seminar

THTR $1170 \quad$ The Eloquent Presenter 1

## Supporting Course

| Code | Title | Hours |
| :---: | :--- | :--- |
| MATH 1341 | Calculus 1 for Science and Engineering |  |
| or MATH 1231 | Calculus for Business and Economics |  |

## 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 <br> Professions |
| :--- | :--- |
| ENGW 3308 | Advanced Writing in the Social <br> Sciences |
| ENGW 3311 | Advanced Writing for Prelaw |
| ENGW 3315 | Interdisciplinary Advanced Writing in <br> the Disciplines |

## Economics Requirements

## Code Title

## Required Courses

A cumulative 2.0 GPA is required.

| 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 |
| Electives |  | 16 |
| Complete four ECON electives with at least two numbered at |  |  |
| ECON 3000 or above. |  |  | ECON 3000 or above.

ECON 1001 to ECON 2999
ECON 3000 to ECON 5999
Integrative Requirement

| Code | Title Hours |
| :--- | :--- | :--- |
| Capstone |  |

Complete one of the following: 4

| ECON 4692 | Senior Economics Seminar |
| :--- | :--- |
| CS 4930 | Cybersecurity Capstone |
| CS 4940 | Research Projects on National Security |

Integrative Requirement
ECON 2560 Applied Econometrics 4

Required General Electives
Code Title Hours

Complete six general electives.

## Cybersecurity GPA Requirement

Minimum 2.000 GPA required in all computer and information science courses.

## Program Requirement

133 total semester hours required.

## 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 course work 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Data Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Discrete Structures

A grade of C - or higher is required:
CS 1800 Discrete Structures 5
and CS 1802 and Seminar for CS 1800
Computer Science Foundations
A grade of C - or higher is required:

| CS 2500 | Fundamentals of Computer Science 1 |  |
| :--- | :--- | ---: |
| and CS 2501 | and Lab for CS 2500 | 5 |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |

Data Science Foundations

| DS 4100 | Data Collection, Integration, and <br> Analysis | 4 |
| :--- | :--- | :---: |
| DS 4200 | Information Presentation and <br> Visualization | 4 |
| DS 4300 | Large-Scale Information Storage and <br> Retrieval | 4 |
| DS 4400 | Machine Learning and Data Mining 1 | 4 |
| Data Science Upper-Division Elective | 4 |  |

requirements:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900
Supporting Courses for Data Science
THTR $1170 \quad$ The Eloquent Presenter 1
Statistics Foundations
Complete one of the following: 4
ENVR 2500 Biostatistics
and ENVR 2501 and Lab for ENVR 2500
MATH $3081 \quad$ Probability and Statistics
Computer Science Writing Requirement
Code Title Hours
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 4 Professions
or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

## Biochemistry Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 |
| Chemistry Foundations |  |  |
| CHEM 1211 <br> and CHEM 1212 | General Chemistry 1 <br> and Lab for CHEM 1211 | 5 |
| CHEM 1214 and CHEM 1215 | General Chemistry 2 and Lab for CHEM 1214 | 5 |
| CHEM 2311 and CHEM 2312 | Organic Chemistry 1 <br> and Lab for CHEM 2311 | 5 |
| $\begin{aligned} & \text { CHEM } 2313 \\ & \text { and CHEM } 2314 \end{aligned}$ | 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 <br> and BIOL 3612 | Biochemistry and Lab for BIOL 3611 | 5 |
| CHEM 2331 and CHEM 2332 or CHEM 4620 | Bioanalytical Chemistry <br> and Lab for CHEM 2331 <br> Introduction to Protein Chemistry | 4-5 |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative Courses |  |  |
| BINF 6308 | Bioinformatics Computational Methods | 4 |
|  | 1 | 4 |
| BINF 6309 | Bioinformatics Computational Methods | 4 |
|  | 2 | 4 |
| Complete one of the following: |  |  |
| BIOL 4701 | Biology Capstone |  |
| CHEM 4750 | Senior Research |  |
| DS 4900 | Data Science Senior Project |  |

## Required General Electives

Code Title
Complete three general electives.
Hours

## Major GPA Requirement

Minimum 2.000 GPA required in all CS, IS, and DS courses

## Program Requirement

136 total semester hours required

## 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, communitybased 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Data Science Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Coop | 1 |
| Discrete Structures |  |  |
| A grade of C - or higher is required: |  |  |
| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |

Computer Science Foundation
A minimum grade of C- must be earned in CS 2500 and
CS 2510.
CS $2500 \quad$ Fundamentals of Computer Science $1 \quad 5$
and CS 2501 and Lab for CS 2500
CS $2510 \quad$ Fundamentals of Computer Science 2
and CS 2511 and Lab for CS 2510
CS $3500 \quad$ Object-Oriented Design 4
CS 3200 Database Design 4

Information Science Requirement
IS $4300 \quad$ Human Computer Interaction 4

Data Science Foundations

| DS 4100 | Data Collection, Integration, and <br> Analysis | 4 |
| :--- | :--- | ---: |
| DS 4200 | Information Presentation and <br> Visualization | 4 |
| DS 4300 | Large-Scale Information Storage and <br> Retrieval | 4 |
| DS 4400 | Machine Learning and Data Mining 1 | 4 |

## Supporting Courses for Data Science

| Code | Title | Hours |
| :--- | :--- | ---: |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| $\quad$ or MATH 1241 | Calculus 1 |  |
| Data Science Writing Requirement |  |  |
| Code <br> College Writing | Title | Hours |
| ENGW 1111 | First-Year Writing |  |
| or ENGW 1102 | First-Year Writing for Multilingual Writers |  |

## Advanced Writing in the Disciplines

| ENGW 3302 | Advanced Writing in the Technical <br> Professions <br> or ENGW 3315 <br> Interdisciplinary Advanced Writing in the <br> Disciplines | 4 |
| :--- | :--- | ---: |
| Health Science Requirements |  |  |
| Code |  |  |
| Public Health Core | Title | Hours |
| PHTH 1260 | The American Healthcare System <br> PHTH 2300 | Communication Skills for the Health <br> Professions |
| PHTH 2350 | Community and Public Health <br> PHTH 2515 | Healthcare Policy and Administration <br> Global Perspectives on Discrimination <br> and Health |
| PHTH 4120 | Health Education and Program <br> Planning | 4 |
| PHTH 4540 | 4 |  |

Supporting Courses for Health Science

| Code | Title | Hours |
| :---: | :---: | :---: |
| Research Methods |  |  |
| Complete one of the following: |  | 4 |
| HLTH 5450 | Healthcare Research |  |
| IS 4800 | Empirical Research Methods |  |
| Statistics |  |  |
| 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 |  |
| Philosophy |  |  |
| Complete one o | following: | 4 |


| PHIL 1145 | Technology and Human Values |  |
| :--- | :--- | :--- |
| PHIL 1165 | Moral and Social Problems in <br> Healthcare |  |
| Life Sciences Core |  | 5 |
| BIOL 1111 <br> and BIOL 1112 | General Biology 1 <br> and Lab for BIOL 1111 |  |
| BIOL 1113 <br> and BIOL 1114 | General Biology 2 <br> and Lab for BIOL 1113 | 5 |
| CHEM 1211 <br> and CHEM 1212 <br> CHEM 1214 <br> and CHEM 1215 | General Chemistry 1 <br> and Lab for CHEM 1211 <br> General Chemistry 2 <br> and Lab for CHEM 1214 | 5 |
| PSYC 1101 | Foundations of Psychology | 5 |

Integrative Requirement
Code Title
Hours
Upper-Division Elective
Complete one from the following:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900
PHTH 4000 or higher

HSCI 4000 or higher

## Integrative Course

DS 4900 Data Science Senior Project 4

## Required General Electives Code Title Hours <br> Complete three general electives. 12

## Data Science GPA Requirement

Minimum 2.000 GPA required in all computer, data, and information science courses.

## Program Requirement

136 semester hours required

## Information Science and Business Administration, BS

The information science and business combined major provides a technical degree with a strong grounding in business. Information science combines concepts and skills from computer science, behavioral and social science, and system design into an integrated, people-centered curriculum. Students will complete most of the requirements of a business major, including macroeconomics and microeconomics, while studying how information is acquired, organized, communicated, and used by both people and computers.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 | Discrete Structures |  |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 and Lab for CS 2500 |  |  |
| CS 2510 Fundamentals of Computer Science 2 <br> and CS 2511 and Lab for CS 2510 5 |  |  |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3200 | Database Design | 4 |


| CS 3500 | Object-Oriented Design | 4 |
| :---: | :---: | :---: |
| Information Science Required Courses |  |  |
| IS 2000 | Principles of Information Science | 4 |
| IS 3500 | Information System Design and Development | 4 |
| IS 4800 | Empirical Research Methods | 4 |
| Presentation Requirement |  |  |
| THTR 1170 | The Eloquent Presenter | 1 |
| Business Courses |  |  |
| Code | Title |  |
| Required Business Courses |  |  |
| 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 |
| Choose one of the following: ${ }^{1}$ |  | 4 |
| STRT 4501 | Strategy in Action |  |
| STRT 4516 | External Case Competition Challenge |  |
| ${ }^{1}$ Strategy in Action (STRT 4501), and External Case Competition Challenge (STRT 4516) satisfy the capstone requirement. |  |  |

## Business Concentration

Complete a four-course business concentration from the following list. Requirements for the concentrations are listed below (p. 250).

- Accounting (p. 250)
- Entrepreneurship and Innovation (p. 250)
- Finance (p. 251)
- Management (p. 251)
- Marketing (p. 251)
- Supply Chain Management (p. 252)


## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| MISM 2301 | Management Information Systems | 4 |
| MISM 3404 | Data Communications | 4 |

## Supporting Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Mathematics |  |  |
| MATH 1341 or MATH 1231 | Calculus 1 for Science and Engineering Calculus for Business and Economics | 4 |
| Economics |  |  |
| ECON 1115 | Principles of Macroeconomics | 4 |
| ECON 1116 | Principles of Microeconomics | 4 |
| Computing and Social Issues |  |  |
| Complete one of th | following: | 4 |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| IA 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 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

## Computer Science Writing Requirement

Code Title Hours

## College Writing

ENGW 1111 First-Year Writing 4

Advanced Writing in the Disciplines
ENGW 3302 Advanced Writing in the Technical 4
or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

## Required General Electives

| Code | Title |
| :--- | ---: | Hours

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Information Science GPA Requirement

Minimum 2.000 GPA required in all CS 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 coop.

## Program Requirement

133 total semester hours required

| Business Concentrations |  |  |
| :--- | :--- | ---: |
| CONCENTRATION IN ACCOUNTING |  |  |
| Code | Title | Hours |
| Required Courses |  | 4 |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 |  |
| Electives |  | 8 |


| ACCT 3403 | Accounting Information Systems |
| :--- | :--- |
| ACCT 3416 | Strategic Cost Analysis for Decision <br> Making |
| ACCT 4412 | Auditing and Other Assurance Services |

ACCT $4414 \begin{aligned} & \text { Income Tax Determination and } \\ & \text { Planning }\end{aligned}$
CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION
Code Title Hours

| Note: The following courses do not count toward this <br> concentration: |
| :--- |
| ENTR 1201 | | The Entrepreneurial Universe |
| :--- |
| ENTR 3308 | | Business Economic History of South |
| :--- |
| Africa |


| ENTR 2301 | Innovation! |
| :---: | :--- |
| or ENTR 2303 | Entrepreneurial Marketing and Selling |
| Capstone Course |  |

Complete one of the following: 4

| ENTR 4501 | Business Planning for Technology <br> Ventures |
| :--- | :--- |
| ENTR 4503 | Business Planning for Small and <br> Medium Enterprises |
| ENTR 4505 | Entrepreneurial Growth Strategy for <br> Technology Ventures |
| ENTR 4506 | Advanced Studies in Social Enterprise |
| Electives |  |

Note: Only one non-ENTR course may be used as an elective.

| Complete two | llowing: | 8 |
| :---: | :---: | :---: |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |  |
| ENTR 3212 | Innovation for Social Change |  |
| ENTR 3217 | Global Family Business Leadership |  |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |  |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |  |
| ENTR 3306 | Global Entrepreneurship |  |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |  |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |  |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |  |
| ENTR 3520 | Impact Investing and Social Finance |  |


| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| :---: | :---: | :---: |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |
| MGMT 3302 | Negotiating in Business |  |
| CONCENTRATION IN <br> Code <br> Required Course | INANCE Title | Hours |
| FINA 3301 or FINA 3303 | Corporate Finance Investments | 4 |
| Electives |  |  |
| Complete three of th | following: | 12 |
| ENTR 3520 or FINA 2720 | Impact Investing and Social Finance Sustainability in the Business Environment |  |
| 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 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 4983 | Special Topics in Finance |  |
| FINA 4602 | Turnaround Management |  |
| FINA 4604 | Fixed-Income Securities |  |
| FINA 4608 | Advanced Financial Strategy |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |
| CONCENTRATION IN MANAGEMENT |  |  |
| Code | Title | Hours |
| Required Course |  |  |
| MGMT 4501 | Skills for Managerial Success | 4 |
| Electives |  |  |
| Note: Only one non-MGMT course may be used as an elective. |  |  |
| Complete three of th | following: | 12 |
| MGMT 3302 | Negotiating in Business |  |
| MGMT 3315 | Managing Organizational Change and Disruption |  |
| MGMT 3330 | Developing Leaders for Global Sustainability |  |



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

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CS 1800 <br> and CS 1802 | CS 2510 <br> and CS 2511 | 5 Vacation | 0 Vacation | 0 |
| CS 2500 <br> and CS 2501 | 5 CS 3200 | 4 |  |  |
| CS 1200 | 1 ECON 1116 | 4 |  |  |
| ECON 1115 | 4 Elective | 4 |  |  |
| ENGW 1111 | 4 |  | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| IS 2000 | 4 IS 3500 | 4 Vacation | 0 Co-op | 0 |
| CS 3500 | 4 ACCT 2301 | 4 |  |  |
| ACCT 1201 | 4 Elective | 4 |  |  |
| MGSC 2301 | 4 CS 3000 | 4 |  |  |
|  | CS 1210 | 1 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 | MISM 3404 | 4 ORGB 3201 | 4 Co-op |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 IS 4800 | 4 Elective | 4 Co-op | 0 |
|  | MISM 2301 | 4 Elective | 4 |  |
|  | Business <br> concentration <br> 1 | 4 |  |  |
|  | Business <br> concentration <br> 2 | 4 |  |  |

Year 5


[^8]
## Information Science and Cognitive Psychology, BS

The information science and cognitive psychology combined major provides a foundation in general psychology, psychology of language, cognition, and statistics. These are supplemented by an experimental laboratory course, seminar course, and psychology electives. Information science combines concepts and skills from computer science, behavioral and social science, and system design to create an integrated, peoplecentered curriculum. 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Computer and Information Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |
| Computer Science Fundamental Courses |  |  |
| A grade of C- or higher is required in computer science |  |  |
| fundamental courses. |  |  |


| CS 1800 <br> and CS 1802 | Discrete Structures <br> and Seminar for CS 1800 | 5 |
| :--- | :--- | :--- |
| CS 2500 | Fundamentals of Computer Science 1 |  |
| and CS 2501 | and Lab for CS 2500 | 5 |
| CS 2510 | Fundamentals of Computer Science 2 |  |
| and CS 2511 | and Lab for CS 2510 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design <br> CS 4100 | Artificial Intelligence (integrative <br> course) |

## Information Science Required Courses

| IS 2000 | Principles of Information Science | 4 |
| :--- | :--- | :---: |
| IS 3500 | Information System Design and <br> Development | 4 |
| IS 4300 | Human Computer Interaction <br> (integrative course) | 4 |
| IS 4800 | Empirical Research Methods | 4 |
| IS 4900 | Information Science Senior Project <br> (integrative course) | 5 |

## 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | MATH 1341 | 4 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | PSYC 3466 | 4 | Elective | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | Elective | 4 |  |  |  |  |
| PSYC 1101 | 4 | Elective | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |



## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 IS 4800 | 4 Elective | 4 Co-op | 0 |
|  | Computing <br> and social <br> issues | 4 Elective | 4 |  |
|  | PSYC <br> elective | 4 |  |  |
|  | PSYC <br> seminar | 4 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 CS 4100 | 4 ENGW 3302 | 4 Co-op | 0 |
|  | IS 4900 | 5 Elective | 4 |  |
| PSYC lab <br> elective | 4 |  |  |  |
| PSYC <br> elective | 4 |  | 0 |  |
| 0 | 17 | 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 <br> CS 2510 <br> and CS 2511 | 5 Vacation | 0 Vacation | 0 |

$\left.\begin{array}{lcccr}\text { ENGW 1111 } & 4 & & \\ \hline & 19 & 17 & 0 & 0 \\ \text { Year 2 } & & & & \\ \text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { IS 2000 } & 4 \text { IS 4300 } & 4 & \text { Vacation } & \text { Vacation }\end{array}\right) 0$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | IS 3500 | 4 Elective | 4 Co-op |  |
|  | ENGW 3302 | 4 Elective | 4 |  |
|  | PSYC | 4 |  |  |
|  | elective |  |  | 0 |
|  | Elective | 4 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Co-op | CS 4100 | 4 Elective | 4 Co-op |  |
|  | IS 4800 | 4 Elective | 4 |  |
|  | PSYC <br> elective <br> PSYC lab <br> elective | 4 |  |  |
| 0 | 16 | 8 | 0 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :--- | ---: |
| Co-op | IS 4900 | 5 |
|  | PSYC <br> seminar | 4 |
|  | Computing <br> and social <br> issues | 4 |
|  | Elective | 4 |
| 0 | 17 |  |

Total Hours: 134

## Information Science and Environmental Science, BS

The information science and environmental science combined major provides a foundational study of geological processes before focusing on environmental planning, environmental ethics, and sustainability. Since it examines the relationship between human decisions and actions to the environment, the program aligns with the orientation of information science, which utilizes an integrated, people-centered curriculum combining concepts and skills from computer science, behavioral and social science, and system 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Information Science Courses

| Code | Title | Hours |
| :--- | :--- | :--- |
| Computer Science | Overview |  |
| CS 1200 | Leadership Skill Development |  |
| CS 1210 | Professional Development for CCIS Co- <br> op |  |
|  |  |  |

Computer Science Fundamental Courses
A grade of C - or higher is required in computer science

## fundamental courses:

| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 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 | Object-Oriented Design | 4 |
| Information Science Required Courses |  |  |
| IS 2000 | Principles of Information Science | 4 |
| IS 3500 | Information System Design and Development | 4 |
| IS 4800 | Empirical Research Methods (Integrative course) | 4 |

## Computer Science 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, IS, or DS classes that are not
already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Environmental Science Courses

Code Title Hours

| Required Environmental Science Courses |  |  |
| :--- | :--- | ---: |
| ENVR 1101 | Environmental Science | 4 |
| ENVR 1200 | Dynamic Earth | 5 |
| and ENVR 1201 | and Lab for ENVR 1200 |  |
| ENVR 5210 | Environmental Planning | 4 |
| or ENVR 5250 | Geology and Land-Use Planning |  |
| ENVR 4900 | Earth and Environmental Science <br> Capstone | 1 |
| or ENVR 4997 | Senior Thesis |  |


| Sustainability Focus Courses |  |  |
| :---: | :---: | :---: |
| PHIL 1180 | Environmental Ethics | 4 |
| Complete two of the following: |  | 8 |
| ECON 3423 | Environmental Economics |  |
| ENVR 4515 | Sustainable Development |  |
| ENVR 5202 | Environmental Science Field Seminar Abroad |  |
| POLS 2390 | Science, Technology, and Public Policy |  |
| POLS 2395 | Environmental Politics and Policy |  |
| SOCL 1246 | Environment and Society |  |
| Environmental Science Electives |  |  |
| Complete three of the following: |  | 12 |
| ENVR 1202 and ENVR 1203 | History of Earth and Life and Interpreting Earth History |  |
| ENVR 3418 | Geophysics |  |
| ENVR 4500 and ENVR 4501 | Applied Hydrogeology and Lab for ENVR 4500 |  |
| ENVR 4504 | Environmental Pollution |  |
| ENVR 5201 | Geologic Field Seminar |  |
| ENVR 5242 <br> and ENVR 5243 | Ancient Marine Life and Lab for ENVR 5242 |  |

## Integrative Course

Code Title Hours
ENVR $3300 \quad$ Geographic Information Systems 5
and ENVR 3301 and Lab for ENVR 3300

## Supporting Courses

Code Title Hours

Mathematics and Statistics

| ECON 2350 | Statistics | 4 |
| :--- | :--- | ---: |
| MATH 1251 | Calculus and Differential Equations for | 4 |
| or MATH 1341 | Biology 1 | Calculus 1 for Science and Engineering |
| Chemistry |  | 5 |
| Complete one of the following: |  |  |


| CHEM 1211 | General Chemistry 1 |
| :--- | :--- |
| and CHEM 1212 | and Lab for CHEM 1211 |
| and CHEM 1213 | and Recitation for CHEM 1211 |
| CHEM 1151 General Chemistry for Engineers <br> and CHEM 1152 and Lab for CHEM 1151 <br> and CHEM 1153 and Recitation for CHEM 1151. |  |

## Economics

ECON 1116 Principles of Microeconomics 4

Computing and Social Issues
Complete one of the following: 4

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values <br> SOCL 1280 The 21st-Century Workplace |


| SOCL 3485 | Environment, Technology, and Society |
| :--- | :--- |
| SOCL 4528 | Computers and Society |


| Computer Science Writing Requirement <br> Code <br> College Writing | Title | Hours |
| :--- | :--- | ---: |
| ENGW 1111 | First-Year Writing | 4 |
| Advanced Writing in the Disciplines |  |  |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions <br> or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

## Code Title

Hours
Complete five general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Exploring Creative Expression and Innovation
- Understanding Societies and Institutions
- Analyzing and Using Data
- 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.

## Program Requirement

136 total semester hours required

## Plan of Study

## Sample Patterns:

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



| Year 2 |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 3500 | 4 IS 3500 | 4 Elective | 4 Co-op |  |


| PHIL 1180 | 4 CS elective | 4 CS 3000 | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| ENVR elective | 4 ENVR 3300 and ENVR 3301 | 5 |  |  |
| CHEM 1211 <br> and <br> CHEM 1212 <br> and <br> CHEM 1213 | 5 ECON 2350 | 4 |  |  |
|  | CS 1210 | 1 |  |  |
|  | 17 | 18 | 8 | 0 |

Year 3

| Fall <br> Co-op | Hours | Spring <br> IS 4800 | Hours 4 | Summer 1 <br> Elective | Hours | Summer 2 <br> Co-op | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ENVR elective | 4 | MATH 1251 or 1341 | 4 |  |  |
|  |  | ENVR sustainability | 4 |  |  |  |  |
|  |  | ENVR 5210 or 5250 | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 4


Total Hours: 136

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

Year 1

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 Vacation | 0 Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 3200 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | ENVR 1200 <br> (ENVR <br> 1201 (Lab if offered)) | 4 |  |  |
| ENGW 1111 | 4 | ECON 1116 | 4 |  |  |
| ENVR 1101 | 4 |  |  |  |  |
|  | 19 |  | 17 | 0 | 0 |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| IS 2000 | 4 ENVR 3300 | 5 Elective | 4 Co-op | 0 |
|  |  |  |  |  |
|  |  | and |  |  |


| CS 3500 | 4 CS 3000 | 4 Elective | 4 |
| :--- | :--- | :--- | :--- |
| CHEM 1211 <br> and <br> CHEM 1212 <br> and <br> CHEM 1213 | 5 ECON 2350 | 4 |  |
| ENVR <br> elective | 4 PHIL 1180 | 4 |  |


| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | IS 3500 | 4 | Elective | 4 | Co-op | 0 |
|  |  | CS elective | 4 | ENGW 3302 | 4 |  |  |
|  |  | MATH 1251 or 1341 | 4 |  |  |  |  |
|  |  | ENVR <br> elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | 0 IS 4800 | 4 Vacation | 0 Co-op |  |
|  | ENVR <br> elective | 4 |  |  |
|  | ENVR <br> sustainability | 4 | 0 | 0 |

Year 5


Total Hours: 136

## Information Science and Journalism, BS

The information science and journalism combined major is similar to the computer science and journalism degree, with a greater focus on the journalism profession's information science needs. Information science combines concepts and skills from computer science, behavioral and social science, and system design into an integrated, people-centered curriculum. Both degrees provide a strong foundation in the principles, practices, and responsibilities of journalism as well as 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Information Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer ScienceOverview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 <br> and CS 2511 | Fundamentals of Computer Science 2 <br> and Lab for CS 2510 | 5 |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |

Information Science Required Courses

| IS 2000 | Principles of Information Science | 4 |
| :--- | :--- | :--- |
| IS 3500 | Information System Design and <br> Development | 4 |
| IS 4800 | Empirical Research Methods | 4 |
| IS 4900 | Information Science Senior Project | 5 |

Information Science Elective (Integrative)
Complete one of the following: 4

| IS 4200 | Information Retrieval |
| :--- | :--- |
| IS 4300 | Human Computer Interaction |

## 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 |
| 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 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 JR | courses. | 8 |
| Journalism-Related Requirement |  |  |
| HIST 1130 | Introduction to the History of the United States | 4 |

## Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Statistics |  |  |
| ECON 2350 | Statistics | 4 |
| Calculus |  |  |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| Psychology |  |  |
| PSYC 1101 | Foundations of Psychology | 4 |

Computing and Social Issues
Complete one of the following:

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

## Writing Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  |  |
| ENGW 1111 | First-Year Writing | 4 |
| Advanced Writing in the Disciplines |  |  |
| JRNL 2301 | Visual Storytelling in Journalism | 4 |

## Required General Electives

## Code Title

Complete five general electives.

## 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

| Hours | Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| ---: | :--- | :---: | :---: | :---: | ---: |
| 20 | Co-op | 0 JRNL 3550 | 4 Elective | 4 Co-op | 0 |
|  |  | IS $4800(*)$ | 4 Elective | 4 |  |
|  | Journalism <br> elective <br> Information <br> science <br> elective | 4 | 4 |  |  |

- 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.


## Major GPA Requirement

Minimum 2.000 GPA required in all CS, IS, and JRNL courses

## Program Requirement

134 total semester hours required

## Plan of Study

## 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 3200 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | JRNL 1101 <br> and <br> JRNL 1102 | 5 |  |  |  |  |
| JRNL 1150 | 4 | HIST 1130 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 18 |  | 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 |
| IS 2000 $\left(^{*}\right)$ | 4 IS $3500\left(^{*}\right)$ | 4 |  |  |
| JRNL 2201 | 4 Elective | 4 |  |  |
| PSYC 1101 | 4 JRNL 2301 | 4 |  |  |
|  |  |  |  |  |
|  | CS 3000 | 4 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | ---: |
| Co-op | 0 JRNL 3610 | 4 Elective | 4 Co-op | 0 |
|  | JRNL 2350 | 4 Elective | 4 |  |
| MATH 1341 | 4 |  |  |  |
|  | ECON 2350 | 4 |  | 0 |

## Year 4

$\begin{array}{llll}0 & 16 & 8 & 0\end{array}$

Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: |
| Co-op | 0 IS $4900\left({ }^{*}\right)$ | 5 |
|  | JRNL 4650 | 4 |
|  | Journalism <br> elective | 4 |
|  | Computing <br> and social <br> issues | 4 |
| 0 | 17 |  |

Total Hours: 135
*Indicates course must be taken in the term listed.

## 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 3200 | 4 | MATH 1341 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ |  | JRNL 1101 <br> and <br> JRNL 1102 | 5 |  |  |  |  |
| JRNL 1150 | 4 | ECON 2350 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 18 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| IS 2000 $\left(^{*}\right)$ | 4 CS 1210 | 1 HIST 1130 | 4 Co-op | 0 |
| Elective | 4 IS 3500 $\left(^{*}\right)$ | 4 Elective | 4 |  |
| JRNL 2201 | 4 CS 3000 | 4 |  |  |
| PSYC 1101 | 4 JRNL 2350 | 4 |  |  |
|  | JRNL 2301 | 4 |  | 0 |
|  | 16 | 17 | 8 |  |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | IS 4800 |  | Journalism elective | 4 | Co-op | 0 |
|  |  | Information science elective | 4 | Elective | 4 |  |  |
|  |  | JRNL 3610 | 4 |  |  |  |  |
|  |  | Journalism elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | ---: | ---: |
| Co-op | 0 | IS 4900 | 5 Elective |
|  | JRNL 4650 | 4 Elective | 4 |
|  | JRNL 3550 | 4 |  |
|  |  |  |  |


| Computing <br> and social <br> issues | 4 |  |
| :--- | :--- | :--- |
| 0 | 17 | 8 |

Total Hours: 135
*Indicates course must be taken in the term listed.

## Accelerated Bachelor/Graduate Degree 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).

## Programs

- Computer Science, BSCS/Computer Science, MSCS
- Computer Science and Mathematics, BS/Mathematics, MS
- Cybersecurity, BS/Information Assurance and Cybersecurity, MSIA


## College of Engineering

Website (http://www.coe.neu.edu)
Nadine Aubry, PhD, Dean
Thomas C. Sheahan, ScD, Senior Associate Dean for Academic Affairs
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

Undergraduate Academic Advising Office
220 Snell Engineering Center
617.373.2154

COEAdvising@northeastern.edu
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. Five-year and four-year options are available to complete the Bachelor of Science degree program. The five-year option includes eighteen months of cooperative education work experience, and the four-year option includes twelve months of cooperative education experience. Customized four-year programs without co-op experience are also available.

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. Active student chapters of many national professional engineering organizations and honor societies are supported by the college as an enriching addition to academic studies and co-op experience.

The Bachelor of Science programs in chemical engineering, civil engineering, computer engineering, electrical engineering, industrial engineering, and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET (http://www.abet.org).

## Bachelor of Science/Master of Science Degree Programs

The Departments of Bioengineering, Chemical Engineering, Civil and Environmental Engineering, Electrical and Computer Engineering, and Mechanical and Industrial Engineering offer programs leading to both the bachelor's and master's degrees in five years. All students begin with the common first-year engineering program. Upon successful completion of required course work (four or five semesters in the undergraduate curriculum depending upon departmental requirements), students may petition to enter a BS/MS program. Degree candidates must maintain a 3.200 cumulative grade-point average (GPA), carry extra courses, and reduce the number of cooperative education semesters to complete the course requirements.

## 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. Only general electives taken outside the College of Engineering may be taken on a pass/fail grading basis.

## 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


## 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)
- 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 less than a 1.800 GPA 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 COURSE WORK

Students may elect to take courses on a pass/fail basis in accordance with university policy. A maximum of two courses may be taken pass/fail toward fulfillment of degree requirements in the College of Engineering.

## 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 course work 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.

## Interdisciplinary Minors

- Entrepreneurial Engineering, Minor (p. 369)
- Materials Science and Engineering, Minor (p. 370)
- Sustainable Energy Systems, Minor (p. 371)


## Entrepreneurial Engineering, Minor

The entrepreneurial engineering minor is designed for the technologyminded 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 |
| :---: | :---: | :---: |
| For Undergraduates in the College of Engineering |  |  |
| 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 |
| For Undergraduates outside the College of Engineering |  |  |
| 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: |  | 4 |
| Venture Creation |  |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling |  |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |  |
| ENTR 3306 | Global Entrepreneurship |  |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |  |
| ENTR 4501 | Business Planning for Technology Ventures |  |
| ENTR 4510 | Management Consulting Abroad |  |
| Design |  |  |
| ARTE 3901 | Art and Design Special Topics |  |
| ARTF 1122 and ARTF 1123 | 2D Fundamentals: Surface and Drawing and 2D Tools |  |


| ARTF 1124 |  |
| :--- | :--- |
| and ARTF 1125 | 3D Fundamentals: Structure and <br> Drawing <br> and 3D Tools |
| ARTG 1250 | Design Process Context and Systems |
| ARTG 3462 | Experience Design 1 |
| ARTG 3463 | Experience Design 2 |
| Manufacturing | Introduction to Industrial Engineering |
| IE 2310 | Engineering Economy <br> IE 45istics and Supply Chain <br> Management |
| IE 4525 | Manufacturing Systems and <br> Techniques |
| IE 4530 4600 | Systems Design for Sustainability |

## GPA Requirement

2.000 GPA required in the minor

## 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

## Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete three courses from the following disciplines: |  | 11-13 |
| Bioengineering |  |  |
| BIOE 5820 | Biomaterials |  |
| Chemical Engineering |  |  |
| CHME 5631 | Biomaterials Principles and Applications |  |
| CHME 5632 | Advanced Topics in Biomaterials |  |
| CHME 5699 | Special Topics in Chemical Engineering (Introduction to Polymer Science) |  |
| Civil and Environmental Engineering |  |  |
| CIVE 2260 <br> and CIVE 2261 | Civil Engineering Materials and Materials and Measurements Lab |  |
| 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 6285 | Structure, Properties, and Processing of Polymeric Materials (With Instructor Permission) |  |
| Mechanical and Industrial Engineering |  |  |
| ME 4640 | Mechanical Behavior and Processing of Materials |  |
| ME 5374 | Special Topics in Mechanical <br> Engineering (Advances in Materials - <br> Fundamentals, Properties, Applications) |  |
| ME 5600 | Materials Processing and Process Selection |  |
| 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 |  |

## Capstone Design

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following major capstone requirements: ${ }^{1}$ |  | 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
${ }^{1}$ Students may complete 4 semester hours of elective course work 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 (i.e., those that are specifically listed by course number and name on the curriculum sheet) 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.

- Civil engineering 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.


## Core Energy Science, Technology Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete two of the following: | 8 |  |
| CHME 2320 | Chemical Engineering Thermodynamics |  |
| or ME 2380 | Thermodynamics |  |
| GE 3300 | Energy Systems: Science, Technology, <br> and Sustainability |  |
| ENGR 5670 | Sustainable Energy. Materials, <br> Conversion, Storage, and Usage |  |
| ENSY 5000 | Fundamentals of Energy System <br> Integration |  |

Environmental/Economics/Policy Courses

| Code <br> Complete one of | Title <br> the following: | Hours |
| :--- | :--- | ---: |
| CIVE 5275 | Life Cycle Assessment of Materials, <br> Products, and Infrastructure |  |
| ECON 3423 | Environmental Economics |  |
| ECON 3425 | Energy Economics |  |
| ENVR 4515 | Sustainable Development |  |
| FINA 2720 | Sustainability in the Business <br> Environment |  |
| ME 5645 | Environmental Issues in Manufacturing <br> and Product Use |  |
| SOCL 3485 | Environment, Technology, and Society |  |

## 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 5686 | Electrical Machines |  |
| EECE 5688 | Analysis of Unbalanced Power Grids |  |
| GE 3300 | Energy Systems: Science, Technology, and Sustainability |  |
| ENGR 5670 | Sustainable Energy: Materials, Conversion, Storage, and Usage |  |
| ENSY 5000 | Fundamentals of Energy System Integration |  |
| IE 4512 | Engineering Economy (IE students may not count this course toward a sustainable energy minor if used to fulfill a major requirement.) |  |
| IE 4600 | Systems Design for Sustainability |  |
| 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

## Bioengineering

Website (http://www.bioe.neu.edu)
Lee Makowski, PhD
Professor and Chair
206 Interdisciplinary Science and Engineering Complex
617.373.7805

## Michael Jaeggli, PhD

Assistant Teaching Professor and Undergraduate Program Director 206 Interdisciplinary Science and Engineering Complex
617.373.6241

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 four concentrations (bioimaging and signal processing, cell and tissue engineering, biomechanics, or biomedical devices), 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.

## Program Objectives

Program educational objectives describe what graduates are expected to attain within a few years after graduation. The program educational objectives of the BS in bioengineering program are to prepare graduates to:

- Be technically proficient, innovative, and rigorous problem solvers who excel in the professional practice of engineering while maintaining a high standard of professional and ethical responsibility.
- Be multifaceted and able to work with and demonstrate leadership in multidisciplinary teams.
- Pursue advanced degrees in engineering, medicine, and other fields that leverage their technical and problem-solving skills.


## Mission of the Department

The program is committed to providing a multidisciplinary education, making connections from the classroom and laboratory to research, coop, and co-curricular 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.

## Overview of Programs Offered

The Department of Bioengineering offers a Bachelor of Science in Bioengineering. Five-year Bachelor of Science in Bioengineering/Master of Science programs are also available in the following Master of Science disciplines: bioimaging and signal processing, cell and tissue engineering, biomedical devices, and biomechanics.

## 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. 372)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 433)

## 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 21 st 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 four 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. This is truly an exciting time!

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum required in BIOE courses

## Bioengineering Core Requirements

Complete 39 semester hours in bioengineering core requirements as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| BIOE 2355 | Quantitative Physiology for Bioengineers | 4 |
| BIOE 2365 <br> and BIOE 2366 | Bioengineering Measurement, Experimentation, and Statistics and Lab for BIOE 2365 | 5 |
| BIOE 2350 | Biomechanics | 4 |
| BIOE 3380 | Biomolecular Dynamics and Control | 4 |
| BIOE 3310 | Transport and Fluids for Bioengineers | 4 |
| BIOE 3210 | Bioelectricity | 4 |
| Bioengineering Capstone |  |  |
| BIOE 4790 | Capstone Design 1 | 4 |
| BIOE 4792 | Capstone Design 2 | 4 |
| Supplemental Credit |  |  |
| 3 semester hour bioengineering | $m$ the following course count toward the equirements: | 3 |

3 semester hours from the following course count toward the 3 bioengineering core requirements:

$$
\text { GE } 1502 \quad \text { Cornerstone of Engineering } 2
$$

## Professional Development

| Code | Title | Hours |
| :--- | :--- | ---: |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| BIOE 2000 | Introduction to Engineering Co-op <br> Education | 1 |
| BIOE 3000 | Professional Issues in Engineering | 1 |
| Additional Required Courses <br> Credit from the following course counts toward requirements <br> above: <br> GE 1501 | 1 |  |

## Concentration

Complete 20 semester hours in one of the following four concentrations. Requirements for the concentrations are listed below (p. 374).

- Bioimaging and Signal Processing (p. 374)
- Cell and Tissue Engineering (p. 374)
- Biomechanics (p. 374)
- Biomedical Devices (p. 374)


## Supporting Courses: Mathematics/Science

Complete 37 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Mathematics/Science |  |  |
| BIOL 1115 and BIOL 1116 | General Biology 1 for Engineers and Lab for BIOL 1115 | 5 |
| CHEM 1151 and CHEM 1153 | General Chemistry for Engineers and Recitation for CHEM 1151 | 4 |
| CHEM 2311 <br> and CHEM 2312 <br> and CHEM 2319 | Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311 | 5 |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| MATH 1342 | Calculus 2 for Science and Engineering | 4 |
| GE 2361 | Mathematical Methods for Engineers | 4 |
| PHYS 1171 <br> and PHYS 1172 <br> and PHYS 1173 | Physics 1 for Bioscience and <br> Bioengineering and Lab for PHYS 1171 and Interactive Learning Seminar for PHYS 1171 | 5 |
| PHYS 1175 <br> and PHYS 1176 <br> and PHYS 1177 | Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175 | 5 |
| Supplemental Credit |  |  |
| 1 semester hour from the following course counts toward the mathematics/science requirement: |  | 1 |
| GE 1502 | Cornerstone of Engineering 2 |  |

## Writing and NUpath Courses

Code Title Hours
Writing

A grade of $C$ or higher is required:

| ENGW 1111 | First-Year Writing | 4 |
| :--- | :--- | :--- |
| ENGW 3302 | Advanced Writing in the Technical <br> or ENGW 3315 | Professions <br> Interdisciplinary Advanced Writing in the |
|  | Disciplines |  |

## NUpath Requirements through General Electives

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.

## Required General Electives

## Code Title

Hours
Complete seven academic, nonremedial, nonrepetitive
courses, each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

136 total semester hours required

| Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN BIOIMAGING AND SIGNAL PROCESSING |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| BIOE 5235 | Biomedical Imaging | 4 |
| BIOE 5810 | Design of Biomedical Instrumentation | 4 |
| EECE 2520 | Fundamentals of Linear Systems | 4 |
| Elective Courses |  |  |
| Complete two of the following: |  | 8 |
| BIOE 4991 | Research |  |
| BIOL 5581 | Biological Imaging |  |
| EECE 2530 | Fundamentals of Electromagnetics |  |
| EECE 3468 | Noise and Stochastic Processes |  |
| EECE 4512 | Biomedical Electronics |  |
| EECE 4626 | Image Processing and Pattern Recognition |  |
| EECE 5648 | Biomedical Optics |  |
| EECE 5664 | Biomedical Signal Processing |  |
| CONCENTRATION IN CELL AND TISSUE ENGINEERING |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| BIOE 5410 | Molecular Bioengineering | 4 |
| BIOE 5420 | Cellular Engineering | 4 |
| BIOE 5430 | Principles and Applications of Tissue Engineering | 4 |
| Elective Courses |  |  |
| Complete two of the following: |  | 8 |
| BIOE 4991 | Research |  |
| BIOE 5650 | Multiscale Biomechanics |  |


| BIOE 5656 | Fields, Forces, and Flows in Biological <br> Systems |
| :--- | :--- |
| BIOE 5820 | Biomaterials |
| CHME 5630 | Biochemical Engineering |

## CONCENTRATION IN BIOMECHANICS

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| BIOE 5630 | Physiological Fluid Mechanics | 4 |
| BIOE 5650 | Multiscale Biomechanics | 4 |
| ME 5665 | Musculoskeletal Biomechanics | 4 |
| Elective Courses |  | 8 |
| Complete two of the following: |  |  |
| BIOE 4991 | Research |  |
| BIOE 5656 | Fields, Forces, and Flows in Biological |  |
| ME 4508 | Systems |  |
| Mechanical Engineering Computation |  |  |
| ME 4555 5667 | and Design |  |

## CONCENTRATION IN BIOMEDICAL DEVICES

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| BIOE 5250 | Design, Manufacture, and Evaluation of <br> Medical Devices | 4 |
| BIOE 5810 | Design of Biomedical Instrumentation | 4 |
| BIOE 5820 | Biomaterials | 4 |
| Elective Courses |  | 8 |
| Complete two of the following: |  |  |
| BIOE 4991 | Research |  |
| BIOE 5850 | Design of Implants |  |
| EECE 2750 | Enabling Engineering <br> ME 2340 <br> and ME 2341 | Introduction to Material Science <br> and Lab for ME 2340 |
| ME 4508 | Mechanical Engineering Computation <br> and Design |  |
| ME 4555 | System Analysis and Control |  |

## Plan of Study <br> Four Years, Two Co-ops in Summer 2/Fall

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Students will | 4 PHYS 1171 | 3 General | 4 Vacation | 0 |
| need to have | (ND) | elective |  |  |

AP credit
for Calc. AB
(MATH1341-
Calculus 1-
4 SH)

| MATH 1342 | 4 PHYS 1172 <br> (AD) | 1 General <br> elective | 4 |
| :--- | :--- | :--- | :--- |
| CHEM 1151 | 4 PHYS 1173 | 1 |  |
| CHEM 1153 | 0 GE 1502 (ER) | 4 |  |
| GE 1000 | 1 GE 2361 | 4 |  |
| GE 1501 | 4 General <br> elective | 4 |  |


| ENGW 1111 <br> (WF) | 4 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 21 | 17 | 8 | 0 |


| Year 2 |  |
| :--- | :--- | :--- |
| Fall | Hours Spring $\quad$ Hours Summer 1 Hours Summer 2 Hours |



Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 BIOE 3000 | 1 BIOE 4790 <br> (EI, CE) | 4 Co-op | 0 |
|  | BIOE 3210 | 4 General elective | 4 |  |
|  | BIOE 3380 | 4 |  |  |
|  | BIOE elective <br> 1 | 4 |  |  |
|  | BIOE elective <br> 2 | 4 |  |  |
|  | 0 | 17 | 8 | 0 |

Year 4


Total Hours: 136

## 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 |  |  |  |
| (FQ) |  |  |  |  |$\quad 4$ Vacation | Vacation |
| :--- |


| ENGW 1111 <br> (WF) | 4 General <br> elective | 4 |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | 17 | 17 | 0 | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIOE 2365 <br> (AD) | 4 | BIOE 2000 | 1 | Vacation |  | Co-op |  |
| BIOE 2366 | 1 | BIOE 2350 | 4 |  |  |  |  |
| $\begin{aligned} & \text { BIOL } 1115 \\ & \text { (ND) } \end{aligned}$ | 4 | BIOE 2355 | 4 |  |  |  |  |
| BIOL 1116 | 1 | CHEM 2311 | 4 |  |  |  |  |
| GE 2361 | 4 | CHEM 2312 | 1 |  |  |  |  |
| PHYS 1175 <br> (ND) | 3 | CHEM 2319 | 0 |  |  |  |  |
| PHYS 1176 <br> (AD) | 1 | General elective | 4 |  |  |  |  |
| PHYS 1177 | 1 |  |  |  |  |  |  |
|  | 19 |  | 18 |  | 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 <br> elective | 4 |  |
|  |   <br>  BIOE elective <br> 1  | 4 |  |  |
|  | ENGW 3302 <br> (WD) | 4 |  | 0 |

## Year 4



## Year 5

| Fall | Hours Spring | Hours |
| :--- | :--- | ---: |
| Co-op | BIOE 4792 | 4 |
|  | BIOE elective | 4 |
| 5 | 4 |  |
| General <br> elective | 4 |  |
| General <br> elective |  |  |

$0 \quad 16$

Total Hours: 136

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

| Year 1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| $\begin{aligned} & \text { MATH } 1341 \\ & \text { (FQ) } \end{aligned}$ | 4 | $\begin{aligned} & \text { MATH } 1342 \\ & \text { (FQ) } \end{aligned}$ | 4 | Vacation |  | Vacation |  |
| CHEM 1151 | 4 | PHYS 1171 <br> (ND) | 3 |  |  |  |  |
| CHEM 1153 | 0 | PHYS 1172 <br> (AD) | 1 |  |  |  |  |
| GE 1000 | 1 | PHYS 1173 | 1 |  |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |  |
| ENGW 1111 <br> (WF) | 4 | General elective | 4 |  |  |  |  |
|  | 17 |  | 17 |  | 0 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 <br> BIOE 2000 | 1 Co-op |
| :--- | :---: | :---: | :---: | :---: | | Hours Summer 2 |
| :---: |
| Vacation |$\quad$ Hours

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| BIOE 2350 | 4 Co-op | Co-op | BIOE 3310 |  |$\quad 4$

Year 4


Year 5


Total Hours: 136

## Chemical Engineering

Website (http://www.northeastern.edu/che)

## Thomas J. Webster, PhD

Professor and Chair
Art Zafiropoulo Chair in Engineering

## Ronald J. Willey, PhD

Professor and Vice Chair
313 Snell Engineering Center
617.373.2989
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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 faculty of the chemical engineering program are committed to providing a practice-oriented education through project and problembased learning and drawing connections between classroom learning and co-op experiences. The educational curriculum provides fundamentals in mathematics, physical sciences, and engineering science as well as real-world design and laboratory experiences. Through the university's academic core requirements, NUpath, students gain awareness of the impact of engineering decisions in a broader societal and ethical context. Cooperative education enables students to integrate practical
workplace knowledge with classroom learning so the educational experiences are synergistic and deepen the learning process. The chemical engineering community encourages professional development through active participation and leadership in student organizations, professional societies, and departmental activities. As a result, the chemical engineering program prepares students for industrial careers, graduate programs, or professional medical, law, and business schools.

## Overview of Programs Offered

Please see the programs tab (p. 377) for a list of the department's academic programs.

The program educational objectives are as follows. Within a few years after graduation, graduates of the chemical engineering program are expected to obtain the ability to function successfully in a variety of fields in chemical engineering or in advanced study that uses the problem-solving skills taught in chemical engineering; identify problems, collect necessary information, and analyze data to draw appropriate conclusions and to make informed decisions; function effectively in a diverse workplace using interpersonal and communicative skills gained from their chemical engineering training; recognize an economic, environmental, health and safety, or sustainability situation in need of improvement, then make suggestions that improve this situation.

The program's student objectives are as follows. When a student graduates from the chemical engineering program, they will have an ability to identify, formulate, and solve complex chemical engineering problems by applying principles of engineering, science, and mathematics; an ability to apply chemical engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, and global, cultural, social, environmental, and economic factors, as well as identifying and mitigating the hazards associated with that design to promote health and safety; an ability to communicate effectively with a range of audiences; an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts including protecting the public and the environment by performing their work in a safe and environmentally conscious manner; an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives; an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions; and an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

The faculty of the chemical engineering program are committed to providing a practice-oriented education through experiential learning and by drawing connections between classroom learning and co-op experiences. The educational curriculum provides fundamentals in mathematics, physical sciences, and engineering science, as well as real-world design and laboratory experiences. Through the university's general education requirements, students gain awareness of the impact of engineering decisions in a broader societal and ethical context.

## 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 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 community creates opportunities for professional development through active participation and leadership in student organizations, professional societies, and departmental activities. As a result, the chemical engineering program prepares students for successful industrial careers; graduate programs; or professional medical, law, and business schools. 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. 377)
- Chemical Engineering and Physics (p. 383)
- Chemical Engineering and Biochemistry (p. 381)


## Minor

- Biochemical Engineering (p. 385)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 433)

## Chemical Engineering, BSCHE

Provides a BS degree in chemical engineering. Upon completion, one can move in several career directions. Traditionally, the degree prepares one for practice in the engineering and the control of processes involving chemicals, biotechnology feedstocks, and pharmaceuticals. The degree can also serve as a springboard to advance study in chemical engineering. Nontraditional postgraduate pathways include obtaining a law school degree related to patent law, an MBA, or a medical degree for a career in the health professions.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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

Complete 54 semester hours in engineering as indicated below:

| Code | Title | Hours | MATH 2341 | Differential Equations and Linear | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CHME 2308 | Conservation Principles in Chemical | 4 |  | Algebra for Engineering |  |
|  | Engineering |  | PHYS 1151 | 5 |  |
| CHME 2310 | Transport Processes 1 | 4 | and PHYS 1152 | and Lab for PHYS 1151 |  |
| CHME 2320 | Chemical Engineering Thermodynamics 1 | 4 | and PHYS 1153 | and Interactive Learning Seminar for PHYS 1151 |  |
| CHME 3312 | Transport Processes 2 and Separations | 4 | Complete one of the following: |  |  |
| CHME 3315 | Chemical Engineering Experimental <br> Design 1 (Chem Eng Lab 1) | 4 | BIOL 1111 | General Biology 1 |  |
|  |  |  | BIOL 1115 | General Biology 1 for Engineers |  |
| CHME 3322 | Chemical Engineering Thermodynamics 2 | 4 | PHYS 1155 <br> and PHYS 1156 <br> and PHYS 1157 | Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155 |  |
| CHME 4315 | Chemical Engineering Experimental Design 2 (Chem Eng Lab 2) | 4 |  |  |  |
| CHME 4510 | Chemical Engineering Kinetics | 4 | Supplemental Credit |  |  |
| CHME 4512 | Chemical Engineering Process Control | 4 | 1 semester hour from the following course counts toward the mathematics/science requirement: |  |  |
| CHME 4701 | Capstone Design 1: Process Analysis | 4 |  |  |  |  |  |
| CHME 4703 | Capstone Design 2: Chemical Process Design |  | GE 1502 | Cornerstone of Engineering 2 |  |
|  |  |  | Supporting Courses: Advanced Science |  |  |
| Advanced Engineering Elective |  |  | Complete 14 semester hours in advanced science as indicated below. |  |  |
| Complete one course numbered between 4000 and 5999 in any of the following subject areas: |  | 4 | Code <br> Title <br> Complete one of the following: |  | Hours |
| BIOE, CHME, CIVE, EECE, ME, IE, MEIE, and ENGR |  |  |  |  | 5 |
| Supplemental Credit |  |  | CHEM 2311 <br> and CHEM 2312 <br> and CHEM 2319 | Organic Chemistry 1 <br> and Lab for CHEM 2311 <br> and Recitation for CHEM 2311 |  |
| 3 semester hours from the following course count toward the engineering requirement: |  |  |  |  |  |
| GE 1501 | Cornerstone of Engineering 1 |  | CHEM 2315 and CHEM 2316 and CHEM 2324 | Organic Chemistry 1 for Chemistry <br> Majors <br> and Lab for CHEM 2315 <br> and Recitation for CHEM 2315 |  |
| 3 semester hours from the following course count toward the engineering requirement: |  |  |  |  |  |
| GE 1502 | Cornerstone of Engineering 2 |  | Complete one of the following: |  | 5 |
| Professional Development <br> Complete 4 semester hours in professional development as indicated below: |  |  | CHEM 2313 <br> and CHEM 2314 <br> and CHEM 2320 | Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313 |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  | CHEM 2317 <br> and CHEM 2318 <br> and CHEM 2325 | Organic Chemistry 2 for Chemistry <br> Majors <br> and Lab for CHEM 2317 <br> and Recitation for CHEM 2317 |  |
| Professional Development |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| CHME 2000 | Introduction to Engineering Co-op Education |  | Complete one of the following: |  | 4-6 |
|  |  |  | BIOL 2301 | Genetics and Molecular Biology |  |
| CHME 3000 | Professional Issues in Engineering | 1 | and BIOL 2302 | and Lab for BIOL 2301 |  |
| Additional Required Courses |  |  | BIOL 2321 <br> and BIOL 2322 | Microbiology and Lab for BIOL 2321 |  |
| The remaining credit from the following course will apply to the professional development area: |  |  |  |  |  |
|  |  |  | BIOL 2327 | Human Parasitology |  |
| GE 1501 | Cornerstone of Engineering 1 |  | BIOL 3611 <br> and BIOL 3612 | Biochemistry and Lab for BIOL 3611 |  |
| Supporting Courses: Mathematics/Science |  |  | BIOL 3603 | Mammalian Systems Physiology |  |
| Complete 30 semester hours in mathematics and science as indicated below: |  |  | EEMB 2302 and EEMB 2303 | Ecology and Lab for EEMB 2302 |  |
| Code | Title | Hours | CHEM 2331 and CHEM 2332 | Bioanalytical Chemistry and Lab for CHEM 2331 |  |
| Required Mathematics/Science |  |  | CHEM 3403 and CHEM 3404 | Quantum Chemistry and Spectroscopy and Lab for CHEM 3403 |  |
| CHEM 1151 | General Chemistry for Engineers and Recitation for CHEM 1151 |  |  |  |  |
| and CHEM 1153 |  |  | CHEM 3501 | Inorganic Chemistry |  |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 | CHEM 4621 and CHEM 4622 | Introduction to Chemical Biology and Lab for CHEM 4621 |  |
| MATH 1342 | Calculus 2 for Science and Engineering | 4 |  |  |  |


| CHEM 4628 <br> and CHEM 4629 | Introduction to Spectroscopy of <br> Organic Compounds <br> and Identification of Organic <br> Compounds |
| :--- | :--- |
| PHYS 2303 | Modern Physics |
| PHYS 3601 | Classical Dynamics |

## Writing Requirements <br> Code Title

A grade of $C$ or higher is required:

| ENGW 1111 | First-Year Writing |
| :--- | :--- |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions |

or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

## Required General Electives

## Code <br> Title

Complete six academic, nonremedial, nonrepetitive courses, each equivalent to 4 semester hours.

## Major GPA Requirement

2.000 minimum required in CHME courses

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

134 total semester hours required

## Plan of Study

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 |  | Summer 2 | Hours | elective |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1342 | 4 | MATH 2321 | 4 | CHME 2308 |  | Vacation | 0 |  | 17 |  | 16 |  |  |  |  |
| Students will need to have AP credit for Calc. AB (MATH1341Calculus 14 SH) | 4 | PHYS 1151 (ND) | 3 | General elective | 4 |  |  | Total Hours: 1 <br> Four Years <br> Year 1 <br> Fall <br> MATH 1342 | 34-135 <br> , Two <br> Hours | 5 <br> o Co-ops i <br> Spring <br> MATH 2321 | Sum <br> Hours <br> 4 | mer 2/Fal <br> Summer 1 <br> CHME 2308 | Hours | Summer 2 <br> Vacation | Hours |
| CHEM 1151 | 4 | PHYS 1152 <br> (AD) | 1 |  |  |  |  | Students will need to have |  | PHYS 1151 <br> (ND) | 3 | General elective | 4 |  |  |
| CHEM 1153 | 0 | PHYS 1153 | 1 |  |  |  |  | AP credit |  |  |  |  |  |  |  |
| GE 1000 | 1 | GE 1502 (ER) | 4 |  |  |  |  | for Calc. AB (MATH1341- |  |  |  |  |  |  |  |
| GE 1501 | 4 | General elective | 4 |  |  |  |  | $\begin{aligned} & \text { Calculus } 1- \\ & 4 \mathrm{SH}) \end{aligned}$ |  |  |  |  |  |  |  |
| ENGW 1111 <br> (WF) | 4 |  |  |  |  |  |  | CHEM 1151 |  | PHYS 1152 <br> (AD) | 1 |  |  |  |  |
|  | 21 |  | 17 |  | 8 | 8 | 0 | CHEM 1153 | 0 | PHYS 1153 | 1 |  |  |  |  |
| Year 2 |  |  |  |  |  |  |  | GE 1000 |  | GE 1502 (ER) | 4 |  |  |  |  |
| Fall <br> CHME 2000 | Hours | Spring Co-op | Hours | Summer 1 Co-op | Hours | Summer 2 CHEM 2313 | Hours | GE 1501 |  | General elective | 4 |  |  |  |  |


| ENGW 1111 <br> (WF) | 4 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 21 | 17 | 8 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | ---: | :---: | ---: | ---: |
| MATH 2341 | 4 CHEM 2313 | 4 Advanced <br> science <br> elective | 4 Co-op |  |$\quad 0$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | ---: | :---: | ---: |
| Co-op | 0 CHME 3315 | 4 General <br> elective | 4 Co-op | 0 |
| ENGW 3302 <br> (To be taken <br> online) | 4 CHME 3322 | 4 General <br> elective | 4 |  |
|  | CHME 4510 | 4 |  |  |
|  | CHME 4701 | 4 | 8 | 0 |


| Year 4 |  |  |
| :--- | ---: | ---: |
| Fall | Hours Spring | Hours |
| Co-op | 0 CHME 3000 | 1 |
|  | CHME 4315 | 4 |
|  | CHME 4512 | 4 |
|  | CHME 4703 | 4 |
|  | Advanced <br> engineering <br> elective | 4 |


| 0 | 17 |
| :---: | :---: |

Total Hours: 134-135

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 <br> (FQ) | 4 | $\begin{aligned} & \text { MATH } 1342 \\ & \text { (FQ) } \end{aligned}$ |  | Vacation | 0 | Vacation | 0 |
| CHEM 1151 | 4 | PHYS 1151 <br> (ND) | 3 |  |  |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | ---: |
| CHEM 2311 | 4 CHEM 2313 | 4 | Vacation | 0 Co-op |$\quad 0$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | ---: | :---: | ---: |
| Co-op | 0 CHME 3312 | 4 General <br> elective | 4 Co-op | 0 |
|  | CHME 3315 | 4 General <br> elective | 4 |  |
|  | (AD, WI) | 4 |  |  |
|  | CHME 3322 | 4 |  | 0 |
|  | ENGW 3302 | 4 | 8 |  |

Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | CHME 3000 |  | General elective | 4 | Co-op | 0 |
|  |  | CHME 4315 <br> (AD, WI) | 4 | General elective | 4 |  |  |
|  |  | CHME 4510 | 4 |  |  |  |  |
|  |  | CHME 4701 | 4 |  |  |  |  |
|  |  | General elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |
| Year 5 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |  |
| Co-op | 0 | CHME 4512 | 4 |  |  |  |  |
|  |  | CHME 4703 <br> (EI, CE) | 4 |  |  |  |  |
|  |  | Advanced engineering elective | 4 |  |  |  |  |
|  |  | Advance science elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  |  |  |  |

Total Hours: 134-135

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 <br> (FQ) | 4 | MATH 1342 <br> (FQ) | 4 | Vacation | 0 Vacation | 0 |
| CHEM 1151 | 4 | PHYS 1151 <br> (ND) | 3 |  |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |
| ENGW 1111 <br> (WF) | 4 | General elective | 4 |  |  |  |
|  | 17 |  | 17 |  | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| MATH 2321 (FQ) | 4 Co-op | 0 Co-op | 0 CHEM 2313 | 4 |
| CHEM 2311 | 4 |  | CHEM 2314 | 1 |
| CHEM 2312 | 1 |  | CHEM 2320 | 0 |
| CHEM 2319 | 0 |  | CHME 2320 | 4 |
| CHME 2000 | 1 |  |  |  |
| CHME 2308 | 4 |  |  |  |
| BIOL 1115 or PHYS 1155 <br> and PHYS <br> 1156 and PHYS 1157 | 4-5 |  |  |  |
|  | 18-19 | 0 | 0 | 9 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CHME 2310 | 4 Co-op | Co-op | 0 General <br> elective | 4 |
| CHME 3322 | 4 | General <br> elective | 4 |  |
| MATH 2341 | 4 |  |  |  |
| General <br> elective | 4 |  |  |  |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CHME 3000 | 1 Co-op | 0 Co-op | 0 Vacation | 0 |
| CHME 3312 | 4 |  |  |  |
| General <br> elective | 4 |  |  |  |
| CHME 3315 <br> (AD, WI) | 4 |  |  | 0 |
| ENGW 3302 | 4 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | :---: |
| CHME 4315 | 4 CHME 4512 | 4 |
| $(\mathrm{AD}, \mathrm{WI})$ |  |  |


| CHME 4701 | 4 General <br> elective | 4 |
| :--- | :---: | :---: |
| Advanced <br> science <br> elective | 4 Advanced <br> engineering <br> elective | 4 |
|  | 16 | 16 |

Total Hours: 134-135

## 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. Successful graduates will be well-qualified 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum required in CHME courses

## Mathematics/Science Requirement

Complete 44 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 |
| 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 |
| PHYS 1151 <br> and PHYS 1152 <br> 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:
BIOL 2311 to BIOL 5999
Supplemental Credit
1 semester hour from the following course counts toward the
mathematics/science requirement:

| GE 1502 | Cornerstone of Engineering 2 |
| :---: | :--- |

## Advanced Science Requirement

Complete 23 semester hours in advanced science as indicated below.

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 1115 | General Biology 1 for Engineers | 4 |
| CHEM 2311 Organic Chemistry 1 <br> and CHEM 2312 and Lab for CHEM 2311 <br> and CHEM 2319 and Recitation for CHEM 2311 | 5 |  |
| CHEM 2313 | Organic Chemistry 2 |  |
| and CHEM 2314 | and Lab for CHEM 2313 <br> and Recitation for CHEM 2313 | 5 |
| CHEM 2331 Bioanalytical Chemistry <br> and CHEM 2332 and Lab for CHEM 2331 |  |  |
| Advanced Chemistry Elective | 5 |  |
| Complete one course in the following range: | 4 |  |
| CHEM 2310 to CHEM 5999 |  |  |

## Engineering

Complete 50 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :--- | :--- | :--- |
| Required Engineering |  |  |
| CHME 2308 | Conservation Principles in Chemical <br> Engineering | 4 |
| CHME 2310 | Transport Processes 1 | 4 |
| CHME 2320 | Chemical Engineering Thermodynamics <br> 1 | 4 |
| CHME 3312 | Transport Processes 2 and Separations | 4 |
| CHME 3315 | Chemical Engineering Experimental <br> Design 1 | 4 |
| CHME 3322 | Chemical Engineering Thermodynamics <br> 2 | 4 |
| CHME 4315 | Chemical Engineering Experimental <br> Design 2 <br> CHME 4510 | Chemical Engineering Kinetics <br> CHME 4512 |
| Chemical Engineering Process Control | 4 |  |
| CHME 4703 | Capstone Design 1: Process Analysis <br> Capstone Design 2: Chemical Process | 4 |

Supplemental Credit
3 semester hours from the following course count toward the 3
engineering requirement:
GE 1501 Cornerstone of Engineering 1
3 semester hours from the following course count toward the 3
engineering requirement:
GE 1502 Cornerstone of Engineering 2

## Professional Development

Complete 4 semester hours in professional development as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Professional Development |  |  |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| CHME 2000 | Introduction to Engineering Co-op Education | 1 |
| CHME 3000 | Professional Issues in Engineering | 1 |
| Additional Required Courses |  |  |
| The remaining credit from the following course will apply to the professional development area: |  |  |
| GE 1501 | Cornerstone of Engineering 1 |  |
| Additional NUpath Courses |  |  |
| Code | Title | Hours |
| Writing |  |  |
| 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 |  |

## NUpath Requirements Through General Electives

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.

## Required General Electives

Complete four academic, nonremedial, nonrepetitive courses, each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

145 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 |
| $\begin{aligned} & \text { CHEM } 1151 \\ & \text { (ND) } \end{aligned}$ | 4 | $\begin{aligned} & \text { MATH } 1342 \\ & \text { (FQ) } \end{aligned}$ | 4 | CHME 2308 |  | Vacation | 0 |
| CHEM 1153 | 0 | PHYS 1151 <br> (ND) | 3 | MATH 2321 | 4 |  |  |
| ENGW 1111 | 4 | PHYS 1152 <br> (AD) | 1 |  |  |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |  |
| $\begin{aligned} & \text { MATH } 1341 \\ & \text { (FQ) } \end{aligned}$ | 4 | General elective | 4 |  |  |  |  |
|  | 17 |  | 17 |  | 8 |  | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIOL 1115 <br> (ND) | 4 | CHEM 2313 |  | BIOL 2301 <br> and BIOL 2302 | 5 | Co-op | 0 |
| CHEM 2311 | 4 | CHEM 2314 | 1 | General elective | 4 |  |  |
| CHEM 2312 | 1 | CHEM 2320 | 0 |  |  |  |  |
| CHEM 2319 | 0 | CHEM 2331 <br> (AD, WI) | 4 |  |  |  |  |
| CHME 2310 | 4 | CHEM 2332 | 1 |  |  |  |  |
| MATH 2341 | 4 | CHME 2000 | 1 |  |  |  |  |
|  |  | CHME 2320 | 4 |  |  |  |  |
|  |  | General elective | 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 <br> (Chem. Eng. <br> Lab 1) | 4 BIOL 3612 <br> (WI) | 1 |  |
|  | CHME 3322 | 4 General <br> elective | 4 |  |
|  | ENGW 3315 | 4 |  | 0 |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | 0 BIOL 4707 | 4 | Vacation | 0 Co-op |$\quad 0$

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 CHME 4512 | 4 |
|  | CHME 4703 <br> (EI, WI, CE) | 4 |
| Advanced <br> chemistry <br> elective | 4 |  |
| Advanced <br> biology <br> elective | 4 |  |
| 0 | 16 |  |

Total Hours: 145

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum required in CHME courses

## Mathematics/Science Requirement

Complete 47 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 <br> and Lab for PHYS 1151 <br> and Interactive Learning Seminar for PHYS 1151 | 5 |
| PHYS 1155 and PHYS 1156 and PHYS 1157 | Physics for Engineering 2 <br> and Lab for PHYS 1155 <br> 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 | 4 |
| PHYS 5318 | Principles of Experimental Physics | 4 |
| Supplemental Credit |  |  |
| 1 semester hour mathematics/sc | the following course counts toward the requirement: | 1 |

GE 1502 Cornerstone of Engineering 2

## Advanced Science Requirement

Complete 18 semester hours in advanced chemistry as indicated below.

CHEM 2311
and CHEM 2312
and CHEM 2319
Code Title Hours

Title Hours
Organic Chemistry 1
5
and Lab for CHEM 2311
and Recitation for CHEM 2311
$\left.\begin{array}{lll}\hline \text { PHYS 2303 } & \text { Modern Physics } & 4 \\ \hline \text { PHYS 5115 } & \text { Quantum Mechanics } & 4 \\ \hline \text { Complete one of the following: } & 5 \\ \hline \begin{array}{l}\text { CHEM 2313 } \\ \text { and CHEM 2314 } \\ \text { and CHEM 2320 }\end{array} & \text { Organic Chemistry 2 } & \text { and Lab for CHEM 2313 } \\ \text { and Recitation for CHEM 2313 }\end{array}\right]$

## Engineering

Complete 54 semester hours in engineering as indicated below.



Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | ---: |
| Co-op | 0 CHME 3000 | 1 Vacation | 0 Co-op | 0 |
|  | CHME 4315 | 4 |  |  |
|  | CHME 4510 | 4 |  |  |
|  | CHME 4701 | 4 |  | 0 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | O CHME 4703 <br> (EI, CE) | 4 |
|  | PHYS 5115 <br> (ND, FQ) | 4 |
|  | PHYS 5318 <br> (ND, AD, CE) | 4 |
|  | Advanced <br> engineering <br> elective | 4 |
| 0 | 16 |  |

Total Hours: 139

## 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 | 4 |
|  | Engineering | 4 |
| CHME 2310 | Transport Processes 1 | 4 |
| CHME 3312 | Transport Processes 2 and Separations | 4 |
| CHME 5630 | Biochemical Engineering |  |

## Capstone

Code Title Hours

CHME 4703 Capstone Design 2: Chemical Process 4

## Supporting Courses: Math and Science

Code
MATH 1241

or MATH 1341 $\quad$\begin{tabular}{l}
Title <br>
MATH 1242 <br>
or MATH 1342

$\quad$

Calculus 1 <br>
MATH 2341 <br>
Calculus 2 for Science and Engineering <br>
Calculus 2 for Science and Engineering
\end{tabular}$\quad 4$

## 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
R. Edward Beighley, PhD

Associate Professor and Associate Chair for Undergraduate Studies
400 Snell Engineering Center
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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.

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, the department prepares 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: 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.

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.

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 programs have been designed with six general 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 architectural engineering, business, architectural history, music, computer science, or any number of other fields.

## Mission of the Department

The mission for the Department of Civil and Environmental Engineering is to provide a premier undergraduate and graduate education to help prepare globally oriented civil and environmental engineering leaders; to conduct world-class, use-inspired disciplinary and interdisciplinary research; and to serve a diverse constituency through public service and outreach.

## CIVIL ENGINEERING

Civil engineers apply their knowledge of mathematics and sciences to improve and protect the natural environment and to design and create the built environment for community living, industry, and transportation. Civil engineering encompasses several disciplines, including environmental and water resources engineering, transportation planning and engineering, structural engineering, geotechnical engineering, and construction management.

The program educational objectives for the Bachelor of Science in Civil Engineering are as follows:

1. The civil engineering program at Northeastern University prepares graduates to contribute to society as civil engineers and in other professions that benefit from a technical education.
2. Within a few years of graduation, many of our graduates will be working in responsible engineering positions that will qualify them to take the professional engineer (PE) licensure exam, and will prepare them to successfully pursue advanced study in civil engineering and other fields.

## ENVIRONMENTAL ENGINEERING

By applying their background in engineering, chemical, biological, and ecological principles, Northeastern's environmental engineering
graduates create, invent, and lead a new generation of engineers who will be able to address key challenges-including 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. Northeastern's program provides graduates with the core skills necessary to practice environmental engineering and to work with other engineers and urban and regional planners in an interdisciplinary environment.

The program educational objectives for the Bachelor of Science in Environmental Engineering are as follows:

1. The environmental engineering program at Northeastern University prepares graduates to contribute to society as environmental engineers and in other professions that benefit from a technical education.
2. Within a few years of graduation, many of our graduates will be working in responsible engineering positions that will qualify them to take the professional engineer (PE) licensure exa, and will prepare them to successfully pursue advanced study in environmental engineering and other fields.

## 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 as part of the five-year Bachelor of Science/Master of Science programs.

## Programs

## Bachelor of Science (BSEnvE)

- Environmental Engineering, BSEnvE (p. 391)


## Bachelor of Science (BS)

- Environmental Engineering and Public Health (p. 394)


## Bachelor of Science in Civil Engineering (BSCE)

- Civil Engineering, BSCE (p. 386)


## Minor

- Architectural Engineering, Minor (p. 396)
- Civil Engineering, Minor (p. 397)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 433)

## Civil Engineering, BSCE

Civil engineers play a vital role in human progress and wellbeing 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum required in major (CIVE) courses

## Engineering

Complete 61 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Engineering |  |  |
| CIVE 2221 <br> and CIVE 2222 | Statics and Strength of Materials and Recitation for CIVE 2221 | 4 |
| CIVE 2260 and CIVE 2261 | Civil Engineering Materials and Materials and Measurements Lab | 5 |
| CIVE 2320 <br> and CIVE 2321 | Structural Analysis 1 <br> and Recitation for CIVE 2320 | 4 |
| CIVE 2324 or CIVE 3425 | Reinforced Concrete Design Steel Design | 4 |
| CIVE 2331 | Fluid Mechanics | 4 |
| CIVE 2334 | Environmental Engineering 1 | 4 |
| CIVE 2340 and CIVE 2341 | Soil Mechanics and Lab for CIVE 2340 | 5 |
| GE 3300 | Energy Systems: Science, Technology, and Sustainability | 4 |
| Civil Engineering Project Elective |  |  |
| Complete one of th | following: | 4 |
| CIVE 4534 <br> and CIVE 4535 | Environmental Engineering 2 and Lab for CIVE 4534 |  |
| CIVE 4542 | Foundation Engineering |  |
| CIVE 4554 | Highway Engineering |  |
| CIVE 5536 | Hydrologic Engineering |  |

## 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 11 semester hours from the following:

| CIVE 2324 | Reinforced Concrete Design |
| :---: | :---: |
| CIVE 3425 | Steel Design |
| CIVE 3435 | Environmental Pollution Fate and Transport |
| CIVE 4540 | Resource Recovery and Waste Treatment Technologies Abroad |
| CIVE 4542 | Foundation Engineering |
| CIVE 4554 | Highway Engineering |
| CIVE 4566 | Design for Sustainable Transportation: Netherlands |
| CIVE 4575 | Construction Management |
| CIVE 4777 | Climate Hazards and Resilient Cities Abroad |
| CIVE 4990 | Elective |
| CIVE 5221 | Construction Project Control and Organization |
| CIVE 5231 | Alternative Project Delivery Systems in Construction |
| CIVE 5250 | Organic Pollutants in the Environment |
| 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 5300 | Environmental Engineering Laboratory |
| CIVE 5373 | Transportation Systems: Analysis and Planning |

CIVE $5376 \quad$ Traffic Engineering and Sustainable Urban Street Design
CIVE 5522 Structural Analysis 2
CIVE 5525 Prestressed Concrete Design
CIVE $5536 \quad$ Hydrologic Engineering
CIVE 5699 Special Topics in Civil Engineering (Climate Science and Technology Adaptation Policy)
CIVE 5699 Special Topics in Civil Engineering (Structural Systems)
CIVE 5699 Special Topics in Civil Engineering (Vibration-based Structural Health Monitoring)
CIVE 5699 Special Topics in Civil Engineering (Groundwater and Contamination)
CIVE 5699 Special Topics in Civil Engineering (Coastal Dynamics and Design Practice)
SBSY $5100 \quad$ Sustainable Design and Technologies in Construction

| SBSY 5200 | Sustainable Engineering Systems for <br> Buildings |
| :--- | :--- |
| SBSY 5300 | Information Systems for Integrated <br>  <br> Project Delivery |

## Supplemental Credit

3 semester hours from the following course count toward the engineering requirement:
GE 1501 Cornerstone of Engineering 1

3 semester hours from the following course count toward the 3 engineering requirement:
GE 1502 Cornerstone of Engineering 2
1 semester hour from the following course counts toward the 1 engineering requirement:

```
CIVE \(3464 \quad\) Probability and Engineering Economy for Civil Engineering
```


## Professional Development

| Code | Title | Hours |
| :--- | :--- | :---: |
| Professional Development |  |  |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| CIVE 2000 | Introduction to Engineering Co-op <br>  <br> CIVE 3000 | Professional Issues in Engineering |

## Additional Required Courses

The remaining credit from the following course will apply to 1
the professional development area:
GE 1501 Cornerstone of Engineering 1

## Supporting Courses: Mathematics/Science

Complete 33 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Mathematics/Science |  |  |
| Complete one of the following: |  | 4 |
| CHEM 1151 and CHEM 1153 | General Chemistry for Engineers and Recitation for CHEM 1151 |  |
| CHEM 1211 <br> and CHEM 1212 <br> and CHEM 1213 | General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211 |  |
| CHEM 1214 <br> and CHEM 1215 and CHEM 1216 | General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214 |  |
| 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 <br> and PHYS 1152 <br> and PHYS 1153 | Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151 |  |
| PHYS 1161 <br> and PHYS 1162 <br> and PHYS 1163 | Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161 |  |
| Science Elective |  |  |
| 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 1117 and BIOL 1118 | Integrated Anatomy and Physiology 1 and Lab for BIOL 1117 |  |
| BIOL 1121 and BIOL 1122 | Basic Microbiology and Lab for BIOL 1121 |  |
| BIOL 1141 | Microbes and Society |  |
| BIOL 1143 | Biology and Society |  |
| CHEM 2311 <br> and CHEM 2312 <br> and CHEM 2319 | Organic Chemistry 1 <br> and Lab for CHEM 2311 <br> and Recitation for CHEM 2311 |  |
| ENVR 1110 | Global Climate Change |  |
| ENVR 1120 | Oceans and Coasts |  |
| ENVR 1200 | Dynamic Earth |  |
| ENVR 1202 | History of Earth and Life |  |
| ENVR 2310 | Earth Materials |  |
| ENVR 3418 | Geophysics |  |
| ENVR 4515 | Sustainable Development |  |
| ENVR 5250 | Geology and Land-Use Planning |  |
| PHYS 1111 | Astronomy |  |
| PHYS 2303 | Modern Physics |  |
| PHYS 2305 | Thermodynamics and Statistical Mechanics |  |
| PHYS 3601 | Classical Dynamics |  |
| PHYS 4623 | Medical Physics |  |
| PHYS 5111 | Astrophysics and Cosmology |  |
| Supplemental Credit |  |  |
| 3 semester hours from the following course count toward the mathematics/science requirement: |  |  |
| CIVE 3464 | Probability and Engineering Economy for Civil Engineering |  |
| 1 semester hour from the following course counts toward the mathematics/science requirement: |  | 1 |
| GE 1502 | Cornerstone of Engineering 2 |  |

## Supporting Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| Economics |  |  |
| ECON 1115 | Principles of Macroeconomics | 4 |
| or ECON 1116 | Principles of Microeconomics |  |

## Writing Requirements and NUpath

Code
Title
Hours
Writing
A grade of $C$ or higher is required:
ENGW 1111 First-Year Writing 4
ENGW 3302 Advanced Writing in the Technical 4
Professions

## NUpath Requirements through General Electives

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.

## Required General Electives

Code Title
Complete six academic, nonremedial, nonrepetitive courses,
each equivalent to 4 semester hours.
Course Work That Does Not Count Toward the Engineering
Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

134 total semester hours required

## Plan of Study

Four Years, Two Co-ops in Summer 2/Fall
Year 1


Total Hours: 134

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

## Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 <br> (FQ) |  | MATH 2321 <br> (FQ) |  | General Elective | 4 Vacation | 0 |
| Students will need to have AP credit for Calc. AB (MATH134 Calculus 1-4 SH) |  | PHYS 1151 <br> (ND) | 3 | General Elective | 4 |  |
| MATH 1342 <br> (FQ) |  | PHYS 1152 <br> (AD) | 1 |  |  |  |
| CHEM 1151 | 4 | PHYS 1153 | 1 |  |  |  |
| CHEM 1153 | 0 | GE 1502 (ER) | 4 |  |  |  |
| ENGW 1111 <br> (WF) | 4 | General Elective | 4 |  |  |  |
| GE 1501 | 4 |  |  |  |  |  |
| GE 1000 | 1 |  |  |  |  |  |
|  | 21 |  | 17 |  | 8 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| MATH 2341 | 4 Co-op | Co-op | General | 4 |
| CIVE 2000 | 1 |  | Elective |  |


| CIVE 2221 | 4 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIVE 2222 | 0 |  |  |  |  |  |  |
| CIVE 2260 | 4 |  |  |  |  |  |  |
| $\begin{aligned} & \text { CIVE } 2261 \\ & \text { (AD) } \end{aligned}$ | 1 |  |  |  |  |  |  |
| CIVE 2334 | 4 |  |  |  |  |  |  |
|  | 18 |  | 0 |  | 0 |  | 8 |
| Year 3 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CIVE 2320 | 4 | ENGW 3302 | 4 | Co-op |  | CIVE 2340 | 4 |
| CIVE 2321 | 0 | Students will need to take Advanced Writing in the Profession online during this co-op |  |  |  | CIVE 2341 | 1 |
| CIVE 2331 |  | Co-op |  |  |  | Technical Elective | 3 |
| ECON 1115 <br> (or 1116) | 4 |  |  |  |  |  |  |
| GE 3300 | 4 |  |  |  |  |  |  |
|  | 16 |  | 4 |  | 0 |  | 8 |

Year 4


Total Hours: 134

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

Year 1
$\left.\begin{array}{lcccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { MATH 1341 } \\ \text { (FQ) }\end{array} \quad \begin{array}{c}4 \text { MATH 1342 } \\ \text { (FQ) }\end{array} \quad \begin{array}{c}4 \text { Vacation }\end{array}\right)$


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 |  |  |
|  | Science Elective | 4 |  |  |
|  | Technical Elective | 4 |  |  |
|  | 0 | 17 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 CIVE 3000 | 1 | General Elective | 4 | Co-op | 0 |
|  | CIVE 3464 | 4 | General Elective | 4 |  |  |
|  | ENGW 3302 <br> (WD) | 4 |  |  |  |  |
|  | Technical Elective | 3 |  |  |  |  |
|  | Project <br> Elective (WI) | 4 |  |  |  |  |
|  | 0 | 16 |  | 8 |  | 0 |

## Year 5

| Fall | Hours | Spring |
| :--- | ---: | ---: |
| Co-op | 0 Senior | 5 |
|  | Design <br>  <br> Project (EI, <br> WI, CE) |  |
|  | General <br> Elective | 4 |
|  | General <br> Elective | 4 |
|  | Technical <br> Elective | 4 |

[^9]
## Five Years, Three Co-ops in Spring/Summer 1

Year 1

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { MATH } 1341 \\ & \text { (FQ) } \end{aligned}$ | 4 | $\begin{aligned} & \text { MATH } 1342 \\ & \text { (FQ) } \end{aligned}$ | 4 Vacation | 0 Vacation | 0 |
| CHEM 1151 | 4 | PHYS 1151 <br> (ND) | 3 |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |
| ENGW 1111 <br> (WF) | 4 | PHYS 1153 | 1 |  |  |
| GE 1000 | , | GE 1502 (ER) | 4 |  |  |
| GE 1501 |  | General Elective | 4 |  |  |
|  | 17 |  | 17 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MATH 2321 <br> (FQ) | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| CIVE 2000 | 1 |  |  |  |
| CIVE 2221 | 4 |  |  |  |
| CIVE 2222 | 0 |  |  | 0 |
| CIVE 2260 | 4 |  |  |  |
| CIVE 2261 | 1 |  |  |  |
| (AD) | 4 | 0 | 0 |  |
| CIVE 2334 | 18 |  |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ECON 1115 | 4 Co-op | 0 Co-op | 0 MATH 2341 | 4 |
| or 1116 (AD, |  |  |  |  |
| SI) |  |  |  |  |
| CIVE 2320 | 4 | CIVE 2340 | 4 |  |
| CIVE 2321 | 0 | CIVE 2341 | 1 |  |
| CIVE 2331 | 4 |  |  |  |
| GE 3300 | 4 | 0 | 0 | 9 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| CIVE 2324 | 4 Co-op | 0 Co-op | O <br> General <br> elective | 4 |
| CIVE 3000 | 1 | General <br> elective | 4 |  |
| ENGW 3302 <br> (WD) | 4 |  |  |  |
| Science <br> Elective | 4 |  |  |  |
| Technical <br> Elective | 3 | 0 | 0 | 8 |

Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: | Hours


| Project <br> Elective (WI) | 4 Technical <br> Elective | 4 |
| :--- | ---: | :---: |
| General | General <br> Elective | 4 |
| Elechnical <br> Elective | General <br> Elective | 4 |
|  | 16 | 17 |

Total Hours: 134

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Major GPA Requirement

2.000 minimum required in major (CIVE) courses

## Engineering

Complete 63 semester hours in engineering as indicated below.
Code Title Hours

## Required Engineering

| CIVE 2221 | Statics and Strength of Materials | 4 |
| :--- | :--- | ---: |
| and CIVE 2222 | and Recitation for CIVE 2221 | 4 |
| CIVE 2260 | Civil Engineering Materials <br> and CIVE 2261 | and Materials and Measurements Lab |
| CIVE 2331 | Fluid Mechanics | 5 |


| CIVE 2334 | Environmental Engineering 1 |  |
| :---: | :---: | :---: |
| CIVE 3435 | Environmental Pollution Fate and Transport | 4 |
| CIVE 4534 <br> and CIVE 4535 | Environmental Engineering 2 and Lab for CIVE 4534 | 4 |
| CIVE 4765 | Senior Design Project-Environmental | 5 |
| CIVE 5300 | Environmental Engineering Laboratory | 4 |
| GE 3300 | Energy Systems: Science, Technology, and Sustainability | 4 |
| Environmental Engineering Technical Electives |  |  |
| Complete 12 semester hours from the following: |  | 12 |
| CIVE 4540 | Resource Recovery and Waste Treatment Technologies Abroad |  |
| CIVE 5250 | Organic Pollutants in the Environment |  |
| 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 5536 | Hydrologic Engineering |  |
| CIVE 5699 | Special Topics in Civil Engineering (Groundwater and Contamination) |  |
| CIVE 5699 | Special Topics in Civil Engineering (Coastal Dynamic and Design Practice) |  |
| CIVE 5699 | Special Topics in Civil Engineering (Climate Science and Technology Adaptation and Policy) |  |
| 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 |  |
| 3 semester hours from the following course count toward the engineering requirement: |  | 3 |
| GE 1501 | Cornerstone of Engineering 1 |  |
| 3 semester hours from the following course count toward the engineering requirement: |  | 3 |
| GE 1502 | Cornerstone of Engineering 2 |  |
| Professional Development |  |  |
| Code | Title |  |
| Professional Development |  |  |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| CIVE 2000 | Introduction to Engineering Co-op Education | 1 |
| CIVE 3000 | Professional Issues in Engineering | 1 |

Additional Required Courses

The remaining credit from the following course will apply to the professional development area:

GE $1501 \quad$ Cornerstone of Engineering 1

## Supporting Courses: Mathematics/Science

Complete 35 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 <br> and PHYS 1152 <br> and PHYS 1153 | Physics for Engineering 1 <br> and Lab for PHYS 1151 <br> and Interactive Learning Seminar for PHYS 1151 | 5 |

## Science Elective (Earth)

Complete one of the following: 4-5

| ENVR 1110 | Global Climate Change |
| :--- | :--- |
| ENVR 1112 | Environmental Geology |
| ENVR 1120 | Oceans and Coasts |
| ENVR 1200 | Dynamic Earth |
| ENVR 1202 | History of Earth and Life |
| ENVR 2310 | Earth Materials |
| ENVR 3125 | Global Oceanic Change |

## Supplemental Credit

3 semester hours from the following course count toward the 3 mathematics/science requirement:

CIVE $3464 \quad$ Probability and Engineering Economy for Civil Engineering
1 semester hour from the following course counts toward the mathematics/science requirement:

CIVE 2335 Environmental Engineering Chemistry
1 semester hour from the following course counts toward the mathematics/science requirement:

CIVE $3430 \quad$ Engineering Microbiology and Ecology
1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1502 Cornerstone of Engineering 2

## Writing Requirement and NUpath Courses

Code Title
Hours

## Writing

A grade of $C$ or higher is required:

| ENGW 1111 | First-Year Writing | 4 |
| :--- | :--- | :--- |
| ENGW 3302 | Advanced Writing in the Technical | 4 |

NUpath Requirements through General Electives

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.

## Required General Electives

Code Title Hours
Complete six academic, nonremedial, nonrepetitive courses,
each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering

 DegreeStudents in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## 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

Year 2


Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours | Summer 2 H | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 CIVE 3430 | 4 Science elective (Earth) | 4 | Co-op | 0 |
|  | CIVE 3435 | 4 General elective |  | ENGW 3302 <br> (WD) | 4 |
|  | CIVE 3464 | 4 |  | Students <br> will need <br> to take <br> Advanced <br> Writing <br> in the <br> Professions <br> online <br> during <br> this co- <br> op. |  |
|  | CIVE 4534 | 3 |  |  |  |
|  | CIVE 4535 | 1 |  |  |  |
|  | 0 | 16 | 8 |  | 4 |

Year 4

| Fall | Hours | Spring |
| :--- | ---: | ---: |
| Co-op | 0 CIVE 3000 | 1 |
|  | CIVE 4765 <br> (EI, WI, CE) | 5 |
|  | CIVE 5300 | 4 |
|  | Technical <br> elective | 4 |
|  | Technical <br> elective | 4 |
| 0 | 18 |  |

Total Hours: 134

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

Year 1

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 <br> (FQ) | 4 | MATH 1342 <br> (FQ) | 4 Vacation | 0 Vacation | 0 |
| CHEM 1151 |  | PHYS 1151 <br> (ND) | 3 |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |
| ENGW 1111 <br> (WF) | 4 | General elective | 4 |  |  |
|  | 17 |  | 17 | 0 | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { MATH } 2321 \\ & \text { (FQ) } \end{aligned}$ | 4 | MATH 2341 | 4 | Vacation | 0 | Co-op | 0 |
| CIVE 2221 | 4 | CIVE 2000 | 1 |  |  |  |  |
| CIVE 2222 | 0 | CIVE 2331 | 4 |  |  |  |  |
| CIVE 2260 | 4 | CIVE 2335 | 4 |  |  |  |  |
| CIVE 2261 <br> (AD) | 1 | GE 3300 | 4 |  |  |  |  |



Year 4

| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 CIVE 3000 |  | General elective | 4 | Co-op | 0 |
|  | CIVE 3464 | 4 | General elective | 4 |  |  |
|  | CIVE 4534 | 3 |  |  |  |  |
|  | CIVE 4535 | 1 |  |  |  |  |
|  | ENGW 3302 <br> (WD) | 4 |  |  |  |  |
|  | Technical elective | 4 |  |  |  |  |
|  | 0 | 17 |  | 8 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | 0 CIVE 4765 | 5 |
|  | (EI, WI, CE) |  |
|  | CIVE 5300 | 4 |
|  | Technical <br> elective | 4 |
|  | General <br> elective | 4 |
| 0 | 17 |  |

Total Hours: 134

## Environmental Engineering and Health Science, BS

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 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum required in major (CIVE) courses

## Engineering

 Complete 65 semester hours in engineering as indicated below.| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Engineering |  |  |
| CIVE 2221 and CIVE 2222 | Statics and Strength of Materials and Recitation for CIVE 2221 | 4 |
| CIVE 2260 and CIVE 2261 | Civil Engineering Materials and Materials and Measurements Lab | 5 |
| CIVE 2331 | Fluid Mechanics | 4 |
| CIVE 2334 | Environmental Engineering 1 | 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 | Environmental Engineering 2 and Lab for CIVE 4534 | 4 |
| CIVE 4765 | Senior Design Project-Environmental | 5 |
| CIVE 5300 | Environmental Engineering Laboratory | 4 |
| GE 3300 | Energy Systems: Science, Technology, and Sustainability | 4 |
| Environmental Engineering Technical Electives |  |  |
| Complete 12 se | hours from the following: | 12 |


| CIVE 5250 | Organic Pollutants in the Environment |
| :--- | :--- |
| CIVE 5260 | Environmental Fluid Mechanics |
| CIVE 5271 | Solid and Hazardous Waste <br> Management |
| CIVE 5275 | Life Cycle Assessment of Materials, <br> Products, and Infrastructure |
| CIVE 5280 | Remote Sensing of the Environment |
| CIVE 5536 | Hydrologic Engineering <br> CIVE 56ecial Topics in Civil Engineering <br> (Groundwater and Contamination) |
| CIVE 5699 | Special Topics in Civil Engineering <br> (Coastal Dynamic and Design Practice) |
| CIVE 5699 | Special Topics in Civil Engineering <br> (Climate Science and Technology |

## Supplemental Credit

1 semester hour from the following course counts toward the

| CIVE 3464 | Probability and Engineering Economy <br> for Civil Engineering |
| :--- | :--- | :--- |
| 3 semester hours from the following course count toward the <br> engineering requirement: | 3 |
| GE 1501 | Cornerstone of Engineering 1 |
| 3 semester hours from the following course count toward the |  |
| engineering requirement: | 3 |
| GE 1502 | Cornerstone of Engineering 2 |

## Professional Development

| Code | Title | Hours |
| :--- | :--- | ---: |
| Professional Development |  |  |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| CIVE 2000 | Introduction to Engineering Co-op | 1 |
| CIVE 3000 | Education | 1 |
| Additional Required Courses | Professional Issues in Engineering | 1 |

Writing Requirement and NUpath Courses

| Code Title Hours |  |
| :--- | :--- | :--- |
| Writing |  |

A grade of $C$ or higher is required:

| ENGW 1111 | First-Year Writing | 4 |
| :---: | :--- | ---: |
| ENGW 3302 | Advanced Writing in the Technical | 4 |
| or ENGW 3315 | Professions Interdisciplinary Advanced Writing in the <br>  Disciplines |  |

## NUpath Requirements through General Electives

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.

## Health Sciences Major Requirement

The remaining credit from the following course will apply to
the professional development area:

GE 1501 Cornerstone of Engineering 1

## Supporting Courses: Mathematics/Science

Complete 33 semester hours in mathematics and science as indicated below.
$\left.\begin{array}{llr}\text { Code } & \text { Title } & \text { Hours } \\ \text { Required Mathematics/Science }\end{array} \quad \begin{array}{l}\text { General Chemistry for Engineers } \\ \text { CHEM 1151 } \\ \text { and CHEM 1153 }\end{array} \quad \begin{array}{ll}\text { and Recitation for CHEM 1151 }\end{array}\right)$

Complete one of the following:

| ENVR 1110 | Global Climate Change |
| :--- | :--- |
| ENVR 1112 | Environmental Geology |
| ENVR 1120 | Oceans and Coasts |
| ENVR 1200 | Dynamic Earth |
| ENVR 1202 | History of Earth and Life |
| ENVR 2310 | Earth Materials |
| ENVR 3125 | Global Oceanic Change |

## Supplemental Credit

3 semester hours from the following course count toward the 3 mathematics/science requirement:

| CIVE 3464 | Probability and Engineering Economy |
| :--- | :--- |
| for Civil Engineering |  |

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1502
Cornerstone of Engineering 2

| Code | Title | Hours |
| :--- | :--- | ---: |
| HLTH 5450 | Healthcare Research | 4 |
| PHTH 4120 | Global Perspectives on Discrimination <br> and Health | 4 |
| PHTH 5214 | Environmental Health | 3 |
| PHTH 1260 | The American Healthcare System | 4 |
| PHTH 2210 | Foundations of Biostatistics | 4 |
| PHTH 2350 | Community and Public Health | 4 |
| PHTH 2414 | Environmental Health | 4 |
| PHTH 2515 | Healthcare Policy and Administration | 4 |
| PHTH 4540 | Health Education and Program | 4 |

## Integrative Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| CIVE 4765 | Senior Design Project-Environmental | 5 |

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

145 total semester hours required

## Plan of Study

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | ---: | :---: | :---: |
| MATH 1241 | 4 MATH 1342 | 4 PHTH 1260 | 4 Vacation |  |
| CHEM 1151 <br> and <br> CHEM 1153 | 4 GE 1502 | 4 MATH 2321 | 4 |  |
| GE 1501 | 4 <br> 4 PHYS 1151 <br> and <br> PHYS 1152 <br> and <br> PHYS 1153 | 5 |  |  |
| GE 1000 | 1 PHTH 2210 | 4 |  |  |


| ENGW 1111 | 4 |  |  |  |
| :--- | ---: | ---: | :--- | :--- |
|  | 17 | 17 | 8 | 0 |

$\left.\begin{array}{lcrcr}\text { Year 2 } & & & & \\ \text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { CIVE 2334 } & 4 \text { PHTH 2414 } & 4 \text { PHTH 2350 } & 4 \text { Co-op }\end{array}\right]$

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | ---: |
| Co-op | CIVE 3435 | 4 GE 3300 | 4 Co-op |  |
|  | Technical | 4 Science |  |  |
| elective | elective | 4 |  |  |
|  | PHTH 4540 | 4 |  |  |
|  | HLTH 5450 | 4 |  | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | ---: |
| Co-op | CIVE 3000 | 1 Vacation | Co-op |  |
|  | CIVE 3464 | 4 | ENGW 3302 |  |$\quad 4$

Year 5

| Fall | Hours Spring | Hours |
| :--- | :--- | ---: |
| Co-op | Technical <br> elective | 4 |
|  | CIVE 5300 | 4 |
|  | PHTH 5214 | 3 |
|  | CIVE 4765 | 5 |
| 0 | 16 |  |

Total Hours: 145

## 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 $(\mathrm{SH})$ 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.

- Audience: This minor in architectural engineering is designed for any major and is open to any undergraduate student at the university.
- 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 | Statics and Strength of Materials | 4 |
| and CIVE 2222 | and Recitation for CIVE 2221 |  |
| ARCH 5210 | Environmental Systems | 4 |
| and ARCH 5211 | and Recitation for ARCH 5210 |  |

## Electives

## ARCHITECTURE ELECTIVES

Code Title Hours

Complete one of the following: 4

| ARCH 2330 <br> and ARCH 2331 | Architecture, Modernity, and the City, <br> 1800 to 1910 <br> and Recitation for ARCH 2330 |
| :--- | :--- |
| ARCH 2340 <br> and ARCH 2341 | Architecture, Modernity, and the City, <br> 1910 to 1980 <br> and Recitation for ARCH 2340 |
| ARCH 5220 | Integrated Building Systems |
| LARC 2230 | Site Materials and Methods <br> LARC 2240Sustainable Site Construction and <br> Detailing |

## ENGINEERING ELECTIVES

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one or two of the following: | 8 |  |
| CIVE 2320 <br> and CIVE 2321 | Structural Analysis 1 <br> and Recitation for CIVE 2320 |  |
| CIVE 2324 | Reinforced Concrete Design |  |
| CIVE 3425 | Steel Design |  |
| CIVE 5522 | Structural Analysis 2 |  |
| CIVE 5699 | Special Topics in Civil Engineering <br> (Structural Systems) |  |


| CIVE 5699 | Special Topics in Civil Engineering <br> (Vibration-based Structural Health <br> Monitoring) |
| :--- | :--- |
| CIVE 5699 | Special Topics in Civil Engineering <br> (Climate Science and Technology <br> Adaptation and Policy) |
| SBSY 5100 | Sustainable Design and Technologies in <br> Construction |
| SBSY 5200 | Sustainable Engineering Systems for <br> Buildings |
| SBSY 5300 | Information Systems for Integrated <br> Project Delivery |
| If only one course was taken above, complete one course |  |
| from the following: | Energy Systems: Science, Technology, <br> GE 3300 <br> and Sustainability |
| Soil Mechanics <br> and CIVE 2341 2340 | and Lab for CIVE 2340 |
| CIVE 4542 Foundation Engineering |  |
| CIVE 5275 | Life Cycle Assessment of Materials, <br> 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 |
| :--- | :--- | ---: |
| Complete four of the following: | 16 |  |
| CIVE 2221 | Statics and Strength of Materials |  |
| CIVE 2260 <br> and CIVE 2261 | Civil Engineering Materials <br> and Materials and Measurements Lab |  |
| CIVE 2320 | Structural Analysis 1 |  |
| CIVE 2324 | Reinforced Concrete Design |  |
| CIVE 2331 | Fluid Mechanics |  |
| CIVE 2334 | Environmental Engineering 1 |  |
| CIVE 2335 | Environmental Engineering Chemistry |  |
| CIVE 2340 | Soil Mechanics |  |
| and CIVE 2341 | and Lab for CIVE 2340 |  |
| CIVE 3425 | Steel Design |  |
| CIVE 3430 | Engineering Microbiology and Ecology |  |
| CIVE 3435 | Environmental Pollution Fate and |  |


| CIVE 3464 | Probability and Engineering Economy for Civil Engineering |
| :---: | :---: |
| CIVE 4534 | Environmental Engineering 2 |
| CIVE 4540 | Resource Recovery and Waste Treatment Technologies Abroad |
| CIVE 4542 | Foundation Engineering |
| CIVE 4554 | Highway Engineering |
| CIVE 4566 | Design for Sustainable Transportation: Netherlands |
| CIVE 4575 | Construction Management |
| CIVE 4777 | Climate Hazards and Resilient Cities 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 5250 | Organic Pollutants in the Environment |
| 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 5300 | Environmental Engineering Laboratory |
| CIVE 5373 | Transportation Systems: Analysis and Planning |
| CIVE 5376 | Traffic Engineering and Sustainable Urban Street Design |
| CIVE 5522 | Structural Analysis 2 |
| CIVE 5536 | Hydrologic Engineering |
| CIVE 5699 | Special Topics in Civil Engineering (Climate Science and Technology Adaptation and Policy) |
| CIVE 5699 | Special Topics in Civil Engineering (Groundwater and Contamination) |
| CIVE 5699 | Special Topics in Civil Engineering (Coastal Dynamics and Design Practice) |
| CIVE 5699 | Special Topics in Civil Engineering (Structural Systems) |
| 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 5300 | Information Systems for Integrated Project Delivery |

## GPA Requirement

2.000 GPA required in the minor

## Electrical and Computer Engineering

Website (http://www.ece.neu.edu)
Srinivas Tadigadapa, PhD
Professor and Chair

## Waleed Meleis, PhD

Associate Professor and Associate 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. Course work 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. $B S, M S$, and PhD degrees are offered in both electrical and computer engineering.

## 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.

## Overview of Programs Offered

Please see the programs tab (p. 398) 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 program educational objectives of the Bachelor of Science programs are that graduates should:

1. Obtain successful careers in electrical and computer engineering and related disciplines through substantial technical contributions, continued employment, professional recognition, advancement in responsibilities, a professional network, and personal satisfaction.
2. Pursue advanced study such as graduate study in engineering or related disciplines, if desired.

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. Many courses are taught in one of the four computer-based teaching classrooms. Two introductory electrical and computer engineering courses meet in integrated lab-classrooms 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.

## 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 (BSCompE)

- Computer Engineering (p. 399)
- Computer Engineering and Physics (p. 402)
- Computer Engineering and Computer Science (p. 290)


## Bachelor of Science in Electrical Engineering (BSEE)

- Electrical Engineering (p. 408)
- Electrical Engineering and Physics (p. 411)
- Electrical Engineering and Music with Concentration in Music Technology (p. 414)


## Combined Major (BSEE or BSCompE)

- Electrical and Computer Engineering (p. 415)


## Minors

- Biomedical Engineering (p. 418)
- Computer Engineering (p. 419)
- Computational Data Analytics (p. 419)
- Electrical Engineering (p. 420)
- Robotics (p. 420)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 433)

## Computer Engineering, BSCompE

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 BSCompE 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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.

## Major GPA Requirement

2.000 minimum GPA required in EECE courses

## Engineering

Complete 56 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| EECE 2150 | Circuits and Signals: Biomedical Applications | 5 |
| EECE 2160 | Embedded Design: Enabling Robotics | 4 |
| Computer Engineering Fundamentals |  |  |
| EECE 2322 <br> 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 |
| Electrical Engineering Fundamentals |  |  |
| 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 <br> 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 |  |
| Capstone Courses |  |  |
| EECE 4790 | Electrical and Computer Engineering Capstone 1 | 4 |
| EECE 4792 | Electrical and Computer Engineering Capstone 2 | 4 |

EECE Technical Electives
Two CS courses from the following approved list may be taken toward the EECE technical elective requirement.
Complete four of the following:

| EECE 2750 | Enabling Engineering |
| :--- | :--- |
| EECE 4991 | Research |
| EECE 4992 | Directed Study |
| EECE 4993 | Independent Study |
| GE 4608 | Nanotechnology in Engineering |
| ENGR 5670 | Sustainable Energy. Materials, <br> Conversion, Storage, and Usage |

EECE 2412 to EECE 2530
EECE 3324 to EECE 4698
EECE 5155 to EECE 5698

| CS 2550 | Foundations of Cybersecurity |
| :--- | :--- |
| CS 3200 | Database Design |
| CS 3500 | Object-Oriented Design |
| CS 4850 | Building Game Engines |
| CS 3540 to CS 3800 |  |
| CS 4100 to CS 4770 |  |
| IS 4200 to IS 4700 | 3 |
| Supplemental Credit |  |
| semester hours from the following course count toward the |  |

engineering requirement:
GE 1501 Cornerstone of Engineering 1
3 semester hours from the following course count toward the 3 engineering requirement:

GE 1502 Cornerstone of Engineering 2

## Professional Development

Code Title Hours

## Required Professional Development

| GE 1000 | Introduction to the Study of Engineering | 1 |
| :--- | :--- | :---: |
| EECE 2000 | Introduction to Engineering Co-op | 1 |
| EECE 3000 | Education | 1 |

Additional Required Courses

The remaining credit from the following course will apply to the professional development area:
GE $1501 \quad$ Cornerstone of Engineering 1

## Supporting Courses: Mathematics/Science Requirement

Complete 35 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Mathematics/Science |  |  |
| CHEM 1151 and CHEM 1153 | General Chemistry for Engineers and Recitation for CHEM 1151 | 4 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 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 <br> and Lab for PHYS 1155 <br> and Interactive Learning Seminar for <br> PHYS 1155 | 5 |
| Supplemental Credit |  |  |
| 1 semester hour from the following course counts toward the mathematics/science requirement: |  | 1 |
| GE 1502 | Cornerstone of Engineering 2 |  |

## 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 | 4 |
| or ENGW 3315 | Professions <br> Interdisciplinary Advanced Writing in the <br> Disciplines |  |

## Required General Electives

## Code <br> Title

Hours
Complete seven academic, nonremedial, nonrepetitive
28 courses, each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

132 total semester hours required

1 Plan of Study
Four Years, Two Co-ops in Summer 2/Fall
Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 <br> (FQ) | 4 | MATH 1342 <br> (FQ) | 4 | General elective | 4 | Vacation | 0 |
| CHEM 1151 |  | PHYS 1151 <br> (ND) | 3 | General elective | 4 |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |  |
| $\begin{aligned} & \text { ENGW } 1111 \\ & \text { (WF) } \end{aligned}$ | 4 | General elective | 4 |  |  |  |  |
|  | 17 |  | 17 |  | 8 |  | 0 |

Year 2


Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGW 3302 (to be taken online) | 4 | CE <br> fundamentals | 4-5 | EECE 4790 | 4 | Co-op | 0 |
| Co-op |  | EE <br> fundamentals |  | EECE <br> technical elective | 4 |  |  |
|  |  | EECE 3000 | 1 |  |  |  |  |
|  |  | General elective | 4 |  |  |  |  |
|  |  | EECE <br> technical elective | 4 |  |  |  |  |
|  | 4 |  | 17-19 |  | 8 |  | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 EECE 4792 | 4 |
|  | EECE <br> technical <br> elective | 4 |
|  | EECE <br> technical <br> elective <br> General <br> elective | 4 |
| 0 | 16 |  |

Total Hours: 131-135

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 (FQ) | 4 | MATH 1342 <br> (FQ) |  | General elective | 4 | Vacation | 0 |
| CHEM 1151 | 4 | PHYS 1151 <br> (ND) | 3 | General elective | 4 |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |  |
| ENGW 1111 <br> (WF) |  | General elective | 4 |  |  |  |  |
|  | 17 |  | 17 |  | 8 |  | 0 |


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| MATH 2341 | 4 Co-op | 0 Co-op | 0 MATH 3081 | 4 |
| PHYS 1155 | 3 |  | General <br> elective | 4 |
| (ND) |  |  |  |  |

PHYS $1156 \quad 1$
(AD)

| PHYS 1157 | 1 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| EECE 2160 | 4 |  |  |  |
| EECE 2000 | 1 |  |  |  |
| General <br> elective | 4 |  | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| EECE 2150 | 5 ENGW 3302 <br> (to be taken <br> online) | 4 Co-op | 0 EECE 4790 |  |$\quad 4$

Year 4


| EECE <br> technical <br> elective | 4 General <br> elective | 4 |
| :--- | ---: | :--- |
|  | $16-19$ | 16 |
| Total Hours: 131-135 |  |  |

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

Year 1

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 <br> (FQ) |  | MATH 1342 (FQ) | 4 Vacation | 0 Vacation | 0 |
| CHEM 1151 |  | PHYS 1151 <br> (ND) | 3 |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |
| ENGW 1111 <br> (WF) |  | General elective | 4 |  |  |
|  | 17 |  | 17 | 0 | 0 |

Year 2
$\left.\begin{array}{lcccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { MATH 2341 } & 4 \text { EECE 2000 }\end{array} \quad \begin{array}{l}1 \text { Vacation }\end{array}\right)$

| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | CE <br> fundamentals | 5 | ENGW 3302 <br> (WD) | 4 | Co-op | 0 |
|  |  | CE <br> fundamentals | 4 | General elective | 4 |  |  |
|  |  | EE <br> fundamentals | 4 |  |  |  |  |
|  |  | General elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 EECE 3000 | 1 <br> EECE 4790 <br> (EI, WI, CE) | 4 Co-op | 0 |


|  | General <br> elective | 4 | 8 | 0 |
| :--- | :---: | :---: | :---: | ---: |
| Year 5 | 0 | 17 | Hours |  |
| Fall | Hours Spring <br> 0 EECE 4792 <br> (EI, WI, CE) | 4 |  |  |
| EECE <br> technical <br> elective | 4 |  |  |  |
| General <br> elective | 4 |  |  |  |
| 0 | 12 |  |  |  |

Total Hours: 132

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 <br> (FQ) | 4 | MATH 1342 <br> (FQ) | 4 | Vacation | 0 Vacation | 0 |
| CHEM 1151 | 4 | PHYS 1151 <br> (ND) | 3 |  |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |
| ENGW 1111 (WF) | 4 | General elective | 4 |  |  |  |
|  | 17 |  | 17 |  | 0 | 0 |


| Year 2 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours | Summer 1 | Hours |  | Hours |
| MATH 2341 | 4 Co-op |  | Co-op |  | Vacation |  |
| EECE 2000 | 1 |  |  |  |  |  |
| EECE 2160 | 4 |  |  |  |  |  |
| PHYS 1155 <br> (ND) | 3 |  |  |  |  |  |
| PHYS 1156 <br> (AD) | 1 |  |  |  |  |  |
| PHYS 1157 | 1 |  |  |  |  |  |
| General elective | 4 |  |  |  |  |  |
|  | 18 | 0 |  | 0 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CS 1800 <br> (FQ) | 4 Co-op | Co-op | ENGW 3302 <br> (WD) | 4 |
| CS 1802 | 1 |  | General <br> elective | 4 |
| EECE 2150 | 5 |  |  |  |
| CE |  |  |  |  |
| fundamentals |  |  |  |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| EECE 3000 | 1 Co-op | Co-op | EECE 4790 <br> (EI, WI, CE) | 4 |
| CE <br> fundamentals | 4 | EECE <br> technical <br> elective | 4 |  |
| EE <br> fundamentals | 4 |  |  |  |
| CE <br> fundamentals | 5 |  |  | 8 |
| General <br> elective | 4 | 0 | 0 | 8 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | :---: |
| EECE 4792 <br> (EI, WI, CE) | EECE <br> technical <br> elective | 4 |
| MATH 3081 <br> (AD) | 4 EECE <br> technical <br> elective | 4 |
| EECE <br> technical <br> elective | General <br> elective | 4 |
| General <br> elective | 4 | 12 |

Total Hours: 132

## Computer Engineering and Physics, BSCompE

This intercollege dual 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum GPA required in EECE courses

Engineering

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| EECE 2150 | Circuits and Signals: Biomedical Applications | 5 |
| EECE 2160 | Embedded Design: Enabling Robotics | 4 |
| Computer Engineering Fundamentals |  |  |
| EECE 2322 <br> 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 |
| Electrical Engineering Fundamentals |  |  |
| 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 <br> and EECE 2413 | Fundamentals of Electronics and Lab for EECE 2412 |  |
| EECE 2520 | Fundamentals of Linear Systems |  |
| EECE 2530 <br> and EECE 2531 | Fundamentals of Electromagnetics and Lab for EECE 2530 |  |
| Capstone Courses |  |  |
| EECE 4790 | Electrical and Computer Engineering Capstone 1 | 4 |
| EECE 4792 | Electrical and Computer Engineering Capstone 2 | 4 |
| Technical Electives |  |  |
| One CS course from the following approved list may be taken toward the EECE technical elective requirement: |  | 8 |
| EECE 2750 | Enabling Engineering |  |
| EECE 4991 | Research |  |
| EECE 4992 | Directed Study |  |
| EECE 4993 | Independent Study |  |
| EECE 2412 to EECE 2530 |  |  |
| EECE 3324 to EECE 4698 |  |  |
| EECE 5155 to EECE 5698 |  |  |
| ENGR 5670 | Sustainable Energy: Materials, Conversion, Storage, and Usage |  |
| GE 4608 | Nanotechnology in Engineering |  |
| CS 2550 | Foundations of Cybersecurity |  |
| CS 3200 | Database Design |  |
| CS 3500 | Object-Oriented Design |  |
| CS 4850 | Building Game Engines |  |

CS 3540 to CS 3800
CS 4100 to CS 4770
IS 4200 to IS 4700

## Supplemental Credit

3 semester hours from the following course count toward the 3 engineering requirement:

GE $1501 \quad$ Cornerstone of Engineering 1
3 semester hours from the following course count toward the 3
engineering requirement:
GE $1502 \quad$ Cornerstone of Engineering 2

## Mathematics/Science

Complete 63 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Mathematics/Science |  |  |
| 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 1161 and PHYS 1162 | Physics 1 and Lab for PHYS 1161 |  |
| PHYS 1151 <br> and PHYS 1152 <br> and PHYS 1153 | Physics for Engineering 1 <br> and Lab for PHYS 1151 <br> and Interactive Learning Seminar for PHYS 1151 |  |
| Complete one of the following: |  | 5 |
| PHYS 1165 and PHYS 1166 | Physics 2 and Lab for PHYS 1165 |  |
| PHYS 1155 <br> and PHYS 1156 <br> and PHYS 1157 | Physics for Engineering 2 <br> and Lab for PHYS 1155 <br> and Interactive Learning Seminar for PHYS 1155 |  |
| PHYS 2303 | Modern Physics | 4 |
| PHYS 2305 | Thermodynamics and Statistical Mechanics | 4 |
| PHYS 3600 | Advanced Physics Laboratory | 4 |
| PHYS 3602 | Electricity and Magnetism | 4 |
| PHYS 5115 | Quantum Mechanics | 4 |

## Advanced Physics Elective

Complete one of the following:
MATH $4606 \quad$ Mathematical and Computational
Methods for Physics

PHYS 3600 to PHYS 7999

## Supplemental Credit

1 semester hour from the following course counts toward the 1 mathematics/science requirement:

## Professional Development

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Professional Development |  |  |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| EECE 2000 | Introduction to Engineering Co-op <br> Education | 1 |
| EECE 3000 | Professional Issues in Engineering | 1 |
| Additional Required Courses |  |  |
| One credit hour from the following course counts toward the <br> engineering requirement: | 1 |  |

GE 1501 Cornerstone of Engineering 1

## Integrative Requirement

The following course, which counts toward the engineering requirement above, is an integrative course:

| Code | Title | Hour |
| :--- | :--- | :--- |
| EECE 4790 | Electrical and Computer Engineering |  |
|  | Capstone 1 |  |

## Writing Requirement and NUpath Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Writing |  |  |
| A grade of C or higher is required: |  |  |
| ENGW 1111 | First-Year Writing | 4 |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions | 4 |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |  |

## NUpath Requirements through General Electives

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.

## Required General Electives

Complete two academic, nonremedial, nonrepetitve courses, each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

132 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 |
| (FQ) | (FQ) |  |  |  |
| CHEM 1151 | 4 PHYS 1165 | 4 |  |  |
|  |  |  |  |  |


| CHEM 1153 | 0 PHYS 1166 <br> (AD) | 1 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| PHYS 1161 <br> (ND) | 4 GE 1502 (ER) | 4 |  |  |
| PHYS 1162 <br> (AD) | 1 |  |  |  |
| GE 1000 | 1 |  |  |  |
| GE 1501 | 4 |  |  |  |
| ENGW 1111 <br> (WF) | 4 |  |  |  |
|  | 22 | 13 | 0 | 0 |

Year 2
$\left.\begin{array}{lcccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { MATH 2321 } & 4 \text { PHYS 2305 } \\ \text { (FQ) }\end{array} \quad \begin{array}{c}4 \\ \text { (ND) }\end{array}\right)$

Year 3

| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 PHYS 3602 <br> (ND) |  | $\begin{aligned} & \text { PHYS } 3600 \\ & (N D, A D<W I) \end{aligned}$ | 4 | Co-op | 0 |
|  | EE <br> fundamentals | 4 | General elective | 4 |  |  |
|  | CE <br> fundamentals | 5 |  |  |  |  |
|  | ENGW 3302 <br> (WD) | 4 |  |  |  |  |
|  | 0 | 17 |  | 8 |  | 0 |

Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | PHYS 5115 <br> (ND, FQ) |  | EECE 4790 <br> (EI, WI, CE) | 4 | Co-op | 0 |
|  |  | EECE 3000 |  | EECE <br> technical elective | 4 |  |  |
|  |  | CE <br> fundamentals | 4 |  |  |  |  |
|  |  | MATH 3081 <br> (AD) | 4 |  |  |  |  |
|  |  | General elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

Year 5

| Fall | Hours | Spring |
| :--- | ---: | ---: |
| Co-op | 0 | Hours |
|  | (EI, WI, CE) |  |
|  | EECE | 4 |
|  | technical <br> elective |  |
|  |  |  |


|  | PHYS <br> advanced <br> elective |
| :--- | :--- |
| 0 | 12 |
| Total Hours: 132 |  |

Total Hours: 132

## Computer Engineering and Computer Science, BSCompE

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum GPA in EECE courses

## Engineering

Complete 48 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses | Circuits and Signals: Biomedical | 5 |
| EECE 2150 | Applications |  |
| EECE 2160 | Embedded Design: Enabling Robotics | 4 |

Computer Engineering Fundamentals

| EECE 2322 <br> and EECE 2323 | Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322 | 5 |
| :---: | :---: | :---: |
| EECE 2540 | Fundamentals of Networks | 4 |
| CS 3000 | Algorithms and Data | 4 |
| Electrical Engineering Fundamentals |  |  |
| Complete one of the following: |  | 4 |
| EECE 2412 <br> 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 |  |
| Capstone Courses |  |  |
| EECE 4790 | Electrical and Computer Engineering Capstone 1 | 4 |
| EECE 4792 | Electrical and Computer Engineering Capstone 2 | 4 |

EECE Technical Electives
Complete two of the following: 8

| EECE 2750 | Enabling Engineering |
| :--- | :--- |
| EECE 4991 | Research |
| EECE 4992 | Directed Study |
| EECE 4993 | Independent Study |
| GE 4608 | Nanotechnology in Engineering |
| ENGR 5670 | Sustainable Energy. Materials, <br> Conversion, Storage, and Usage |

EECE 2412 to EECE 2530
EECE 3324 to EECE 4698
EECE 5155 to EECE 5698
CS/IS Technical Electives
Complete two of the following:

| CS 2550 | Foundations of Cybersecurity |
| :--- | :--- |
| CS 3200 | Database Design |
| CS 3540 | Game Programming |
| CS 3700 | Networks and Distributed Systems |
| CS 3740 | Systems Security |
| CS 3800 | Theory of Computation |
| CS 4850 | Building Game Engines |
| CS 4100 to CS 4410 |  |
| CS 4510 to CS 4650 |  |
| CS 4740 to CS 4760 | 3 |
| IS 4200 to IS 4700 |  |
| Supplemental Credit |  |
| 3 semester hours from the following course count toward the |  |

engineering requirement:

| GE 1501 Cornerstone of Engineering 1 |  |
| :---: | :---: |
| 3 semester hours from the following course count toward the | 3 |

engineering requirement:
GE 1502 Cornerstone of Engineering 2

## Computer Science Requirements

Code Title
Computer Science Introductory Courses
CS $2500 \quad$ Fundamentals of Computer Science $1 \quad 5$
and CS 2501 and Lab for CS 2500

Hours

| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | Logic and Computation and Lab for CS 2800 | 5 |
| Computer Science Upper-Level Courses |  |  |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 | 4 |

## Professional Development

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Professional Development |  |  |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| EECE 2000 | Introduction to Engineering Co-op | 1 |
| EECE 3000 | Education |  |

## Additional Required Courses

The remaining credit from the following course will apply to the professional development area:

$$
\text { GE } 1501 \quad \text { Cornerstone of Engineering } 1
$$

## Integrative Courses

The following courses are taken in the major and count toward the integrative requirement:

| Code | Title | Hours |
| :--- | :--- | ---: |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| MATH 1342 | Calculus 2 for Science and Engineering | 4 |
| MATH 3081 | Probability and Statistics | 4 |
| CS 1800 | Discrete Structures | 4 |
| PHYS 1151 | Physics for Engineering 1 | 4 |
| and PHYS 1152 | and Lab for PHYS 1151 |  |
| EECE 4790 | Electrical and Computer Engineering | 4 |
| EECE 4792 | Capstone 1 |  |
|  | Electrical and Computer Engineering <br> Capstone 2 | 4 |

## Supporting Courses: Mathematics/Science

Complete 35 semester hours in mathematics and science as indicated below.

| Code | Titl | Hours |
| :---: | :---: | :---: |
| Required Mathematics/Science |  |  |
| CHEM 1151 <br> and CHEM 1153 | General Chemistry for Engineers and Recitation for CHEM 1151 | 4 |
| CS 1800 <br> 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 <br> and Lab for PHYS 1151 <br> and Interactive Learning Seminar for PHYS 1151 | 5 |

\(\left.$$
\begin{array}{lll}\begin{array}{ll}\text { PHYS 1155 } \\
\text { and PHYS 1156 } \\
\text { and PHYS 1157 }\end{array}
$$ \& \begin{array}{l}Physics for Engineering 2 <br>
and Lab for PHYS 1155 <br>
and Interactive Learning Seminar for <br>

PHYS 1155\end{array} \& 5\end{array}\right]\)| Supplemental Credit |
| :--- |

## Writing Requirements and NUpath Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Writing |  |  |
| A grade of C or higher is required: | 4 |  |
| ENGW 1111 | First-Year Writing | 4 |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions <br> or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## NUpath Requirements through General Electives

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.

## Required General Electives

## Code Title Hours <br> Complete two academic, nonremedial, nonrepetitve courses, 8 each equivalent to 4 semester hours. <br> Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

139 total semester hours required

## Plan of Study <br> Five Years, Three Co-ops in Summer 2/Fall



Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| MATH 2341 | 4 EECE 2160 | 4 Vacation | 0 Co-op | 0 |


| PHYS 1155 <br> (ND) |  | $\begin{aligned} & \text { CS } 2510 \text { (ND, } \\ & \text { AD) } \end{aligned}$ | 4 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PHYS 1156 <br> (AD) | 1 | CS 2511 | 1 |  |  |
| PHYS 1157 | 1 | CS 2800 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \text { (ND, } \\ & \text { FQ) } \end{aligned}$ | 4 | CS 2801 | 1 |  |  |
| CS 2501 | 1 | EECE 2000 | 1 |  |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { (FQ) } \end{aligned}$ | 4 | General elective | 4 |  |  |
| CS 1802 | 1 |  |  |  |  |
|  | 19 |  | 19 | 0 | 0 |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | 0 EECE 2150 | 5 ENGW 3302 <br> (WD) | 4 Co-op | 0 |


| Year 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | EECE 3000 | 1 | EECE 4790 <br> (EI, WI, CE) | 4 | Co-op | 0 |
|  |  | CE <br> fundamental course | 4 | CS 3000 | 4 |  |  |
|  |  | EE <br> fundamental course | 4 |  |  |  |  |
|  |  | MATH 3081 <br> (AD) | 4 |  |  |  |  |
|  |  | CCIS <br> Technical Elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |


| Year 5 |  |  |
| :--- | :--- | ---: |
| Fall | Hours Spring | Hours |
| Co-op | EECE 4792 <br> (EI, WI, CE) | 4 |
|  | EECE <br> technical <br> elective | 4 |
|  | EECE <br> technical <br> elective | 4 |
|  | CS 4500 (WI) | 4 |
|  | CS 4501 | 0 |

[^10]
## Five Years, Three Co-ops in Spring/Summer 1

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { MATH } 1341 \\ & \text { (FQ) } \end{aligned}$ |  | MATH 1342 <br> (FQ) | 4 | Vacation | 0 | Vacation | 0 |
| CHEM 1151 |  | PHYS 1151 <br> (ND) | 3 |  |  |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |  |
| $\begin{aligned} & \text { ENGW } 1111 \\ & \text { (WF) } \end{aligned}$ | 4 | General elective | 4 |  |  |  |  |
|  | 17 |  | 17 |  | 0 |  | 0 |


| Year 2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| MATH 2341 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| PHYS 1155 <br> (ND) | 3 |  |  |  |
| PHYS 1156 <br> (AD) | 1 |  |  |  |
| PHYS 1157 | 1 |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \text { (ND, } \\ & \text { FQ) } \end{aligned}$ | 4 |  |  |  |
| CS 2501 | 1 |  |  |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { (FQ) } \end{aligned}$ | 4 |  |  |  |
| CS 1802 | 1 |  |  |  |
| EECE 2000 | 1 |  |  |  |
|  | 20 | 0 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| EECE 2150 | 5 Co-op | 0 Co-op | 0 ENGW 3302 <br> (WD) | 4 |
| EECE 2160 | 4 |  | MATH 3081 <br> (AD) | 4 |
| $\begin{aligned} & \text { CS } 2510 \text { (ND, } \\ & \text { AD) } \end{aligned}$ | 4 |  |  |  |
| CS 2511 | 1 |  |  |  |
| CS 2800 | 4 |  |  |  |
| CS 2801 | 1 |  |  |  |
|  | 19 | 0 | 0 | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| EECE 3000 | 1 Co-op | 0 Co-op | 0 EECE 4790 <br> (EI, WI, CE) | 4 |
| CE fundamental course | 4 |  | CS 3000 | 4 |
| CE fundamental course | 5 |  |  |  |
| $\begin{aligned} & \text { CS } 3500 \text { (ND, } \\ & \text { AD) } \end{aligned}$ | 4 |  |  |  |
| CS 3650 | 4 |  |  |  |
|  | 18 | 0 | 0 | 8 |

Year 5

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { EECE } 4792 \\ & \text { (EI, WI, CE) } \end{aligned}$ |  | EECE technical elective | 4 |
| CE <br> fundamenta course | 4 | General elective | 4 |
| EE <br> fundamenta course | 4 | EECE technical elective | 4 |
| CCIS <br> Technical <br> Elective | 4 | CS 4500 (WI) | 4 |
|  |  | CS 4501 | 0 |
| 16 |  |  | 16 |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

Minimum 2.000 GPA required in EECE courses

## Engineering

Complete 59 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| EECE 2150 | Circuits and Signals: Biomedical Applications | 5 |
| EECE 2160 | Embedded Design: Enabling Robotics | 4 |
| Electrical Engineering Fundamentals |  |  |
| EECE 2412 <br> 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

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 <br> 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 |  |
| Capstone Courses |  |  |
| EECE 4790 | Electrical and Computer Engineering Capstone 1 | 4 |
| EECE 4792 | Electrical and Computer Engineering Capstone 2 | 4 |


| Electrical Engineering Technical Electives |  |  |
| :---: | :---: | :---: |
| Complete four of the following: |  | 16 |
| EECE 2322 <br> and EECE 2323 | Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322 |  |
| EECE 4991 | Research |  |
| EECE 4992 | Directed Study |  |
| EECE 4993 | Independent Study |  |
| ENGR 5670 | Sustainable Energy: Materials, Conversion, Storage, and Usage |  |
| GE 4608 | Nanotechnology in Engineering |  |

EECE 2540 to EECE 2750
EECE 3324 to EECE 3410
EECE 4512 to EECE 4698
EECE 5155 to EECE 5698

## Supplemental Credit

2 semester hours from the following course count toward the 2
engineering requirement:
EECE $3468 \quad$ Noise and Stochastic Processes
3 semester hours from the following course count toward the 3 engineering requirement:

GE $1501 \quad$ Cornerstone of Engineering 1
3 semester hours from the following course count toward the 3
engineering requirement:

GE 1502
Cornerstone of Engineering 2

| Total Hours |  | $59-60$ |
| :--- | :--- | ---: |
| Professional Development |  |  |
| Code | Title | Hours |
| Professional |  |  |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| EECE 2000 | Introduction to Engineering Co-op | 1 |
|  | Education |  |
| EECE 3000 | Professional Issues in Engineering | 1 |

Additional Required Courses
The remaining credit from the following course will apply to
the professional development area:
GE 1501 Cornerstone of Engineering 1

## Supporting Courses: Mathematics/Science

Complete 33 semester hours in mathematics and science as indicated below:
$\left.\begin{array}{llr}\text { Code } & \text { Title } & \text { Hours } \\ \text { CHEM 1151 } \\ \text { and CHEM 1153 }\end{array} \quad \begin{array}{llr}\text { General Chemistry for Engineers } \\ \text { and Recitation for CHEM 1151 }\end{array}\right)$

| EECE 3468 | Noise and Stochastic Processes |  |
| :---: | :---: | :---: |
| 1 semester hour from the following course counts toward the mathematics/science requirement: |  | 1 |
| GE 1502 | Cornerstone of Engineering 2 |  |

Writing Requirement and NUpath Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Writing |  |  |
| A grade of C or higher is required: |  |  |
| ENGW 1111 | First-Year Writing | 4 |
| ENGW 3302 | Advanced Writing in the Technical <br> or ENGW 3315 | Professions <br> Interdisciplinary Advanced Writing in the <br> Disciplines |

NUpath Requirements through Open Electives

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.

## Required General Electives

## Code Title Hours Complete seven academic, nonremedial, nonrepetitive 28 courses, each equivalent to 4 semester hours. <br> Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

132 total semester hours required

## Plan of Study <br> Four Years, Two Co-ops in Summer 2/Fall

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 (FQ) | 4 | MATH 1342 <br> (FQ) | 4 | General elective | 4 | Vacation | 0 |
| CHEM 1151 | 4 | PHYS 1151 <br> (ND) | 3 | General elective | 4 |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |  |
| ENGW 1111 <br> (WF) | 4 | General elective | 4 |  |  |  |  |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 2341 | 4 | MATH 2321 | 4 | General elective | 4 | Co-op | 0 |
| PHYS 1155 (ND) | 3 | EECE 2000 | 1 | General elective | 4 |  |  |
| PHYS 1156 <br> (AD) | 1 | EECE 2160 | 4 |  |  |  |  |
| PHYS 1157 | 1 | EE <br> fundamentals | 4-5 |  |  |  |  |
| EECE 2150 | 5 | EE <br> fundamentals | 4-5 |  |  |  |  |
| General elective | 4 |  |  |  |  |  |  |
|  | 18 |  | 17-19 |  | 8 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 3302 <br> (to be taken | 4 EECE 3000 | 1 EECE | 4 Co-op | 0 |
| online) |  | technical <br> elective |  |  |
| Co-op | 0 EE | $4-5$ EECE 4790 | 4 |  |
|  | fundamentals |  |  |  |


|  |  | CE <br> fundamentals | 4-5 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | EECE 3468 | 4 |  |  |
|  |  | EECE <br> technical elective | 4 |  |  |
|  | 4 |  | 17-19 | 8 | 0 |
| Year 4 |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |
| Co-op | 0 | EECE 4792 | 4 |  |  |
|  |  | EECE <br> technical elective | 4 |  |  |
|  |  | EECE <br> technical elective | 4 |  |  |
|  |  | General elective | 4 |  |  |
|  | 0 |  | 16 |  |  |

Total Hours: 130-134

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




| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | HoursSpring | Hours Summer 1 | Hours Summer 2 | Hours |
| MATH 2321 | 4 <br> ENGW 3302 <br> (to be taken <br> online) | 4 Co-op | 0 <br> EECE <br> technical <br> elective | 4 |
| EECE 2160 | 4 Co-op | 0 | EECE 4790 | 4 |
| EE | $4-5$ |  |  |  |
| fundamentals |  |  |  |  |


| EE fundamentals | 4-5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EECE 3000 | 1 |  |  |  |  |
|  | 17-19 |  | 4 | 0 | 8 |
| Year 4 |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |
| fundamentals |  |  |  |  |  |
| CE fundamentals |  | EECE <br> technical elective | 4 |  |  |
| EECE 3468 |  | EECE <br> technical elective | 4 |  |  |
| EECE <br> technical elective |  | General elective | 4 |  |  |
|  | 16-18 |  | 16 |  |  |

Total Hours: 130-134

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { MATH } 1341 \\ & \text { (FQ) } \end{aligned}$ |  | MATH 1342 <br> (FQ) | 4 | Vacation | 0 | Vacation | 0 |
| CHEM 1151 | 4 | PHYS 1151 <br> (ND) | 3 |  |  |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |  |
| ENGW 1111 <br> (WF) | 4 | General elective | 4 |  |  |  |  |
|  | 17 |  | 17 |  | 0 |  | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHYS 1155 <br> (ND) | 3 | $\begin{aligned} & \text { MATH } 2321 \\ & \text { (FQ) } \end{aligned}$ | 4 | Vacation | 0 | Co-op | 0 |
| PHYS 1156 <br> (AD) | 1 | EECE 2160 | 4 |  |  |  |  |
| PHYS 1157 |  | EE <br> fundamentals course | 4 |  |  |  |  |
| EECE 2150 | 5 | EECE 2000 | 1 |  |  |  |  |
| MATH 2341 | 4 | General elective | 4 |  |  |  |  |
| General elective | 4 |  |  |  |  |  |  |
|  | 18 |  | 17 |  | 0 |  | 0 |

Year 3

| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 EE fundamentals course |  | ENGW 3302 <br> (WD) | 4 | Co-op | 0 |
|  | EE fundamentals course | 5 | General elective | 4 |  |  |



Total Hours: 132

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 (FQ) | 4 | MATH 1342 (FQ) | 4 | Vacation | 0 Vacation | 0 |
| CHEM 1151 | 4 | PHYS 1151 <br> (ND) | 3 |  |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |
| $\begin{aligned} & \text { ENGW } 1111 \\ & \text { (WF) } \end{aligned}$ | 4 | General elective | 4 |  |  |  |
|  | 17 |  | 17 |  | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 1155 | 3 Co-op | 0 Co-op | 0 Vacation | 0 |
| (ND) |  |  |  |  |
| PHYS 1156 <br> (AD) | 1 |  |  |  |
| PHYS 1157 | 1 |  |  |  |
| MATH 2341 | 4 |  |  |  |
| EECE 2150 | 5 |  |  |  |
| EECE 2000 | 1 |  |  |  |


| General <br> elective | 4 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 19 | 0 | 0 | 0 |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 |  | Hours

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| EECE 3000 | 1 Co-op | 0 Co-op | 0 EECE technical elective | 4 |
| EE <br> fundamentals course | 5 |  | EECE 4790 <br> (EI, WI, CE) | 4 |
| General elective | 4 |  |  |  |
| EE <br> fundamentals course | 5 |  |  |  |
| CE <br> fundamentals course | 4 |  |  |  |
|  | 19 | 0 | 0 | 8 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | :---: |
| EECE 3468 | 4 EECE <br> technical <br> elective | 4 |
| EECE <br> technical <br> elective | 4 General <br> elective | 4 |
| EECE 4792 <br> (EI, WI, CE) | 4 EECE <br> technical <br> elective | 4 |
| General <br> elective | 4 | 12 |

Total Hours: 132

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum GPA required in EECE courses

## Engineering

Complete 51 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| EECE 2150 | Circuits and Signals: Biomedical Applications | 5 |
| EECE 2160 | Embedded Design: Enabling Robotics | 4 |
| Electrical Engineering Fundamentals |  |  |
| 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 |  |  |
| 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 <br> 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 |  |
| Capstone Courses |  |  |
| EECE 4790 | Electrical and Computer Engineering Capstone 1 | 4 |
| EECE 4792 | Electrical and Computer Engineering Capstone 2 | 4 |

EECE Technical Electives

| Complete two of the following: |  |
| :--- | :--- |
| EECE 2322 <br> and EECE 2323 | Fundamentals of Digital Design and <br> Computer Organization <br> and Lab for EECE 2322 |
| EECE 4991 | Research |
| EECE 4992 | Directed Study |
| EECE 4993 | Independent Study |
| ENGR 5670 | Sustainable Energy: Materials, <br> Conversion, Storage, and Usage |
| GE 4608 | Nanotechnology in Engineering |

EECE 2540 to EECE 2750
EECE 3324 to EECE 3410
EECE 4512 to EECE 4698
EECE 5155 to EECE 5698

## Supplemental Credit

2 semester hours from the following course count toward the 2 engineering requirement:

EECE $3468 \quad$ Noise and Stochastic Processes
3 semester hours from the following course count toward the 3 engineering requirement:

GE $1501 \quad$ Cornerstone of Engineering 1
3 semester hours from the following course count toward the 3
engineering requirement:
GE $1502 \quad$ Cornerstone of Engineering 2

## Professional Development

Code Title Hours
Required Professional Development

| GE 1000 | Introduction to the Study of Engineering | 1 |
| :--- | :--- | :---: |
| EECE 2000 | Introduction to Engineering Co-op | 1 |
| EECE 3000 | Education | 1 |

Additional Required Courses
The remaining credit from the following course will apply to 1 the professional development area:

GE 1501 Cornerstone of Engineering 1

## Mathematics/Science

Complete 57 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Mathematics/Science |  |  |
| CHEM 1151 <br> and CHEM 1153 | General Chemistry for Engineers <br> 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 <br> Algebra for Engineering | 4 |
| Complete one of the following: | 5 |  |

PHYS 1151 Physics for Engineering 1
and PHYS 1152 and Lab for PHYS 1151
and PHYS 1153 and Interactive Learning Seminar for PHYS 1151
PHYS $1161 \quad$ Physics 1
and PHYS 1162 and Lab 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 | Physics 2 and Lab for PHYS 1165 |  |
| PHYS 2303 | Modern Physics | 4 |
| PHYS 2305 | Thermodynamics and Statistical Mechanics | 4 |
| PHYS 3600 | Advanced Physics Laboratory | 4 |
| PHYS 3602 | Electricity and Magnetism | 4 |
| PHYS 5115 | Quantum 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 1502 | Cornerstone of Engineering 2 |  |
| Writing Requirement and NUpath Courses |  |  |
| Code | Title |  |
| Writing |  |  |
| 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 |  |

## NUpath Requirements through General Electives

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.

## Required General Electives

Code Title
Complete three academic, nonremedial, nonrepetitive courses, each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

132 total semester hours required

5 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 <br> (FQ) | 4 | MATH 1342 (FQ) | 4 | Vacation | 0 | Vacation | 0 |
| CHEM 1151 |  | PHYS 1165 <br> (ND) | 4 |  |  |  |  |
| CHEM 1153 | 0 | PHYS 1166 <br> (AD) | 1 |  |  |  |  |
| PHYS 1161 <br> (ND) | 4 | GE 1502 (ER) | 4 |  |  |  |  |
| PHYS 1162 <br> (AD) | 1 |  |  |  |  |  |  |
| GE 1000 | 1 |  |  |  |  |  |  |
| GE 1501 | 4 |  |  |  |  |  |  |
| $\begin{aligned} & \text { ENGW } 1111 \\ & \text { (WF) } \end{aligned}$ | 4 |  |  |  |  |  |  |
|  | 22 |  | 13 |  | 0 |  | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { MATH } 2321 \\ & \text { (FQ) } \end{aligned}$ |  | PHYS 2305 <br> (ND) | 4 | Vacation | 0 | Co-op | 0 |
| MATH 2341 | 4 | EECE 2160 | 4 |  |  |  |  |
| EECE 2150 |  | EE <br> fundamentals | S 4 |  |  |  |  |
| PHYS 2303 <br> (ND) | 4 | EECE 2000 | 1 |  |  |  |  |
|  |  | General elective | 4 |  |  |  |  |
|  | 17 |  | 17 |  | 0 |  | 0 |
| Year 3 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | PHYS 3602 <br> (ND) | 4 | PHYS 3600 <br> (ND, AD, WI) | 4 | Co-op | 0 |
|  |  | CE <br> fundamentals | 4 | General elective | 4 |  |  |
|  |  | EE <br> fundamentals | 5 |  |  |  |  |
|  |  | ENGW 3302 <br> (WD) | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 EECE 3468 | 4 <br> EECE 4790 <br> (EI, WI, CE) | 4 Co-op | 0 |


| Year 5 | HoursSpring <br> Fall | Hours |
| :--- | :---: | :---: |
| Co-op | EECE 4792 <br> (EI, WI, CE) <br> PHYS <br> advanced <br> elective | 4 |
| General <br> elective | 4 |  |
| 0 | 4 |  |

Total Hours: 132

## 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., electronic musical instruments and performance/recording technology), storage (e.g., mp3 and other file storage formats), and distribution (e.g., streaming services) of music. The program combines the content of two majors to allow students to 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

Minimum 2.000 GPA required in EECE courses

## Engineering Requirements

Complete 51 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 5 |
| EECE 2150 | Circuits and Signals: Biomedical <br> Applications | 4 |
| EECE 2160 | Embedded Design: Enabling Robotics |  |
| Electrical Engineering Fundamentals |  |  |
| EECE 2412 Fundamentals of Electronics <br> and EECE 2413 and Lab for EECE 2412 | 5 |  |
| EECE 2520 | Fundamentals of Linear Systems | 4 |
| EECE 2530 | Fundamentals of Electromagnetics <br> and EECE 2531 | and Lab for EECE 2530 |

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:

$\left.$| EECE 2322 |
| :--- | :--- |
| and EECE 2323 | | Fundamentals of Digital Design and |
| :--- |
| Computer Organization |
| and Lab for EECE 2322 | \right\rvert\, | EECE 2540 | Fundamentals of Networks |
| :--- | :--- |
| EECE 2560 | Fundamentals of Engineering <br> Algorithms |

Capstone Courses

| EECE 4790 | Electrical and Computer Engineering <br> Capstone 1 | 4 |
| :--- | :--- | :---: |
| EECE 4792 | Electrical and Computer Engineering | 4 |

## Technical Electives

Complete two of the following. If EECE 5697 is taken,
students are required to complete a music elective.

| EECE 2322 <br> and EECE 2323 | Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322 |
| :---: | :---: |
| EECE 4993 | Independent Study |
| EECE 4991 | Research |
| ENGR 5670 | Sustainable Energy: Materials, Conversion, Storage, and Usage |
| EECE 4992 | Directed Study |
| GE 4608 | Nanotechnology in Engineering |
| EECE 2540 | Fundamentals of Networks |
| EECE 2750 | Enabling Engineering |
| EECE 3324 | Computer Architecture and Organization |
| EECE 3410 | Electronics 2 |
| EECE 4512 | Biomedical Electronics |
| EECE 5155 | Wireless Sensor Networks and the Internet of Things |
| EECE 5698 | Special Topics in Electrical and Computer Engineering |

Supplemental Credit
3 semester hours from the following course count toward the
engineering requirement:

$$
\text { GE } 1501 \quad \text { Cornerstone of Engineering } 1
$$

2 semester hours from the following course count toward the 2 engineering requirement:

EECE $3468 \quad$ Noise and Stochastic Processes
3 semester hours from the following course count toward the 3 engineering requirement:

GE 1502 Cornerstone of Engineering 2

## Professional Development

| Code | Title | Hours |
| :--- | :--- | ---: |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| EECE 2000 | Introduction to Engineering Co-op <br> Education | 1 |
| EECE 3000 | Professional Issues in Engineering | 1 |
| Required course with additional credit not used in the <br> engineering requirement above: | 1 |  |

GE $1501 \quad$ Cornerstone of Engineering 1

## Supporting Courses: Mathematics/Science

Complete 33 semester hours in mathematics and science as indicated below:


| MUST 4520 | Interactive Music Programming |
| :--- | :--- |
| MUST 4610 | Composition for Electronic Instruments |
| MUST 3540 | Special Topics in Music Technology |

## Writing Requirement and Additional NUpath Courses

A grade of C or higher is required in both First-Year Writing and Advanced Writing in the Disciplines.

## Requirements through Open Electives

Nuph (SI), and Diff
explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general

## Cive

Complete one academic, nonremedial, nonrepetitive course, 4

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of pass/fal course is allowed per semester.

## Program Requirement

136 total semester hours required

## Electrical and Computer Engineering, BSEE or BSCompE

Students may choose to major in both electrical and computer engineering by following the combined-major program leading to a Bachelor of Science in Electral Engineerng or Bachelor of Science 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 edit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Engineering

Complete 68 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| EECE 2150 | Circuits and Signals: Biomedical Applications | 5 |
| EECE 2160 | Embedded Design: Enabling Robotics | 4 |
| Electrical Engineering Fundamentals |  |  |
| EECE 2412 <br> 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 |  |  |
| EECE 2322 <br> 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 |
| Capstone Courses |  |  |
| EECE 4790 | Electrical and Computer Engineering Capstone 1 | 4 |
| EECE 4792 | Electrical and Computer Engineering Capstone 2 | 4 |
| EECE Technical Electives |  |  |
| Two CS courses from the following approved list may be taken toward the EECE technical elective requirement. |  |  |
| Complete four of the following: |  | 16 |
| EECE 2750 | Enabling Engineering |  |
| EECE 4991 | Research |  |
| EECE 4992 | Directed Study |  |
| EECE 4993 | Independent Study |  |
| EECE 3324 to EECE 3410 |  |  |
| EECE 4512 to EECE 4698 |  |  |
| EECE 5155 to EECE 5698 |  |  |
| ENGR 5670 | Sustainable Energy: Materials, Conversion, Storage, and Usage |  |
| GE 4608 | Nanotechnology in Engineering |  |
| CS 2550 | Foundations of Cybersecurity |  |
| CS 3200 | Database Design |  |
| CS 3500 | Object-Oriented Design |  |
| CS 4850 | Building Game Engines |  |
| CS 3540 to CS 3800 |  |  |
| CS 4100 to CS 4770 |  |  |
| IS 4200 to IS 4700 |  |  |
| Supplemental Credit |  |  |
| 2 semester hour engineering requ | $m$ the following course count toward the ent: | 2 |

3 semester hours from the following course count toward the engineering requirement:
GE 1501 Cornerstone of Engineering 1
3 semester hours from the following course count toward the

$$
\text { GE } 1502 \quad \text { Cornerstone of Engineering } 2
$$

## Professional Development

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Professional Development |  |  |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| EECE 2000 | Introduction to Engineering Co-op | 1 |
| EECE 3000 | Education |  |

## Additional Required Courses

The remaining credit from the following course will apply to 1 the professional development area:

$$
\text { GE } 1501 \quad \text { Cornerstone of Engineering } 1
$$

## Supporting Courses: Mathematics/Science

Complete 37 semester hours in mathematics and science as indicated below.
Code Title Hours Required Mathematics/Science
CHEM 1151 General Chemistry for Engineers 4
and CHEM 1153 and Recitation for CHEM 1151
— Discrete Structures
and CS 1802 and Seminar for CS 1800
MATH 1341 Calculus 1 for Science and Engineering 4
MATH 1342 Calculus 2 for Science and Engineering 4
MATH $2321 \quad$ Calculus 3 for Science and Engineering 4
MATH 2341 Differential Equations and Linear 4

Algebra for Engineering
PHYS 1151 Physics for Engineering 1 5
and PHYS 1152 and Lab for PHYS 1151
and PHYS 1153 and Interactive Learning Seminar for PHYS 1151
PHYS $1155 \quad$ Physics for Engineering 2
and PHYS 1156 and Lab for PHYS 1155
and PHYS 1157 and Interactive Learning Seminar for PHYS 1155

## Supplemental Credit

2 semester hours from the following course count toward the 2 mathematics/science requirement:

EECE $3468 \quad$ Noise and Stochastic Processes
1 semester hour from the following course counts toward the 1 mathematics/science requirement:

$$
\text { GE } 1502 \quad \text { Cornerstone of Engineering } 2
$$

## Writing Requirement and NUpath Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Writing |  |  |
| A grade of C or higher is required: | 4 |  |
| ENGW 1111 | First-Year Writing | 4 |
| ENGW 3302 | Advanced Writing in the Technical <br>  | Professions |

## or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

## NUpath Requirements through General Electives

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.

## Required General Electives

Code Title Hours

Complete four academic, nonremedial, nonrepetitive courses, each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

134 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


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| PHYS 1155 <br> (ND) | 3 MATH 2321 <br> (FQ) | 4 | Vacation | 0 Co-op |$\quad 0$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 EE or CE | 4 ENGW 3302 | 4 Co-op | 0 |
|  | fundamentals | (WD) |  |  |


|  | EE or CE <br> fundamentals | 4 General <br> elective | 4 |
| :--- | :--- | :---: | :--- |
| EE or CE <br> fundamentals | 5 |  |  |
| EE or CE <br> fundamentals | 5 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 EECE 3000 | 1 EECE <br> technical <br> elective | 4 Co-op | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | EECE 4792 <br> (EI, WI, CE) | 4 |
|  | EECE <br> technical <br> elective | 4 |
| General <br> elective | 4 |  |
| 0 | 12 |  |

Total Hours: 134

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

| Year 1 |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| PHYS 1155 | 3 Co-op | Co-op | Vacation |  |
| (ND) |  |  |  |  |
| PHYS 1156 | 1 |  |  |  |
| (AD) |  |  |  |  |
| PHYS 1157 | 1 |  |  |  |
| EECE 2000 | 1 |  |  |  |


| EECE 2150 <br> or 2160 | $\begin{array}{r} 5 \text { or } \\ 4 \end{array}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 2341 | 4 |  |  |  |  |  |
| General elective | 4 |  |  |  |  |  |
|  | 19-18 | 0 |  | 0 |  | 0 |
| Year 3 |  |  |  |  |  |  |
| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { (FQ) } \end{aligned}$ | 4 Co-op |  | Co-op |  | General elective | 4 |
| CS 1802 | 1 |  |  |  | ENGW 3302 <br> (WD) | 4 |
| MATH 2321 <br> (FQ) | 4 |  |  |  |  |  |
| EECE 2160 <br> or 2150 | $\begin{array}{r} 4 \text { or } \\ 5 \end{array}$ |  |  |  |  |  |
| fundamentals |  |  |  |  |  |  |
|  | 17-18 | 0 |  | 0 |  | 8 |


| Year 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| EECE 3000 | 1 | Co-op |  | Co-op |  | EECE technical elective | 4 |
| EE or CE fundamentals | 4 |  |  |  |  | EECE 4790 <br> (EI, WI, CE) | 4 |
| fundamentals |  |  |  |  |  |  |  |
| EE or CE fundamentals | 5 |  |  |  |  |  |  |
| EE or CEfundamentals |  |  |  |  |  |  |  |
|  | 19 |  | 0 |  | 0 |  | 8 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | :---: |
| EECE 3468 | 4 EECE <br> technical <br> elective | 4 |
| EECE 4792 <br> (EI, WI, CE) | 4 EECE <br> technical <br> elective | 4 |
| EE or CE <br> fundamentals | 5 <br> General <br> elective | 4 |
| EECE <br> technical <br> elective | 4 | 12 |

Total Hours: 134

## 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.

## Required Biology

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 1115 | General Biology 1 for Engineers | 5 |
| and BIOL 1116 and Lab for BIOL 1115 |  |  |
| BIOL 1117 Integrated Anatomy and Physiology 1 <br> and BIOL 1118 and Lab for BIOL 1117 | 5 |  |

## Required Engineering

The course you select may also count toward your major.

| Code <br> Complete one of the following: | Hours |  |
| :--- | :--- | ---: |
| EECE 4512 | Biomedical Electronics | 4 |
| EECE 5664 | Biomedical Signal Processing |  |
| EECE 5648 | Biomedical Optics |  |
| EECE 5698 | Special Topics in Electrical and <br> Computer Engineering |  |
| EECE 4993 | Independent Study (must have a <br> 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 <br> Capstone 1 | 4 |
| EECE 4792 | Electrical and Computer Engineering <br> Capstone 2 | 4 |

## Elective Courses

One course must be outside your home department. Neither course can be used toward your major.

| Code <br> Complete two of the following: <br> Biology | Hours <br> BIOL 1113 <br> and BIOL 1114 | General Biology 2 <br> and Lab for BIOL 1113 |
| :--- | :--- | ---: |
| BIOL 1119 <br> and BIOL 1120 | Integrated Anatomy and Physiology 2 <br> and Lab for BIOL 1119 |  |
| BIOL 2299 | Inquiries in Biological Sciences <br> BIOL 2301 <br> and BIOL 2302 | Genetics and Molecular Biology <br> and Lab for BIOL 2301 |
| BIOL 3405 | Neurobiology |  |
| BIOL 5581 | Biological Imaging |  |
| Chemical Engineering |  |  |
| CHME 5630 | Biochemical Engineering |  |
| CHME 5699 | Special Topics in Chemical Engineering |  |

## Civil/Industrial Engineering

CIVE 7251 Environmental Biological Processes

| Electrical/Computer Engineering |  |
| :--- | :--- |
| EECE 4512 | Biomedical Electronics |
| EECE 5664 | Biomedical Signal Processing |
| EECE 5648 | Biomedical Optics |
| EECE 5698 | Special Topics in Electrical and <br> Computer Engineering |
| EECE 4993 | Independent Study |
| Mechanical/Industrial Engineering |  |
| ME 5665 | Musculoskeletal Biomechanics |
| IE 4522 | Human-Machine Systems |
| Physics | Biological Physics 1 |
| PHYS 4621 | Medical Physics |
| PHYS 4623 | Medical Physics Seminar 1 |
| PHYS 4651 | Medical Physics Seminar 2 |
| PHYS 4652 | Sensation and Perception |
| Psychology | Biological Psychology |
| PSYC 3452 |  |

## GPA Requirement

2.000 GPA required in the minor

## Computer Engineering, Minor

The minor in computer engineering 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 laboratory practice of 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.
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.
\(\left.\begin{array}{llr}Code \& Title \& Hours <br>

Complete one of the following: \& 4-5\end{array} $$
\begin{array}{ll}\text { EECE } 4993 & \text { Independent Study }\end{array}
$$\right]\)| ENGR 5670 | Sustainable Energy: Materials, <br> Conversion, Storage, and Usage |
| :--- | :--- |
| GE 4608 | Nanotechnology in Engineering |

## 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 College of Computer and Information Science.

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 course work.

## Required Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| EECE 2300 | Computational Methods for Data <br> Analytics (not required for EECE <br> majors) | 4 |
| EECE 5644 | Introduction to Machine Learning and <br> Pattern Recognition | 4 |
| EECE 5642 | Data Visualization | 4 |

Probability and Statistics

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | 4 |  |
| CIVE 3464 | Probability and Engineering Economy <br> for Civil Engineering |  |
| EECE 3468 | Noise and Stochastic Processes |  |
| GE 2361 | Mathematical Methods for Engineers |  |
| 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 4626 | Image Processing and Pattern Recognition |  |
| 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.

## 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.

## Required Core Course

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 5 |
| EECE 2150 | Circuits and Signals: Biomedical Applications |  |
| EECE 2210 <br> 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 <br> and EECE 2413 | Fundamentals of Electronics and Lab for EECE 2412 |  |
| EECE 2520 | Fundamentals of Linear Systems |  |
| EECE 2530 <br> 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, <br> Conversion, Storage, and Usage |
| GE 4608 | Nanotechnology in Engineering |
| 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.

Students need to complete the program requirements with at least three courses that are not part of their major required course work.

## 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 |
| :--- | :--- | ---: |
| ME 3460 | Robot Dynamics and Control | 4 |
| Complete one of the following: | 4 |  |
| EECE 2210 | Electrical Engineering |  |
| and EECE 2211 | and Lab for EECE 2210 |  |
| EECE 2160 | Embedded Design: Enabling Robotics |  |

## Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete three of the following: |  | 12 |
| EECE 4626 | Image Processing and Pattern Recognition |  |
| EECE 4630 | Robotics |  |
| EECE 5639 | Computer Vision |  |
| EECE 5644 | Introduction to Machine Learning and Pattern Recognition |  |
| EECE 5698 | Special Topics in Electrical and Computer Engineering |  |
| EECE 5580 | Classical Control Systems |  |
| ME 5245 | Mechatronic Systems |  |
| ME 5250 | Robot Mechanics and Control |  |
| IE 4522 | Human-Machine Systems |  |
| IE 5630 | Biosensor and Human Behavior Measurement |  |
| CS 4100 | Artificial Intelligence |  |
| CS 4610 | Robotic Science and Systems |  |

## GPA Requirement

2.000 GPA required in the minor

## Mechanical and Industrial Engineering

Website (http://www.mie.neu.edu)

## Hanchen Huang, PhD

Professor and Chair

## Andrew Gouldstone, PhD

Associate Professor, Associate Chair, and Director of Mechanical Engineering
Emanuel S. Melachrinoudis, PhD
Professor, Associate Chair, and Director of Industrial Engineering
334 Snell Engineering Center
617.373.2740
617.373 .2921 (fax)

## 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.

The program educational objectives for the mechanical engineering and industrial engineering programs are as follows. Graduates from our undergraduate programs will demonstrate technical excellence in their chosen fields, anticipate and respond to societal changes, and develop careers with depth and flexibility, while retaining a professional and intellectual thrust throughout. Specifically:

1. Graduates will contribute to the advancement of the mechanical or industrial engineering field, displaying leadership and innovation in the larger community while fulfilling the expectations of their employers.
2. Graduates will engage in activities that promote professional development and personal growth.

## 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 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 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 3-D CAD modeling, while more advanced-level positions will allow students to gain experience in the design process, including advanced 3-D 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, as well as new interdisciplinary graduate and professional master's programs.

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 <br> Bachelor of Science in Industrial Engineering (BSIE)

- Industrial Engineering (p. 422)


## Bachelor of Science in Mechanical Engineering (BSME)

- Mechanical Engineering (p. 426)
- Mechanical Engineering and Physics (p. 430)


## Minors

- Biomechanical Engineering (p. 431)
- Healthcare System Operation (p. 432)
- Industrial Engineering (p. 432)
- Mechanical Engineering (p. 433)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 433)

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Engineering

Complete 58 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Engineering |  |  |
| 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 |
| 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: |  | 8 |
| CHME, CIVE, EECE, EMGT, IE, ME, and MEIE |  |  |
| Supplemental Credit |  |  |
| 1 semester hour from the following course counts toward the engineering requirement: |  | 1 |
| IE 3412 | Engineering Probability and Statistics |  |
| 3 semester hours from the following course count toward the engineering requirement: |  | 3 |
| IE 4512 | Engineering Economy |  |
| 2 semester hours from the following course count toward the engineering requirement: |  | 2 |
| IE 4515 | Operations Research |  |
| 2 semester hours from the following course count toward the engineering requirement: |  | 2 |
| IE 4520 | Stochastic Modeling |  |
| 3 semester engineering | $m$ the following course count toward the ent: | 3 |

GE 1501 Cornerstone of Engineering 1

3 semester hours from the following course count toward the engineering requirement:

GE 1502
Cornerstone of Engineering 2

## Professional Development

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Professional Development |  |  |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| MEIE 2000 | Introduction to Engineering Co-op |  |
| MEIE 3000 | Education | 1 |
| Professional Issues in Engineering | 1 |  |

## Additional Required Courses

The remaining credit from the following course will apply to the professional development area:
GE 1501 Cornerstone of Engineering 1

## Supporting Courses: Mathematics/Science

Complete 39 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 |
| Science Elective |  |  |
| Complete one of the following: |  | 5 |
| PHYS 1155 and PHYS 1156 and PHYS 1157 | Physics for Engineering 2 <br> and Lab for PHYS 1155 <br> and Interactive Learning Seminar for PHYS 1155 |  |
| CHEM 1214 and CHEM 1215 and CHEM 1216 | General Chemistry 2 <br> and Lab for CHEM 1214 <br> and Recitation for CHEM 1214 (and Lab <br> for CHEM 1214) |  |
| CHEM 2311 <br> and CHEM 2312 <br> and CHEM 2319 | Organic Chemistry 1 <br> and Lab for CHEM 2311 <br> and Recitation for CHEM 2311 |  |
| BIOL 1115 <br> and BIOL 1116 | General Biology 1 for Engineers and Lab for BIOL 1115 |  |
| BIOL 1117 <br> and BIOL 1118 | Integrated Anatomy and Physiology 1 and Lab for BIOL 1117 |  |
| Supplemental Credit |  |  |
| 3 semester hours from the following course count toward the mathematics/science requirement: |  | 3 |
| IE 3412 | Engineering Probability and Statistics |  |
| 1 semester hour from the following course counts toward the mathematics/science requirement: |  | 1 |
| E 4512 | Engineering Economy |  |

32 semester hours from the following course count toward the 2 mathematics/science requirement:

$$
\text { IE } 4515 \quad \text { Operations Research }
$$

2 semester hours from the following course count toward the 2 mathematics/science requirement:
IE $4520 \quad$ Stochastic Modeling
1 semester hour from the following course counts toward the 1 mathematics/science requirement:
GE 1502 Cornerstone of Engineering 2

## Additional NUpath Courses

Code Title Hours

Writing
A grade of C or higher is required:

| ENGW 1111 | First-Year Writing | 4 |
| :---: | :--- | :---: |
| ENGW 3302 | Advanced Writing in the Technical | 4 |
| or ENGW 3315 | Professions | Interdisciplinary Advanced Writing in the |
|  | Disciplines |  |

## NUpath Requirements through General Electives

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.

## Required General Electives

Code Title Hours

Complete seven academic, nonremedial, nonrepetitive 28
courses, each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## 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 | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1342 (FQ) | $4$ | MATH 2321 (FQ) | 4 | General elective | 4 | Vacation | 0 |
| Students will need to have AP credit for Calc. AB (MATH1341Calculus 14 SH) |  | PHYS 1151 <br> (ND) | 3 | General elective | 4 |  |  |
| CHEM 1151 |  | PHYS 1152 <br> (AD) | 1 |  |  |  |  |
| CHEM 1153 | 0 | PHYS 1153 | 1 |  |  |  |  |
| GE 1000 | 1 | GE 1502 (ER) | 4 |  |  |  |  |


| GE 1501 | 4 General <br> elective | 4 |  |
| :--- | :---: | :---: | :---: |
| ENGW 1111 <br> (WF) | 4 |  |  |
|  | 17 | 17 | 8 |



| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| IE 4510 | 4 | Co-op |  | Co-op |  | General elective | 4 |
| IE 4515 |  | ENGW 3302 <br> (to be taken online during co-op (WD)) | 4 |  |  | General elective | 4 |
| IE 4516 | 4 |  |  |  |  |  |  |
| MEIE 3000 | 1 |  |  |  |  |  |  |
| IE 4530 | 4 |  |  |  |  |  |  |
| IE 4531 | 1 |  |  |  |  |  |  |
|  | 18 |  | 4 |  | 0 |  | 8 |


| Year 4 | Hours Spring | Hours |
| :--- | :---: | ---: |
| Fall | 4 MEIE 4702 <br> (EI, WI, CE) | 5 |
| IE 4512 | 4 IE 4522 | 4 |
| IE 4520 | 4 IE 4523 | 1 |
| IE 4525 | Technical <br> elective | 4 |
| MEIE 4701 <br> (EI, WI, CE) | General <br> elective | 4 |
| Technical <br> elective | 17 |  |

Total Hours: 128-133

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1342 (FQ) |  | MATH 2321 <br> (FQ) | 4 | General elective |  | Vacation | 0 |
| Students will need to have AP credit for Calc. AB (MATH1341Calculus 14 SH) |  | PHYS 1151 <br> (ND) | 3 | General elective | 4 |  |  |


| CHEM 1151 |  | PHYS 1152 <br> (AD) | 1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CHEM 1153 | 0 | PHYS 1153 | 1 |  |  |
| GE 1000 | 1 | GE 1502 (ER) | 4 |  |  |
| GE 1501 | 4 | General elective | 4 |  |  |
| $\begin{aligned} & \text { ENGW } 1111 \\ & \text { (WF) } \end{aligned}$ | 4 |  |  |  |  |
|  | 17 |  | 17 | 8 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| MATH 2341 | 4 IE 3412 (AD) | 4 General elective | 4 Co-op |  |
| IE 2310 (WI) | 4 IE 4512 | 4 General elective | 4 |  |
| IE 2311 | 0 MEIE 2000 | 1 |  |  |
| IE 3425 | 4 General elective | 4 |  |  |
| IE 3426 | 0 General 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 <br> (EI, WI, CE) | 1 | Co-op |  |
| ENGW 3302 (to be taken online during co-op (WD)) | 4 | IE 4515 | 4 | General elective | 4 |  |  |
|  |  | IE 4516 | 4 | Technical elective | 4 |  |  |
|  |  | MEIE 3000 | 1 |  |  |  |  |
|  |  | IE 4530 | 4 |  |  |  |  |
|  |  | IE 4531 | 1 |  |  |  |  |
|  | 4 |  | 18 |  | 9 |  | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | MEIE 4702 | 5 |
|  | (EI, WI, CE) |  |
|  | IE 4520 | 4 |
|  | IE 4522 | 4 |
|  | IE 4523 | 1 |
|  | IE 4525 | 4 |
|  | 0 | 18 |

Total Hours: 133

## 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 |
| (FQ) | (FQ) |  |  |  |
| CHEM 1151 | 4 PHYS 1151 <br>  <br> $\quad$(ND) | 3 |  |  |


| CHEM 1153 |  | PHYS 1152 <br> (AD) | 1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |
| $\begin{aligned} & \text { ENGW } 1111 \\ & \text { (WF) } \end{aligned}$ | 4 | General elective | 4 |  |  |
|  | 17 |  | 17 | 0 | 0 |


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| MATH 2321 <br> (FQ) | 4 MATH 2341 | 4 | Vacation | 0 Co-op |$\quad 0$


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | IE 4516 |  | General elective | 4 | Co-op | 0 |
|  |  | $\begin{aligned} & \text { ENGW } 3302 \\ & \text { (WD) } \end{aligned}$ | 4 | General elective | 4 |  |  |
|  |  | IE 4515 | 4 |  |  |  |  |
|  |  | IE 4510 | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |


| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | MEIE 3000 | 1 | MEIE 4701 | 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 | MEIE 4702 <br> (EI, WI, CE) | 5 |
|  |  | IE 4522 | 4 |
|  |  | IE 4523 | 1 |
|  |  | Technical elective | 4 |
|  |  | General elective | 4 |
|  | 0 |  | 18 |

[^11]Five Years, Three Co-ops in Spring/Summer 1
Year 1

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { MATH } 1341 \\ & \text { (FQ) } \end{aligned}$ | 4 | MATH 1342 (FQ) | 4 Vacation | 0 Vacation | 0 |
| CHEM 1151 | 4 | PHYS 1151 <br> (ND) | 3 |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |
| ENGW 1111 <br> (WF) | 4 | General elective | 4 |  |  |
|  | 17 |  | 17 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { MATH } 2321 \\ & \text { (FQ) } \end{aligned}$ | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| IE 2310 (WI) | 4 |  |  |  |
| IE 2311 | 0 |  |  |  |
| IE 3425 | 4 |  |  |  |
| IE 3426 | 0 |  |  |  |
| Science elective | 5 |  |  |  |
| MEIE 2000 | 1 |  |  |  |
|  | 18 | 0 | 0 | 0 |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| ENGW 3302 <br> (WD) | 4 Co-op | 0 Co-op | 0 General elective | 4 |
| IE 3412 (AD) | 4 |  | General elective | 4 |
| IE 4512 | 4 |  |  |  |
| MATH 2341 | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |

$$
\text { Year } 4
$$

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| IE 4510 | 4 Co-op | 0 Co-op | 0 General elective | 4 |
| IE 4515 | 4 |  | General elective | 4 |
| IE 4516 | 4 |  |  |  |
| MEIE 3000 | 1 |  |  |  |
| IE 4530 | 4 |  |  |  |
| IE 4531 | 1 |  |  |  |
|  | 18 | 0 | 0 | 8 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Technical <br> elective | 4 MEIE 4702 <br> (EI, WI, CE) | 5 |
| IE 4525 | 4 IE 4522 | 4 |
| MEIE 4701 <br> (EI, WI, CE) | 1 IE 4523 | 1 |
| IE 4520 | Technical <br> elective | 4 |


| General <br> elective | 4 General <br> 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, internalcombustion 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, qualitycontrol 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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

Complete 69 semester hours in engineering as indicated below:

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Engineering |  |  |
| 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 | Engineering Mechanics and Design | 4 |
| ME 2355 and ME 2356 | Mechanics of Materials and Lab for ME 2355 | 5 |
| ME 2380 | Thermodynamics | 4 |
| ME 3455 and ME 3456 | Dynamics and Vibrations and Lab for ME 3455 | 5 |
| ME 3475 <br> or ME 3480 | Fluid Mechanics <br> International Applications of Fluid Mec | 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 |
| MEIE 4701 | Capstone Design 1 | 1 |
| MEIE 4702 | Capstone Design 2 | 5 |
| Mechanical and Industrial Engineering Technical Elective |  |  |
| Complete one $t$ subject areas: | cal elective in one of the following | 4 |
| EMGT, ENGR, IE, ME, or MEIE |  |  |
| Supplemental Credit |  |  |
| 3 semester hours from the following course counts toward the engineering requirement: |  |  |
| GE 1501 | Cornerstone of Engineering 1 |  |
| 3 semester hours from the following course counts toward the engineering requirement: |  |  |
| GE 1502 | Cornerstone of Engineering 2 |  |

## Professional Development

Code Title Hours

Required Professional Development

| GE 1000 | Introduction to the Study of Engineering | 1 |
| :--- | :--- | :--- |
| MEIE 2000 | Introduction to Engineering Co-op | 1 |

MEIE $3000 \quad$ Professional Issues in Engineering 1

## Additional Required Courses

The remaining credit from the following course will apply to
the professional development area:
Cornerstone of Engineering 1

## Supporting Courses: Mathematics/Science

Complete 35 semester hours in mathematics and science as indicated below:
Code
Title
Hours

## Required Mathematics/Science

| CHEM 1151 <br> 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 <br> and PHYS 1152 <br> and PHYS 1153 | Physics for Engineering 1 <br> and Lab for PHYS 1151 <br> and Interactive Learning Seminar for <br> 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 |


| Science/Math Elective |  |  |
| :---: | :---: | :---: |
| Complete one of the following: |  | 4-5 |
| BIOL 1115 <br> and BIOL 1116 | General Biology 1 for Engineers and Lab for BIOL 1115 |  |
| BIOL 1117 <br> and BIOL 1118 | Integrated Anatomy and Physiology 1 and Lab for BIOL 1117 |  |
| CHEM 1214 and CHEM 1215 | General Chemistry 2 and Lab for CHEM 1214 |  |
| CHEM 2311 <br> and CHEM 2312 <br> and CHEM 2319 | Organic Chemistry 1 <br> and Lab for CHEM 2311 <br> and Recitation for CHEM 2311 |  |
| MATH 3081 | Probability and Statistics |  |
| MATH 2310 | Discrete Mathematics |  |
| PHYS 2303 | Modern Physics |  |
| PHYS 3601 | Classical Dynamics |  |
| PHYS 3602 | Electricity and Magnetism |  |
| Supplemental Credit |  |  |
| 1 semester hour from mathematics/scienc | the following course counts toward the requirement: | 1 |
| GE 1502 | Cornerstone of Engineering 2 |  |

## 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 <br> Professions | 4 |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |  |

1 Required General Electives
Code Title
Hours
1 Complete six academic, nonremedial, nonrepetitive courses, 24 each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

140 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 |
| :--- | :---: | :---: | :---: | ---: |
| MATH 1342 <br> (FQ) | 4 MATH 2321 <br> (FQ) | 4 ME 2350 |  |  |$\quad$| 4 Vacation |
| :---: |$\quad 0$

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| MATH 2341 | 4 Co-op | Co-op | ME 3475 | 4 |
| PHYS 1155 | 3 |  | General | 4 |
| (ND) |  |  |  |  |

PHYS 11561
(AD)

| PHYS 1157 | 1 |  |  |  |
| :--- | :---: | :---: | :--- | :--- |
| ME 2355 | 4 |  |  |  |
| ME 2356 | 1 |  | 0 | 8 |
| ME 2380 | 4 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :--- | ---: | ---: |
| ME 3455 | 4 Co-op | Co-op | ME 4550 | 4 |
| ME 3456 | 1 ENGW 3302 <br> (to be taken <br> online during <br> co-op (WD)) | 4 | MEIE 4701 <br> (EI, WI, CE) | 1 |
| ME 4505 <br> (AD) | 4 | General <br> elective | 4 |  |



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

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MATH 1342 <br> (FQ) | MATH 2321 <br> (FQ) | 4 ME 2350 |  |  |$\quad$| 4 Vacation |
| :--- |$\quad 0$

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 2341 | 4 | ME 2380 | 4 | ME 3475 |  | Co-op |  |
| PHYS 1155 <br> (ND) | 3 | ME 3455 | 4 | General elective | 4 |  |  |
| PHYS 1156 <br> (AD) | 1 | ME 3456 | 1 |  |  |  |  |
| PHYS 1157 | 1 | ME 2340 <br> (WI) | 4 |  |  |  |  |
| ME 2355 | 4 | ME 2341 | 1 |  |  |  |  |
| ME 2356 | 1 | MEIE 2000 | 1 |  |  |  |  |
| General elective | 4 | General elective | 4 |  |  |  |  |
|  | 18 |  | 19 |  | 8 |  | 0 |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | ME 4505 <br> (AD) | 4 | ME 4550 | 4 | Co-op |  |
| ENGW 3302 <br> (to be taken online during co-op (WD)) | 4 | ME 4506 | 1 | MEIE 4701 <br> (EI, WI, CE) | 1 |  |  |
|  |  | EECE 2210 | 4 | General elective | 4 |  |  |
|  |  | EECE 2211 | 1 |  |  |  |  |
|  |  | ME 4570 | 4 |  |  |  |  |
|  |  | ME 4555 | 4 |  |  |  |  |
|  |  | MEIE 3000 | 1 |  |  |  |  |
|  | 4 |  | 19 |  | 9 |  | 0 |

Year 4

| Fall Hours Spring Hours <br> Co-op ME 4508 4 <br> math   <br> elective   | 4 |  |
| :--- | :---: | :---: |
|  | MEIE 4702 <br> (EI, WI, CE) | 5 |
|  | MIE <br> technical <br> elective | 4 |
| 0 | 17 |  |
| Total Hours: 136 |  |  |
| Five Years, Three Co-0ps in Summer 2/Fall |  |  |

Year 1

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 <br> (FQ) |  | MATH 1342 (FQ) | 4 Vacation | 0 Vacation | 0 |
| CHEM 1151 |  | PHYS 1151 <br> (ND) | 3 |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |
| ENGW 1111 <br> (WF) | 4 | General elective | 4 |  |  |
|  | 17 |  | 17 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ME 2350 | 4 MATH 2341 | 4 Vacation | 0 Co-op | 0 |
| General <br> elective | 4 ME 2355 | 4 |  |  |
| PHYS 1155 <br> (ND) | 3 ME 2356 | 1 |  |  |
| PHYS 1156 <br> (AD) | 1 ME 2380 | 4 |  |  |
| PHYS 1157 | 1 MEIE 2000 | 1 |  | 0 |
| MATH 2321 <br> (FQ) | 4 General <br> elective | 4 | 0 | 0 |



| Year 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | ME 4505 <br> (AD) | 4 | ME 4550 | 4 | Co-op | 0 |
|  |  | ME 4506 |  | MEIE 4701 <br> (EI, WI, CE) | 1 |  |  |
|  |  | ME 4555 | 4 | General elective | 4 |  |  |
|  |  | ME 4570 | 4 |  |  |  |  |
|  |  | MEIE 3000 | 1 |  |  |  |  |
|  |  | Math/ science elective | 4 |  |  |  |  |
|  | 0 |  | 18 |  | 9 |  | 0 |


| Year 5 <br> Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | MEIE 4702 <br> (EI, WI, CE) | 5 |
|  | EECE 2210 | 4 |
|  | EECE 2211 | 1 |
| ME or IE <br> technical <br> elective | 4 |  |
| General <br> 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1341 <br> (FQ) | 4 | MATH 1342 <br> (FQ) | 4 | Vacation | 0 Vacation | 0 |
| CHEM 1151 | 4 | PHYS 1151 <br> (ND) | 3 |  |  |  |
| CHEM 1153 | 0 | PHYS 1152 <br> (AD) | 1 |  |  |  |
| GE 1000 | 1 | PHYS 1153 | 1 |  |  |  |
| GE 1501 | 4 | GE 1502 (ER) | 4 |  |  |  |
| ENGW 1111 <br> (WF) | 4 | General elective | 4 |  |  |  |
|  | 17 |  | 17 |  | 0 | 0 |

Year 2


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 <br> (EI, WI, CE) | 1 |
| ME 4505 <br> (AD) | 4 |  |  |  |  | General elective | 4 |
| ME 4506 | 1 |  |  |  |  |  |  |
| ME 4508 | 4 |  |  |  |  |  |  |
| ME 4570 | 4 |  |  |  |  |  |  |
|  | 18 |  | 0 |  | 0 |  | 9 |
| Year 5 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |  |
| ME 4555 |  | ME or IE technical elective | 4 |  |  |  |  |
| MEIE 3000 |  | Math/ science elective | 4 |  |  |  |  |
| EECE 2210 | 4 | General elective | 4 |  |  |  |  |
| EECE 2211 | 1 | General elective | 4 |  |  |  |  |
| MEIE 4702 <br> (EI, WI, CE) | 5 |  |  |  |  |  |  |
| General elective | 4 |  |  |  |  |  |  |
|  | 19 |  | 16 |  |  |  |  |
| Total Hours: |  |  |  |  |  |  |  |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum GPA required in IE, ME, and MEIE courses

## Engineering Requirement

Complete 60 semester hours in engineering as indicated below:

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Engineering |  |  |
| ME 2340 and ME 2341 | Introduction to Material Science and Lab for ME 2340 | 5 |
| ME 2350 | Engineering Mechanics and Design | 4 |
| ME 2355 and ME 2356 | Mechanics of Materials and Lab for ME 2355 | 5 |
| ME 2380 | Thermodynamics | 4 |
| ME 3455 and ME 3456 | Dynamics and Vibrations and Lab for ME 3455 | 5 |
| ME 3475 <br> or ME 3480 | Fluid Mechanics <br> 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 |
| MEIE 4701 | Capstone Design 1 | 1 |
| MEIE 4702 | Capstone Design 2 | 5 |
| Supplemental Credit |  |  |
| 3 semester hours from the following course counts toward the engineering requirement: |  |  |
| GE 1501 | Cornerstone of Engineering 1 |  |
| 3 semester hours from the following course counts toward the engineering requirement: |  |  |

GE 1502 Cornerstone of Engineering 2

Professional Development Requirement
Code Title Hours
Professional Development

| GE 1000 | Introduction to the Study of Engineering | 1 |
| :--- | :--- | :--- |
| MEIE 2000 | Introduction to Engineering Co-op | 1 |
|  | Education |  |
| MEIE 3000 | Professional Issues in Engineering | 1 |

## Additional Required Courses

The remaining credit from the following course will apply to the professional development area:

GE 1501 Cornerstone of Engineering 1

## Mathematics/Science Requirement

Complete 59 semester hours in mathematics and science as indicated below:

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 1161 and PHYS 1162 | Physics 1 <br> and Lab for PHYS 1161 | 5 |
| PHYS 1165 and PHYS 1166 | Physics 2 <br> and Lab for PHYS 1165 | 5 |
| PHYS 2303 | Modern Physics | 4 |
| PHYS 2371 and PHYS 2372 | Electronics and Lab for PHYS 2371 | 4 |
| PHYS 3602 | Electricity and Magnetism | 4 |
| PHYS 3600 | Advanced Physics Laboratory | 4 |
| PHYS 3601 | Classical Dynamics | 4 |
| PHYS 5318 | Principles of Experimental Physics | 4 |

## Advanced Physics Elective

Complete one 4-semester-hour course in the following range: 4
PHYS 3600 to PHYS 5999

## Supplemental Credit

1 semester hour from the following course counts toward the 1 mathematics/science requirement:
GE 1502 Cornerstone of Engineering 2

## Writing Requirement and NUpath Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Writing | First-Year Writing (a grade of C or | 4 |
| ENGW 1111 | higher is required) |  |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions (a grade of C or higher is <br> required) | 4 |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |  |

## NUpath Requirements through General Electives

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.

## Integrative Requirement

Principles of Experimental Physics (PHYS 5318) is part of the mathematics/science requirement above and is an integrative course.

## Code <br> Title <br> PHYS $5318 \quad$ Principles of Experimental Physics <br> Hours

## Required General Electives

Complete two academic, nonremedial, nonrepetitve courses, each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

139 total semester hours required

## Plan of Study

Five Years, Three Co-ops in Summer 2/Fall


## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MATH 2321 <br> (FQ) | PHYS 2303 | 4 Vacation | 0 Co-op | 0 |
| MATH 2341 | 4 MEIE 2000 | 1 |  |  |
| PHYS 2371 <br> (ND) | 3 <br> ME 2340 <br> (WI) | 4 |  |  |
| PHYS 2372 <br> (EI) | 1 ME 2341 | 1 |  |  |
| ME 2350 | 4 ME 2355 | 4 |  |  |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | PHYS 3602 <br> (ND) | 4 | ME 3475 | 4 | Co-op | 0 |
|  |  | ME 3455 | 4 | PHYS 3600 <br> (ND, AD, WI) | 4 |  |  |
|  |  | ME 3456 | 1 |  |  |  |  |
|  |  | ME 4508 | 4 |  |  |  |  |
|  |  | ENGW 3302 <br> (WD) | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | PHYS 3601 <br> (ND) | 4 | ME 4550 | 4 | Co-op | 0 |
|  |  | MEIE 3000 | 1 | MEIE 4701 <br> (EI, WI, CE) | 1 |  |  |
|  |  | ME 4505 <br> (AD) | 4 | General elective | 4 |  |  |
|  |  | ME 4506 | 1 |  |  |  |  |
|  |  | ME 4555 | 4 |  |  |  |  |
|  |  | ME 4570 | 4 |  |  |  |  |
|  | 0 |  | 18 |  | 9 |  | 0 |
| Year 5 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |  |
| Co-op | 0 | MEIE 4702 <br> (EI, WI, CE) | 5 |  |  |  |  |
|  |  | PHYS 5318 <br> (ND, AD, CE) | 4 |  |  |  |  |
|  |  | PHYS <br> advanced elective | 4 |  |  |  |  |
|  |  | General elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  |  |  |  |

Total Hours: 139

## 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, humanmachine 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

## Biology 1

Complete one of the following: 5
BIOL 1111 General Biology 1
and BIOL 1112 and Lab for BIOL 1111

BIOL 1115 General Biology 1 for Engineers and BIOL 1116 and Lab for BIOL 1115

Anatomy and Physiology

| BIOL 1117 | Integrated Anatomy and Physiology 1 | 5 |
| :--- | :--- | :--- |
| and BIOL 1118 | and Lab for BIOL 1117 |  |

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 advisor.

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Complete one of the following: | $4-5$ |


| IE 4520 | Stochastic Modeling |
| :--- | :--- |
| IE 4522 | Human-Machine Systems |
| and IE 4523 | and Lab for IE 4522 |
| ME 4640 | Mechanical Behavior and Processing of <br> 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.
$\left.\begin{array}{llr}\text { Code } & \text { Title } & \text { Hours } \\ \text { Required Courses } & & 4 \\ \text { IE } 5617 & \text { Lean Concepts and Applications } & 4 \\ \text { IE } 5400 & \begin{array}{l}\text { Healthcare Systems Modeling and } \\ \text { Analysis } \\ \text { or IE } 3500\end{array} & \text { Introduction to Healthcare Systems Engineering }\end{array}\right]$

## Electives

| Complete one of the following: |  |
| :--- | :--- |
| PHTH 4511 | Healthcare Management |
| PHTH 5226 | Strategic Management and Leadership <br> in Healthcare |
| PHTH 5232 | Evaluating Healthcare Quality <br> NRSG 5121Epidemiology and Population Health <br> IE 5374 <br> IE 5pecial Topics in Industrial Engineering <br> (System Dynamics in Healthcare) |
| IE 5640 | Systems Engineering in Public <br> Programs | | Data Mining for Engineering |
| :--- |
| Applications |

## 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.

## 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 | 4 |
|  | (or equivalent) |  |

## 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 | Human-Machine Systems <br> and IE 4523 |
| IE 4525 | Logistics and Supply Chain <br> Management |
| IE 4530 | Manufacturing Systems and <br> 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).

## 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 | Engineering Mechanics and Design | 4 |
| ME 2380 | Thermodynamics | 4 |

## Mechanical Engineering Technical Electives

| Code | Title <br> Complete two of the following: | Hours |
| :--- | :--- | ---: |
| ME 2340 | Introduction to Material Science | 8 |
| ME 2355 | Mechanics of Materials |  |
| ME 3455 | Dynamics and Vibrations |  |
| ME 3475 | Fluid Mechanics |  |
| or ME 3480 | International Applications of Fluid Mechanics <br> ME 4508 | Mechanical Engineering Computation <br> and Design |
| ME 4550 | Mechanical Engineering Design <br> ME 4555 | System Analysis and Control |
| ME 4570 | Thermal Systems Analysis and Design |  |

## GPA Requirement

2.000 GPA required in the minor

## Accelerated Bachelor/Graduate Degree Programs

The College of Engineering offers a number of bachelor's/master's degree programs that allow students to accelerate the attainment of the master's degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. These degrees may be earned either simultaneously in five years, or sequentially, with the bachelor's degree attainment followed by a PlusOne year to complete the master's degree. See additional information on engineering bachelor's/master's programs (http://www.coe.neu.edu/advising/flexible-degree-programs).

## Programs

## Bioengineering

- Bioengineering, BSBioE/Engineering Management, MSEM
- Bioengineering, BSBioE/Bioengineering, MSBioE


## Chemical Engineering

- Chemical Engineering, BSCHE/Chemical Engineering, MSCHE
- Chemical Engineering, BSCHE/Engineering Management, MSEM


## Civil and Environmental Engineering

- Civil Engineering, BSCE/Civil Engineering, MSCivE
- Civil Engineering, BSCE/Energy Systems, MSENES
- Civil Engineering, BSCE/Engineering and Public Policy, MS
- Civil Engineering, BSCE/Engineering Management, MSEM
- Civil Engineering, BSCE/Environmental Engineering, MSEnvE
- Civil Engineering, BSCE/Sustainable Building Systems, MSSBS
- Environmental Engineering, BSEnvE/Environmental Engineering, MSEnvE


## Electrical and Computer Engineering

- Electrical Engineering, BSEE/Electrical and Computer Engineering, MSECE
- Electrical Engineering, BSEE/Engineering Management, MSEM
- Computer Engineering, BSEE/Electrical and Computer Engineering, MSECE
- Computer Engineering, BSEE/Engineering Management, MSEM


## Industrial and Mechanical Engineering

- Industrial Engineering, BSIE/Industrial Engineering, MSIE
- Industrial Engineering, BSIE/Energy Systems, MSENES
- Industrial Engineering, BSIE/Engineering Management, MSEM
- Industrial Engineering, BSIE/Operations Research, MSOR
- Mechanical Engineering, BSME/Law, JD
- Mechanical Engineering, BSME/Mechanical Engineering, MSME
- Mechanical Engineering, BSME/Energy Systems, MSENES
- Mechanical Engineering, BSME/Engineering Management, MSEM


## Bouvé College of Health Sciences

Website (http://www.northeastern.edu/bouve)
Susan L. Parish, PhD, MSW, Dean and Professor of Health Sciences
Carmen Sceppa, MD, PhD, Associate Dean for Undergraduate Education
Dean's Office
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617.373 .3030 (fax)

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The programs in Bouvé College of Health Sciences combine experiential and cooperative education opportunities with highly innovative academic curricula that are designed to meet the demand for well-educated health professionals, nurses, and pharmacists. The college seeks to prepare students to become effective clinicians, researchers, and leaders who will enter graduate schools and work in many areas responsible for the delivery of healthcare and the promotion of health of individuals and populations.

There are three schools within the Bouvé College of Health Sciences: the School of Nursing, the School of Pharmacy, and the School of Health Professions, which comprises the health science and physical therapy majors. The college offers students an education in health and health profession fields that features a curriculum of highly relevant and closely integrated basic courses in the physical, biological, behavioral, social, environmental, and health systems sciences; as well as on-site involvement in interprofessional clinical patient care and interdisciplinary translational research; integrated experiential education opportunities in the form of the university's signature cooperative education work program; and a commitment to the search for and advancement of new and progressive concepts, ideas, and philosophies of education and professional practice.

Each of the programs offered by the college is accredited by the appropriate professional entity. The college is a member of the American Association of Colleges of Nursing, the American Association of Colleges of Pharmacy, the American Council of Academic Physical Therapy, and the Council on Education for Public Health.

## Academic Requirements

Students are responsible for following the curriculum plan 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.

## COLLEGE ACADEMIC STANDARDS-PROFESSIONAL COURSES

Students must receive a grade of C or better in professional courses.

Professional courses are those required courses taught within the major/ college as identified by course subject code: EXSC, HLTH, HSCI, NRSG, PHMD, PHSC, PHTH, and PT.

Courses in the above-listed subjects that are taken as electives are exempt from the C or better rule and the university's minimum satisfactory grade will be accepted. Those courses labeled "professional elective" (i.e. certain pharmacy courses), are subject to the C or better requirement.

| Major | Professional <br> Prerequisite <br> Designation | Minimum Passing Grade |
| :---: | :---: | :---: |
| Health Science | BIOL, CHEM, MATH | C- |
| Nursing | BIOL, CHEM, MATH | C |
|  | PSYC 3404 | C |
| Pharmacy (PharmD, BS PharmSci) | BIOL, CHEM, MATH, PHYS | C |
| Physical Therapy | BIOL, EXSC, PHYS, PSYC | C |
|  | CHEM, MATH | C- |

Courses in the above-listed subjects that are taken as electives are exempt from the C - or higher rule and the university's minimum satisfactory grade will be accepted. Those courses labeled "professional elective" (i.e. certain pharmacy courses), are subject to the C or better requirement.

## COLLEGE ACADEMIC STANDARDS-ALL OTHER COURSES

The university's minimum passing grade for the course will be accepted. Note: The university requires a minimum grade of C for First-Year Writing (ENGW 1111) and Advanced Writing in the Health Professions (ENGW 3306).

## PROGRESSION WITHIN BOUVÉ

- First-year students must complete at least 27 semester hours and meet all major prerequisite course requirements to progress to sophomore status.
- 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 chart above.
- To progress into the subsequent semester of professional courses, students must have completed all professional courses with a grade of $C$ or better.
- For pharmacy students, failure to earn a satisfactory grade (S) in a co-op will be counted as a professional course failure.
- Students admitted to the preprofessional pharmacy program must receive the minimum passing grade as noted in the chart above for all professional prerequisites, have satisfactorily completed all academic courses in the preprofessional phase of the curriculum, have an overall GPA of 3.000 or higher, and a science prerequisite GPA of 3.000 or higher in order to progress. In addition, in order to progress into the PharmD professional (P1) year, students must demonstrate, through a personal interview, good verbal and written communication skills, understanding of the pharmacy profession, and commitment to patient care, based on criteria set by the Doctor of Pharmacy program. Pharmacy (PharmD) students with a cumulative GPA of 3.200 or less following the fall semester of the sophomore year
may experience a delayed start date for the first co-op (IPPE), as the School of Pharmacy will not submit intern licensure documentation to the Board of Pharmacy until spring grades are verified. Pharmacy (PharmD) students must maintain an overall GPA of 3.000 or higher during the professional years (P1-P4) of the Doctor of Pharmacy program. BS Pharm Sci students must maintain an overall GPA and a science GPA of 3.000 or higher in order to progress.
- Physical therapy students must receive the minimum passing grade as noted in the chart above for all professional prerequisites, have satisfactorily completed all academic courses in the preprofessional phase of the curriculum, have an overall GPA of 3.000 or higher, a science prerequisite GPA of 3.000, and must have completed a minor or its equivalent by the end of the preprofessional phase of the program (physical therapy = summer 1) in order to progress into the professional phase of the program. This requirement is intended to provide students with a robust foundation in the humanities, social sciences, and natural sciences that is required for successful completion of the doctoral program in physical therapy.
- 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.


## CRITERIA FOR UNIVERSITY ACADEMIC PROBATION

Note: Notation of academic probation will appear on internal records but not on permanent transcripts.

Students in the Bouvé College of Health Sciences will be placed on academic probation effective the following academic semester for any of the reasons noted below:

## First-year Students

Students who fail to attain an overall GPA of 1.800 at the end of each semester of their freshman year and/or fail to earn at least 12 semester hours in the semester just completed will be placed on academic probation effective for the following semester.

## Upperclass and Transfer Students

Students who fail to attain a minimum cumulative GPA of 2.000 at the end of each semester and/or fail to earn at least 12 semester hours in the semester just completed and/or fail to meet the requirements for good academic standing for their major will be placed on academic probation.

## 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:

- Failure to earn the minimum required grade in the same course twice.
- For health science, pharmacy, and physical therapy students, failure to earn a grade of $C$ or better in three professional courses, regardless of remediation.

Within the health science program, lecture and clinical/ lab components for the same class are considered as one professional course failure.

Within the physical therapy and pharmacy programs, each specific professional course (with separate registration number) will be counted as a separate failure even if content is related.

- For nursing students, failure to earn a grade of C or better in two professional and/or clinical courses, regardless of remediation. Within the nursing program, each specific professional course (with
separate registration number) will be counted as a separate failure even if content is related.
- For physical therapy and pharmacy students, failure to achieve an overall GPA of 3.000 or higher or a science prerequisite GPA of 3.000 or higher by the end of the preprofessional phase of the program (physical therapy = summer 1, semester year two; pharmacy = spring semester, year two) or failure to maintain the required overall 3.000 GPA at any point in the professional phase of the program.
- For nursing, physical therapy, and pharmacy students, changing the expected graduation date more than twice.
- The physical therapy and pharmacy programs monitor and promote the development of professional behaviors in their students in order 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 student's respective 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. If not moved into a new major by the end of two semesters, the student will be blocked from further registration.

## ACADEMIC DISMISSAL FROM UNIVERSITY

Students who remain on probation after two academic semesters may be dismissed from the university. Notation of this academic dismissal action will appear on the permanent transcript.

## 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 that decision. In addition, students may also appeal to the college's Academic Standing Committee to review probation and dismissal cases. Refer to the Bouvé Undergraduate or Graduate Student Manual, which details the Bouvé College of Health Sciences Appeals Process, and the Northeastern University Student Handbook, which details the University Undergraduate Student Academic Appeals Procedures.

GPA
Bouvé College does not permit the use of a hand-calculated GPA under any circumstances. All grade-point calculations will be performed by the university's standard process.

## Communication Sciences and Disorders

Website (http://www.northeastern.edu/bouve/csd)

## Lorraine A. Book, PhD, CCC-SLP

Interim Chair and Assistant Clinical Professor

226 Forsyth Building
617.373.3698
617.373 .2239 (fax)

The Department of Communication Sciences and Disorders (CSD) offers two undergraduate minors.

These flexible minors allow students from various fields of study to enhance their academics with courses related to the field of communication sciences in general, as well as specific courses covering topics such as audiology or speech/language disorders
across the lifespan. Advisors assist students minoring in this area with accommodating their interests, aptitudes, or graduate plans.

The minor in CSD includes courses that offer exposure to a variety of aspects of the CSD field. Students can go on 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 privatepractice clinics.

The minor in clinical speech-language pathology and audiology (SLPA) seeks to prepare students for admission into a graduate program in speech-language pathology or audiology. Speech-language pathologists and audiologists (which requires graduate education to practice) are involved with the evaluation and treatment of, and counseling and research in, human communication and its disorders. They provide clinical services to a full range of communicatively impaired individuals, 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 diseases. Audiologists specialize in the prevention, identification, assessment, and rehabilitation of hearing disorders. Individuals with congenital and acquired hearing impairments are seen for services by audiologists. They prescribe and dispense hearing aids and instruct individuals in the use of amplification.

## Communication Sciences and Disorders Minor

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 by units other than the Department of CSD. Students may consult with an advisor in the CSD department concerning the current listing of eligible elective courses for the CSD minor.

## Clinical 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/communication-sciences-disorders/speech-language-pathology-ms) program.

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.

## Programs

## Minors

- Communication Sciences and Disorders (p. 436)
- Speech-Language Pathology and Audiology (p. 437)


## 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: |  | 4 |
| SLPA 1101 | Introduction to Communication Disorders |  |
| SLPA 1555 | Communication Disorders in Movies |  |
| Communication Sciences and Disorders Core |  |  |
| Code | Title | Hours |
| Complete two of the following: |  | 6-8 |
| SLPA 1102 | Language Development |  |
| 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 |
| :--- | :--- |
| CAEP 3480 | Counseling Theories and Practice |
| COMM 1112 | Public Speaking |
| COMM 3201 | Health Communication |
| COMM 3230 | Interpersonal Communication |
| COMM 3534 |  |
| ENTR 2301 | Innovation! |
| HLTH 1510 | Introduction to Healthcare Ethics |
| PHTH 2300 | Communication Skills for the Health <br> Professions |
| PHTH 2301 | Communication Skills for the Health |
| PSYCfessions-Global 3450 | Learning and Motivation <br> PSYC 3451 |

## Minor Credit Requirement

Minimum of 15 semester hours required in the minor

## 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/communication-sciences-disorders/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

## Health Sciences

Website (http://www.northeastern.edu/bouve/health-sciences)
Shan Mohammed, MD, MPH
Associate Clinical Professor and Interim Chair
316 Robinson Hall
617.373.3666
617.373 .2968 (fax)

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The Department of Health Sciences offers a BS degree program in health science; a BS in health science/MPH (Master of Public Health); and minors in exercise science, global health, nutrition, and health science.

The health science major is designed to provide students with an integrated understanding of the natural and social sciences, critical reasoning, and the determinants of global and population health. The competencies that students acquire over their tenure in the Department of Health Sciences provide a solid foundation that prepares students to enter graduate and professional programs in medicine, dentistry, law, veterinary medicine, physician assistant, exercise science, social work, and public health. Health science students also distinguish themselves as particularly well prepared to enter the workforce in many health-related areas because they understand the critical importance of the context in which healthcare is delivered. Health science graduates can be found in leadership roles in various health-related organizations, including hospitals, government and other public health agencies, communitybased organizations, and in the pharmaceutical and insurance industries.

The health science curriculum integrates learning in the natural sciences, social sciences, and the liberal arts. All health science students have the option to complete the program with or without a co-op experience. Health science students take courses that introduce them to social determinants of health and wellness and to the ways in which healthcare systems and policies foster-or impede-health and wellness. Our curriculum offers students an opportunity to develop an understanding of public health, health policy and administration, quality-of-care improvement, research methods, and evidence-based healthcare. The curriculum includes electives designed to enrich students' intellectual lives and an opportunity to identify specific areas of interest. Students may use electives to explore a formal minor that complements their health science studies or take prerequisite courses for graduate programs. The entire academic experience culminates in a sequence of capstone courses during the senior year, intended to provide students with a structured opportunity to integrate the knowledge and skills acquired in prior courses, research, and experiential activities into a significant capstone project.

## Programs

## Bachelor of Science (BS)

- Health Science (p. 438)


## Combined Majors

- Data Science and Health Science (p. 355)
- Health Science and Business Administration (p. 246)
- Environmental Engineering and Public Health (p. 394)


## Minors

- Health Science (p. 446)
- Health, Humanities, and Society (p. 446)
- Healthcare System Operations (p. 432)
- Exercise Science (p. 447)
- Global Health (p. 448)
- Nutrition (p. 448)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 467)

## 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
- Social work

The health science major is also designed for students who are seeking a strong foundation for a career in health administration and in communitybased health promotion and public health.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Public Health Core

| Code | Title | Hours |
| :---: | :---: | :---: |
| YEAR 1 |  |  |
| PHTH 1260 | The American Healthcare System | 4 |
| YEARS 2 and 3 |  |  |
| PHTH 2210 and PHTH 2211 | Foundations of Biostatistics and Recitation for PHTH 2210 | 4 |
| PHTH 2300 | Communication Skills for the Health Professions | 4 |
| PHTH 2350 | Community and Public Health | 4 |
| PHTH 2515 | Healthcare Policy and Administration | 4 |
| HLTH 5450 | Healthcare Research | 4 |
| PHTH 4540 | Health Education and Program Planning | 4 |
| FINAL YEAR |  |  |
| PHTH 4120 | Global Perspectives on Discrimination and Health | 4 |

## Health Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| YEAR 1 |  |  |
| HSCI 1000 | College: An Introduction | 1 |
| YEAR 2 OR 3 |  | 1 |
| HSCI 2000 | Professional Development for Bouvé <br> Co-op |  |

FINAL YEAR

| HSCI 4700 | Health Science Capstone Introduction | 0 |
| :---: | :--- | :--- |
| HSCl 4720 | Health Science Capstone-Service | 4 |
| or HSCl 4730 | Health Science Capstone-Research |  |

## Selectives

Code Title Hours

Complete at least three courses from the groups listed below 12
with at least two in one category. At least one of them must be at 2000 level or higher.
Society and Health

| PHTH 1120 | Society and Health |
| :--- | :--- |
| SOCL 1120 | Society and Health |
| PHTH 1270 | Introduction to Global Health |
| SOCL 3441 | Sociology of Health and Illness |
| HLTH 5280 | The (in)Visibility of (dis)Ability in <br> Society |
| PHTH 5234 | Economic Perspectives on Health <br> Policy |


| LPSC 2302 | Global Human Rights: A Social and <br> Economic Perspective |
| :--- | :--- |
| PHTH 5228 | Advances in Measuring Behavior |
| ANTH 2365 | Sport, Culture, and Society |
| ANTH 4580 | Special Topics in Anthropology |
| SOCL 1246 | Environment and Society |
| SOCL 1295 | Drugs and Society |
| SOCL 2303 | Gender and Reproductive Justice |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4523 | Sexualities |

Policy and Administration

| PHTH 4511 | Healthcare Management |
| :--- | :--- |
| PHTH 4515 | Critical Issues in Health and Public- <br> Health Policy |
| ENTR 2206 | Global Social Enterprise |
| ORGB 3201 | Organizational Behavior |
| MGMT 3340 | Managing Healthcare Organizations: <br> Critical Challenges and New <br> Approaches |
| PHTH 5214 | Environmental Health |
| PHTH 5232 | Evaluating Healthcare Quality |
| PHTH 5234 | Economic Perspectives on Health |
|  | Policy |

HUSV 2800 Sexual Orientation and Gender Expression in Practice and Policy
CRIM $3040 \quad$ Psychology of Crime
SOCL 1241 Sociology of Violence
Physical Activity and Nutrition
HSCI 1105 Human Nutrition
or HSCl 1106 Contemporary Issues in Nutrition
or HSCI 1107 Nutrition Service Learning
EXSC 1120 Introduction to Exercise, Fitness, and Health
EXSC $4500 \quad$ Exercise Physiology 1
and EXSC 4501 and Lab for EXSC 4500
EXSC 5200 Cardiopulmonary Physiology
EXSC 5220 Advanced Exercise Physiology
COMM 3201 Health Communication

| Digital Health |
| :--- | :--- |
| IS 2000 |$\quad$| Principles of Information Science |  |
| :--- | :--- |
| CS 2500 CS 2501 | Fundamentals of Computer Science 1 <br> and Lab for CS 2500 |
| HINF 5200 | Theoretical Foundations in Personal <br> Health Informatics |
| HINF 5300 | Personal Health Interface Design and <br> Development |
| HINF 5101 | Introduction to Health Informatics and <br> Health Information Systems |
| Research | Introduction to Epidemiology |
| PHTH 5202 | Social Epidemiology |
| PHTH 5224 Environmental Health |  |
| PHTH 5214 |  |

## Supporting Courses

| Code <br> YEAR 1 | Title | Hours |
| :--- | :--- | ---: |
| BIOL 1111 <br> and BIOL 1112 | General Biology 1 <br> and Lab for BIOL 1111 | 5 |
| BIOL 1113 <br> and BIOL 1114 | General Biology 2 <br> and Lab for BIOL 1113 | 5 |
| CHEM 1211 <br> and CHEM 1212 <br> and CHEM 1213 | General Chemistry 1 <br> and Lab for CHEM 1211 <br> and Recitation for CHEM 1211 | 5 |
| CHEM 1214 <br> and CHEM 1215 <br> and CHEM 1216 | General Chemistry 2 <br> and Lab for CHEM 1214 <br> and Recitation for CHEM 1214 |  |
| MATH 1241 | Calculus 1 | 5 |
| PSYC 1101 | Foundations of Psychology | 4 |
| YEAR 2 OR 3 | Moral and Social Problems in | 4 |
| PHIL 1165 | Healthcare | 4 |

Writing Requirements
Code Title Hours

| YEAR 1 | First-Year Writing | Hours |
| :--- | :--- | ---: |
| ENGW 1111 | Advanced Writing in the Health <br> YEAR 2 OR 3 | 4 |
| ENGW 3306 | Professions | 4 |

## Electives

| Code | Title |
| :--- | ---: |
| Complete 10 general electives | Hours |
|  | 40 |

## Health Science Major GPA Requirement

A minimum 2.000 GPA is required

## Program Requirement

133 total semester hours required

## Plan of Study

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 PHTH 1260 | 4 Vacation | 0 Vacation | 0 |
| PSYC 1101 | 4 BIOL 1113 | 4 |  |  |
| BIOL 1111 | 4 BIOL 1114 | 1 |  |  |
| BIOL 1112 | 1 CHEM 1214 | 4 |  |  |
| MATH 1241 | 4 CHEM 1215 | 1 |  |  |
| CHEM 1211 | 4 CHEM 1216 | 0 |  | 0 |
| CHEM 1212 | 1 ENGW 1111 | 4 |  |  |
| CHEM 1213 | 0 |  | 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 |  |  |
| PHTH 2211 | 0 HLTH 1200 <br> (or elective) | 2 |  |  |
| Elective | 4 HLTH 1201 | 1 |  |  |
| Elective | 4 Elective | 4 |  |  |
|  | Elective | 4 | 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 |  |  |
|  | ENGW 3306 | 4 |  |  |
|  | PHTH 2300 | 4 |  | 0 |


| Year 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| HLTH 5450 | 4 | Co-op | 0 | Co-op | 0 | Vacation | 0 |
| PHTH 4540 | 4 |  |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
| Selective | 4 |  |  |  |  |  |  |
|  | 16 |  | 0 |  | 0 |  | 0 |
| Year 5 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |  |
| PHTH 4120 | 4 | HSCI 4720 or 4730 | 4 |  |  |  |  |
| HSCI 4700 | 0 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
| Selective | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 16 |  | 16 |  |  |  |  |

Total Hours: 133

## 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, communitybased 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Data Science Requirements
Code Title
Hours
Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Discrete Structures

A grade of C - or higher is required:

| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| Computer Science Foundation |  |  |
| A minimum grade of C- must be earned in CS 2500 and CS 2510. |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3200 | Database Design | 4 |
| Information Science Requirement |  |  |
| IS 4300 | Human Computer Interaction | 4 |


| Data Science Foundations |  |  |
| :---: | :---: | :---: |
| DS 4100 | Data Collection, Integration, and Analysis | 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 | Calculus 1 for Science and Engineering | 4 |
| or MATH 1241 | Calculus 1 |  |
| Data Science Writing Requirement |  |  |
| Code <br> College Writing | Title | Hours |
| ENGW 1111 | First-Year Writing |  |
| or ENGW 1102 | First-Year Writing for Multilingual Writers |  |

Advanced Writing in the Disciplines

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :---: | :--- |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Health Science Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Public Health Core |  |  |
| PHTH 1260 | The American Healthcare System | 4 |
| PHTH 2300 | Communication Skills for the Health Professions | 4 |
| PHTH 2350 | Community and Public 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 |

Supporting Courses for Health Science
Code Title Hours

Research Methods
Complete one of the following: 4
HLTH 5450 Healthcare Research
IS 4800 Empirical Research Methods
Statistics
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 |
| Philosophy |  |
| Complete one of the following: |  |
| PHIL 1145 | Technology and Human Values |
| PHIL 1165 | Moral and Social Problems in |

## Life Sciences Core

BIOL 1111 General Biology $1 \quad 5$
and BIOL 1112 and Lab for BIOL 1111
BIOL 1113 General Biology $2 \quad 5$
$\begin{array}{lll}\text { and BIOL } 1114 & \text { and Lab for BIOL } 1113 & \\ \text { CHEM } 1211 & \text { General Chemistry } 1 & 5\end{array}$
$\begin{array}{lll}\text { and CHEM } 1212 & \text { and Lab for CHEM } 1211 & 5 \\ \text { CHEM } 1214 & \text { General Chemistry } 2 & 5\end{array}$
and CHEM 1215 and Lab for CHEM 1214
PSYC 1101 Foundations of Psychology 4

## Integrative Requirement

Code Title Hours
Upper-Division Elective
Complete one from the following: 4
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900
PHTH 4000 or higher

HSCI 4000 or higher
Integrative Course
DS 4900 Data Science Senior Project 4

## Required General Electives <br> Code Title

Complete three general electives.
Hours
12

## Data Science GPA Requirement

Minimum 2.000 GPA required in all computer, data, and information science courses.

## Program Requirement

136 semester hours required

## 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 health care. 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 health care 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).


| BIOL 1113 <br> and BIOL 1114 | General Biology 2 <br> and Lab for BIOL 1113 | 5 |
| :--- | :--- | :--- |
| CHEM 1211 <br> and CHEM 1212 <br> and CHEM 1213 | General Chemistry 1 <br> and Lab for CHEM 1211 <br> and Recitation for CHEM 1211 | 5 |
| CHEM 1214 <br> and CHEM 1215 <br> and CHEM 1216 | General Chemistry 2 <br> and Lab for CHEM 1214 <br> and Recitation for CHEM 1214 | 5 |
| PSYC 1101 | Foundations of Psychology |  |

Business Administration Requirements
Code Title Hours

## 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 <br> Social Responsibility | 4 |
| Business Electives |  | 8 |


| MISM 2301 | Management Information Systems |
| :---: | :--- |
| MKTG 2201 | Introduction to Marketing |
| SCHM 2301 | Supply Chain and Operations <br> Management |
| ORGB 3201 |  | | Organizational Behavior |
| :--- | :--- |
| Supporting Courses for Business |

## Business Concentration

Complete one of the following concentrations. Requirements for the concentrations are listed below. (p. 247)

- Accounting
- Entrepreneurship and Innovation
- Finance
- Management
- Management Information Systems
- Marketing
- Supply Chain Management


## Supporting Courses

Code Title Hours

## Introduction to College

| HSCI 1000 | College: An Introduction | 1 |
| :---: | :---: | :---: |
| or BUSN 1102 | Personal Skill Development for Business |  |
| Calculus |  |  |
| MATH 1231 or MATH 1241 | Calculus for Business and Economics Calculus 1 | 4 |
| Statistics |  |  |
| PHTH 2210 or MGSC 2301 | Foundations of Biostatistics Business Statistics | 4 |
| Co-op Preparation |  |  |
| Complete one of th | olllowing: | 4-5 |


| BUSN 1101 | Introduction to Business |
| :--- | :--- |
| and BUSN 1103 | and Professional Development for |
|  | Business Co-op |


| HSCI 2000 | Professional Development for Bouvé Co-op |  |
| :---: | :---: | :---: |
| Capstone |  |  |
| Complete one of the folllowing: 4 |  |  |
| STRT 4501 | Strategy in Action |  |
| HSCI 4720 | Health Science Capstone-Service <br> (Prerequisite course HSCI 4700) |  |
| HSCI 4730 | Health Science Capstone-Research (Prerequisite course HSCI 4700) |  |
| Integrative Requirement |  |  |
| Code | Title | Hours |
| MGMT 3340 | Managing Healthcare Organizations: Critical Challenges and New Approaches | 4 |

## Business GPA Requirement

A minimum 2.000 GPA is required in all business courses.

## Program Requirement

132 total semester hours required

| Business Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN ACCOUNTING |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 | 4 |
| Electives |  |  |
| Complete two of the following: |  | 8 |
| ACCT 3403 | Accounting Information Systems |  |
| ACCT 3416 | Strategic Cost Analysis for Decision Making |  |
| ACCT 4412 | Auditing and Other Assurance Services |  |
| ACCT 4414 | Income Tax Determination and Planning |  |
| CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION |  |  |
| Code | Title | Hours |
| Note: The following courses do not count toward this concentration: |  |  |
| ENTR 1201 | The Entrepreneurial Universe |  |
| ENTR 3308 | Business Economic History of South Africa |  |
| ENTR 3318 |  |  |
| ENTR 3328 |  |  |
| ENTR 3338 | Field Research in Sustainable Energy in Iceland |  |
| ENTR 3346 |  |  |
| ENTR 4510 | Management Consulting Abroad |  |
| ENTR 4514 | Development Practice and Global Citizenship in India |  |
| Introductory Course |  |  |
| $\begin{aligned} & \text { ENTR } 2301 \\ & \text { or ENTR } 2303 \end{aligned}$ | Innovation! <br> Entrepreneurial Marketing and Selling | 4 |
| Capstone Course |  |  |
| Complete one of th | following: | 4 |


| ENTR 4501 | Business Planning for Technology Ventures |  |
| :---: | :---: | :---: |
| ENTR 4503 | Business Planning for Small and Medium Enterprises |  |
| ENTR 4505 | Entrepreneurial Growth Strategy for Technology Ventures |  |
| ENTR 4506 | Advanced Studies in Social Enterprise |  |
| Electives |  |  |
| Note: Only one non-ENTR course may be used as an elective. |  |  |
| Complete two of the following: |  | 8 |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |  |
| ENTR 3212 | Innovation for Social Change |  |
| ENTR 3217 | Global Family Business Leadership |  |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |  |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |  |
| ENTR 3306 | Global Entrepreneurship |  |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |  |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |  |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |  |
| ENTR 3520 | Impact Investing and Social Finance |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |
| MGMT 3302 | Negotiating in Business |  |

## CONCENTRATION IN FINANCE

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Course |  |  |
| FINA 3301 | Corporate Finance | 4 |
| or FINA 3303 | Investments |  |
| Electives |  |  |
| Complete three of th | following: | 12 |
| ENTR 3520 or FINA 2720 | Impact Investing and Social Finance <br> Sustainability in the Business Environment |  |
| 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 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 4983 | Special Topics in Finance |
| FINA 4602 | Turnaround Management |
| FINA 4604 | Fixed-Income Securities |
| FINA 4608 | Advanced Financial Strategy |
| FINA 4610 | Entrepreneurial Finance, Innovation |

## $\begin{array}{ll}\text { CONCENTRATION IN MANAGEMENT } \\ \text { Code } & \text { Title Hours }\end{array}$

| Required Course |  |
| :--- | :--- |
| MGMT 4501 | Skills for Managerial Success |

Electives
Note: Only one non-MGMT course may be used as an elective.
Complete three of the following:

| MGMT 3302 | Negotiating in Business |
| :--- | :--- |
| MGMT 3315 | Managing Organizational Change and <br> Disruption |
| MGMT 3330 | Developing Leaders for Global <br> Sustainability |
| MGMT 3340 | Managing Healthcare Organizations: <br> Critical Challenges and New <br> Approaches |
| MGMT 3350 | Managing a Diverse Workforce |
| MGMT 3360 | Law and the Legal Process |
| MGMT 3420 | Managing Human Capital |
| MGMT 3510 | Managing Global Teams Virtually and <br> Locally |
| MGMT 3530 | Project Management Management Practices of Great <br> Organizations <br> MGMT 4310 |
| MGMT 4410 | Haman Resources and Workforce <br> Analytics |
| ENTR 2215 | Understanding Family Enterprise <br> Social Responsibility of Business in an <br> Age of Inequality |
| ENTR 2414 |  |

ENTR $4225 \quad$ Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances

CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS
Code Hours

## Required Courses

MISM 3403 Data Management in the Enterprise 4

## Electives

Note: Only one non-MISM course may be used as an elective.
Complete two of the following:

| MISM 2510 | Fundamentals of Information Analytics |
| :--- | :--- |
| MISM 3305 | Information Resource Management |
| MISM 3404 | Data Communications |
| MISM 3406 | Introduction to Web Design, Practices, <br> and Standards |
| MISM 3501 | Information Visualization for Business |
| MISM 3515 | Data Mining for Business |
| MKTG 4508 | Digital Marketing |
| SCHM 3301 | Global Supply Chain Strategy |
| SCHM 3305 | Sourcing and Procurement |
| SCHM 3308 | Supply Chain Analytics |

CONCENTRATION IN MARKETING
Code Title Hours
Required Courses

| MKTG 3401 | Marketing Research | 4 |
| :--- | :--- | ---: |
| MKTG 3301 | Marketing Management | 4 |
| or MKTG 4506 | Consumer Behavior |  |
| Electives |  | 8 |


| MKTG 2301 | Marketing and Society |
| :--- | :--- |
| MKTG 3301 | Marketing Management (if not selected <br> as a required course) |
| MKTG 3501 | Marketing Analytics |
| MKTG 4220 | Marketing in Asia |
| MKTG 4420 | Sales Management |
| MKTG 4502 | Marketing in the Service Sector |
| MKTG 4504 | Advertising and Brand Promotion |
| MKTG 4506 | Consumer Behavior (if not selected as a <br> required course) |
| MKTG 4508 | Digital Marketing |
| MKTG 4510 | New Product Development |
| MKTG 4512 | International Marketing |

CONCENTRATION IN SUPPLY CHAIN MANAGEMENT

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation <br> Management | 4 |

Elective
Complete one of the following:

| SCHM 3308 | Supply Chain Analytics |
| :--- | :--- |
| SCHM 3320 | Demand Planning and Forecasting |
| SCHM 3330 | Sustainability and Supply Chain <br> Management |
| SCHM 4401 | Advanced Problems in Supply Chain <br> Management |

## Environmental Engineering and Health Science, BS

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 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum required in major (CIVE) courses

## Engineering

Complete 65 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Engineering |  |  |
| CIVE 2221 and CIVE 2222 | Statics and Strength of Materials and Recitation for CIVE 2221 | 4 |
| CIVE 2260 and CIVE 2261 | Civil Engineering Materials and Materials and Measurements Lab | 5 |
| CIVE 2331 | Fluid Mechanics | 4 |
| CIVE 2334 | Environmental Engineering 1 | 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 | Environmental Engineering 2 and Lab for CIVE 4534 | 4 |
| CIVE 4765 | Senior Design Project-Environmental | 5 |
| CIVE 5300 | Environmental Engineering Laboratory | 4 |
| GE 3300 | Energy Systems: Science, Technology, and Sustainability | 4 |
| Environmental Engineering Technical Electives |  |  |
| Complete 12 semester hours from the following: |  | 12 |
| CIVE 5250 | Organic Pollutants in the Environment |  |
| CIVE 5260 | Environmental Fluid Mechanics |  |
| CIVE 5271 | Solid and Hazardous Waste Management |  |
| CIVE 5275 | Life Cycle Assessment of Materials, Products, and Infrastructure |  |
| CIVE 5280 | e Environm |  |


| CIVE 5536 | Hydrologic Engineering |  |
| :---: | :---: | :---: |
| CIVE 5699 | Special Topics in Civil Engineering (Groundwater and Contamination) |  |
| CIVE 5699 | Special Topics in Civil Engineering (Coastal Dynamic and Design Practice) |  |
| CIVE 5699 | Special Topics in Civil Engineering (Climate Science and Technology Adaptation and Policy) |  |
| Supplemental Credit |  |  |
| 1 semester hour from the following course counts toward the engineering requirement: |  |  |
| CIVE 3464 | Probability and Engineering Economy for Civil Engineering |  |
| 3 semester hours from the following course count toward the engineering requirement: |  |  |
| GE 1501 | Cornerstone of Engineering 1 |  |
| 3 semester hours from the following course count toward the engineering requirement: |  |  |

GE 1502 Cornerstone of Engineering 2

## Professional Development

Code Title Hours
Professional Development

| GE 1000 | Introduction to the Study of Engineering | 1 |
| :--- | :--- | :---: |
| CIVE 2000 | Introduction to Engineering Co-op | 1 |
| CIVE 3000 | Education | 1 |

## Additional Required Courses

The remaining credit from the following course will apply to the professional development area:

GE 1501 Cornerstone of Engineering 1

## Supporting Courses: Mathematics/Science

Complete 33 semester hours in mathematics and science as indicated below.
Code Title Hours

Required Mathematics/Science

| CHEM 1151 | General Chemistry for Engineers |
| :--- | :--- | :--- |
| and CHEM 1153 | and Recitation for CHEM 1151 |$\quad 4$

and PHYS 1152
and PHYS 1153
and Lab for PHYS 1151
and Interactive Learning Seminar for
PHYS 1151

| Science Elective (Earth) |  |  |
| :---: | :---: | :---: |
| Complete one | following: | 4-5 |
| ENVR 1110 | Global Climate Change |  |
| ENVR 1112 | Environmental Geology |  |
| ENVR 1120 | Oceans and Coasts |  |
| ENVR 1200 | Dynamic Earth |  |
| ENVR 1202 | History of Earth and Life |  |
| ENVR 2310 | Earth Materials |  |

## ENVR $3125 \quad$ Global Oceanic Change

Supplemental Credit
3 semester hours from the following course count toward the
mathematics/science requirement:

| CIVE 3464 | Probability and Engineering Economy |
| :--- | :--- |
| for Civil Engineering |  |

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1502 Cornerstone of Engineering 2

## Writing Requirement and NUpath Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Writing |  |  |
| A grade of C or higher is required: | 4 |  |
| ENGW 1111 | First-Year Writing | 4 |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions <br> or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## NUpath Requirements through General Electives

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.

| Health Sciences |  |  |
| :--- | :--- | ---: |
| Code | Major Requirement |  |
| HLTH 5450 | Healthcare Research | Hours |
| PHTH 4120 | Global Perspectives on Discrimination | 4 |
|  | and Health | 4 |
| PHTH 5214 | Environmental Health | 3 |
| PHTH 1260 | The American Healthcare System | 4 |
| PHTH 2210 | Foundations of Biostatistics | 4 |
| PHTH 2350 | Community and Public Health | 4 |
| PHTH 2414 | Environmental Health | 4 |
| PHTH 2515 | Healthcare Policy and Administration | 4 |
| PHTH 4540 | Health Education and Program | 4 |

## Integrative Course

Code Title Hours

CIVE 4765 Senior Design Project - Environmental
ours

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

145 total semester hours required

## Plan of Study

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours |  | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1241 | 4 | MATH 1342 | 4 | PHTH 1260 | 4 | Vacation |  |
| CHEM 1151 and CHEM 1153 | 4 | GE 1502 | 4 | MATH 2321 | 4 |  |  |
| GE 1501 | 4 | PHYS 1151 <br> and <br> PHYS 1152 <br> and <br> PHYS 1153 | 5 |  |  |  |  |
| GE 1000 | 1 | PHTH 2210 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 17 |  | 17 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | ---: | :---: | :---: |
| CIVE 2334 | 4 PHTH 2414 | 4 PHTH 2350 | 4 Co-op |  |
| CIVE 2260 <br> and | 5 CIVE 2000 | 1 MATH 2341 | 4 |  |
| CIVE 2261 |  |  |  |  |

CIVE 22214 CIVE 23314
and
CIVE 2222

| PHTH 2515 | 4 CIVE 2335 | 4 |  |  |
| ---: | ---: | ---: | ---: | ---: |
|  | CIVE 3430 | 4 |  |  |
|  | 17 | 17 | 8 | 0 |

Year 3

| Fall <br> Co-op | Hours | Spring <br> CIVE 3435 | Hours 4 | Summer 1 <br> GE 3300 | Hours | Summer 2 <br> Co-op | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Technical elective | 4 | Science elective | 4 |  |  |
|  |  | PHTH 4540 | 4 |  |  |  |  |
|  |  | HLTH 5450 | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | CIVE 3000 | 1 | Vacation |  | Co-op |  |
|  |  | CIVE 3464 | 4 |  |  | ENGW 3302 | 4 |
|  |  | Technical elective | 4 |  |  |  |  |
|  |  | CIVE 4534 <br> and <br> CIVE 4535 | 4 |  |  |  |  |
|  |  | PHTH 4120 | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 0 |  | 4 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :--- | ---: |
| Co-op | Technical <br> elective | 4 |
|  | CIVE 5300 | 4 |
|  | PHTH 5214 | 3 |


| CIVE 4765 | 5 |
| ---: | ---: |
| 0 | 16 |

## Total Hours: 145

## Health Science, Minor

The minor in health science is designed for undergraduate students from a variety of disciplines across the university who wish to expand and apply their understanding in key areas of public health including healthcare research; policy; management and delivery; epidemiology; informatics; communications; and contemporary issues in food policy, nutrition, health disparities, disease prevention, and disability in society. The minor is comprised of five courses, two of which are required (The American Healthcare System (PHTH 1260) and Community and Public Health (PHTH 2350)) to equal 20 credits in total. Health science faculty will consult with students to assist with elective selections relevant to their 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 |
| :--- | :--- | ---: |
| PHTH 1260 | The American Healthcare System | 4 |
| PHTH 2350 | Community and Public Health | 4 |

## Elective Courses

| Code | Title |  |
| :---: | :---: | :---: |
| Complete three of the | following: | 9-12 |
| EXSC 1120 | Introduction to Exercise, Fitness, and Health |  |
| HSCI 1106 | Contemporary Issues in Nutrition |  |
| PHTH 1120 | Society and Health |  |
| PHTH 2300 | Communication Skills for the Health Professions |  |
| PHTH 4120 | Global Perspectives on Discrimination and Health |  |
| PHTH 4511 | Healthcare Management |  |
| PHTH 4515 | Critical Issues in Health and PublicHealth Policy |  |
| PHTH 5202 | Introduction to Epidemiology |  |
| PHTH 5228 | Advances in Measuring Behavior |  |
| PHTH 5230 | Global Health |  |
| PHTH 5232 | Evaluating Healthcare Quality |  |
| PHTH 5234 | Economic Perspectives on Health Policy |  |
| PHTH 5440 | Community-Based Participatory Research: Environmental Health |  |
| HSCI 5230 | Clinical Nutrition Applications in Health and Disease |  |
| HLTH 5450 | Healthcare Research |  |
| HLTH 5280 | The (in)Visibility of (dis)Ability in Society |  |

## GPA Requirement

2.000 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 <br> Introductory Course | Title | Hours |
| :--- | :--- | ---: |
| INSH 1300 Introduction to Health and Humanities | 4 |  |
| Humanities Requirement <br> Complete two of the following: |  |  |
| ENGL 2770 | Writing to Heal | 8 |
| ENGL 3700 | Narrative Medicine |  |
| ENGL 4710 | Capstone Seminar |  |
| ENGL 4040 | Topics in 19th-Century Literatures |  |
| HIST 3322 | The History of Medicine in North <br> America | Moral and Social Problems in <br> Healthcare |
| PHIL 1165 | Sexin Judaism, Christianity, and Islam |  |

PHIL 1271 Sex in Judaism, Christianity, and Islam

| PHIL 1295 | Religious Perspectives on Health and <br> Healing |
| :--- | :--- |
| WMNS 1225 | Gender, Race, and Medicine |
| Social Sciences Requirement |  |

## 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 |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| IE 5617 | Lean Concepts and Applications | 4 |
| IE 5400 | Healthcare Systems Modeling and <br> Analysis | Introduction to Healthcare Systems Engineering |


| PHTH 1260 <br> Electives <br> Complete one of the following: | 4 |
| :--- | :--- | ---: |
| PHTH 4511 | Healthcare Management |
| PHTH 5226 | Strategic Management and Leadership <br> in Healthcare |
| PHTH 5232 | Evaluating Healthcare Quality |
| NRSG 5121 | Epidemiology and Population Health |
| IE 5374 | Special Topics in Industrial Engineering <br> (System Dynamics in Healthcare) |
| IE 5500 | Systems Engineering in Public <br> Programs |
| IE 5640 | Data Mining for Engineering <br> Applications |

## GPA Requirement

2.000 GPA required in the minor

## 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 1117 Integrated Anatomy and Physiology 1 5
and BIOL 1118 and Lab for BIOL 1117
BIOL 1119 Integrated Anatomy and Physiology 2 and BIOL 1120 and Lab for BIOL 1119
EXSC $4500 \quad$ Exercise Physiology 1
and EXSC 4501 and Lab for EXSC 4500

## Focus

Complete either the cardiovascular focus (open to all students) or the musculoskeletal focus (open to physical therapy students only):

| Code | Title | Hours |
| :--- | :---: | ---: |
| Cardiovascular Focus-Open to All Students |  |  |
| EXSC 5200 | Cardiopulmonary Physiology | 3 |
| EXSC 5220 | Advanced Exercise Physiology | 3 |
| Musculoskeletal Focus-Open to Physical Therapy Students  <br> Only  |  |  |


| EXSC 5230 | Physical Activity and Exercise: Effects <br> on Musculoskeletal Health and Disease | 3 |
| :--- | :--- | :--- |
| PT 5133 | Kinesiology <br> and Lab for PT 5133 | 4 |
| and PT 5134 |  |  |

## 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: two foundation and core courses, 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 Courses

## Code Title

Hours
If both are taken, the additional course may count as an elective.
Complete one of the following:

| PHTH 2350 | Community and Public Health |
| :---: | :--- |
| AFRS 1270 | Introduction to Global Health |
| or PHTH 1270 | Introduction to Global Health |

## Core Courses

Code Title
Complete one of the following. If additional courses are taken,
Hours
they may be used as electives.

| AFRS 3424 | Epidemiology of Pandemic Diseases <br> and Health Disparities in the African <br> Diaspora |
| :---: | :--- |
| HUSV 4945 | Leadership and International Program <br> Development |
| PHTH 4120 | Global Perspectives on Discrimination <br> and Health |
| PHTH 5202 | Introduction to Epidemiology |
| PHTH 5230 | Global Health |

## Elective Courses

## Code Title

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

PHTH 1261 Comparative Healthcare Systems

| PHTH 2301 | Communication Skills for the Health <br> Professions-Global |
| :--- | :--- |
| PHTH 4540 | Health Education and Program <br> Planning |
| AFRS 4939 | Community Health, Culture, and <br> Development in Kenya |

Area 2: Biology of Health and Disease
BIOL 1141 Microbes and Society

ENVR $1110 \quad$ Global Climate Change
Area 3: Society and Cultural Health/Area Studies

| PHIL 1165 | Moral and Social Problems in <br> Healthcare |
| :--- | :--- |
| ECON 1230 | Healthcare and Medical Economics |
| LACS 1220 | Latino, Latin American, and Caribbean <br> Studies |
| ANTH 4350 | Ethnography of Southeast Asia |
| ANTH 4510 | Anthropology of Africa |
| ANTH 4515 | Culture and Politics in Modern India |
| MGMT 3330 | Developing Leaders for Global <br> Sustainability |
| HIST 3322 | The History of Medicine in North |

Area 4: Globalization and Development

| POLS 1160 | International Relations |
| :--- | :--- |
| ECON 1291 | Development Economics |
| LPSC 2302 | Global Human Rights: A Social and |
|  | Economic Perspective |
| CRIM 1400 | Human Trafficking |
| HLTH 1510 | Introduction to Healthcare Ethics |

## Global Health Experience

Complete a global health experience that has been approved by the global health minor advisor.

## Recommended

Competency in another language other than English is recommended.

## GPA Requirement

2.000 GPA required in the minor

## 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 2500 | Public Health Nutrition in the <br> Community | 4 |
| HSCI 2350 | Advanced Nutrition in Health and <br>  <br>  <br>  Disease | 4 |

## Supporting Courses

Code Title

Hours
Complete two of the following. At least one elective must be
at the 3000 level or above:

| HSCI 1106 | Contemporary Issues in Nutrition |
| :--- | :--- |
| EXSC 1120 | Introduction to Exercise, Fitness, and <br> Health |
| PSYC 2306 | Food, Behavior, and Eating Disorders |
| ECON 3404 | International Food Economics and <br> Policy |
| BIOL 3611 | Biochemistry |
| CAEP 3480 | Counseling Theories and Practice <br> COMM 3201Health Communication |
| PHSC 4340 | Pharmacology for the Health <br> Professions |
| PPUA 5270 | Food Systems and Public Policy |
| GPA Requirement |  |
| 2.000 GPA required in the minor |  |

## Interdisciplinary

## Programs

## Minor

Early Intervention, Minor (p. 449)

## Early Intervention, Minor

The interdisciplinary concentration in early lintervention (EI) is designed for students who enjoy working with very young children and their families. Through course work 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.

This course work can be integrated into the psychology undergraduate degree program, the program in human services, or the physical therapy DNP program, usually taken in the senior year. Students in other programs may petition to include this minor in their course of study.

## 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 | 3 |
|  | Development, Risk, and Disability |  |$\quad 3$

## GPA Requirement

2.000 GPA required in the minor

## Physical Therapy, Movement, and Rehabilitation Sciences

Website (http://www.northeastern.edu/bouve/physical-therapy)

## Kristen Curry Greenwood, PT, DPT, EdD, MS

Associate Clinical Professor and Interim Chair
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physicaltherapy@northeastern.edu
The physical therapy program has a long and rich history as one of the oldest accredited programs in the United States, with origins dating back to World War I reconstruction aides. Our mission is to impact the health and well-being of the global community by developing leaders in physical therapy, movement, and rehabilitation sciences through interprofessional experiential education, translational research, and excellence in clinical practice. The cornerstone of our program is experiential learning, which includes cooperative education, simulated patient interactions, engagement with consumer clients, service-learning, clinical research, and international humanitarian opportunities. Through this unique, multifaceted approach to learning we:

- Educate skilled, autonomous doctors of physical therapy who embrace evidence-based practice, are culturally competent, and are equipped to work in a complex global healthcare environment
- Promote professionalism, humanistic values, resourcefulness and innovation, and a commitment to lifelong learning
- Advance scholarship in areas related to physical therapist education and clinical practice to meet the changing needs of a global and technologically advancing world


## Features of the Doctor of Physical Therapy Program

The program in physical therapy has three admission points: freshman, change of major, or as a graduate student with a baccalaureate degree in any field. The duration of the program is six years for freshman entry and three and one-half years for transfer or postbaccalaureate entry. The terminal degree is the Doctor of Physical Therapy (DPT). Our entrylevel Doctor of Physical Therapy program is one of the few freshman entry programs in the country. Undergraduate students earn a BS in rehabilitation science and progress into the Doctor of Physical Therapy phase of the program. Students do not need to reapply to the DPT phase of the program, provided they meet the academic standards.

## Emphasis on Experiential Learning

Our DPT program provides freshman-entry students with one year of cooperative education (six months for graduate-entry students) in addition to the required clinical affiliations necessary for licensure. Through cooperative education, the hallmark of Northeastern University, students are able to integrate semesters of academic study with semesters of cooperative education experiences in hospitals and clinics throughout the country and around the globe. Students may be employed as physical therapy co-ops with increasing responsibilities commensurate with their academic studies or perform other healthrelated duties.

The curriculum also includes 36 weeks of clinical education under the direct supervision of a licensed physical therapist. We are affiliated with world-class medical centers and clinical sites throughout the United States, providing students with access to master clinicians and clinical scholars. Every effort is made to accommodate individual circumstances, but students should be prepared to travel out of state for two of the three clinical placements. Availability of a car is required, as most sites are not accessible by public transportation. All expenses associated with clinical education, including travel and housing, are the responsibility of the student.

## Student Research

Physical therapy students participate in research that is integrated into the curriculum. Students have the opportunity to work with faculty to conduct ongoing research in world-renowned medical centers, in one of the 11 Department of Physical Therapy, Movement, and Rehabilitation Science's labs and centers (e.g., Neuromotor Systems Lab, Lab for Locomotion Research, The ReGameVR Lab, Movement Neuroscience Lab, Rehabilitation and Epidemiology Trainee Program, Occupational Biomechanics and Ergonomics Lab, Neurophysiology Lab, Teaching and Learning Innovation Lab, Musculoskeletal Epidemiology and Biomechanics Lab, Cadaver Lab, and Neuroscience Wet Lab). The outcome is the ability to conduct and present quality research at localand/or national-level conferences.

## Global Outreach

Students have multiple opportunities to enrich their education through global outreach and education. Physical therapy students can elect to do a traditional semester-long study abroad, a one-month Dialogue of Civilization, or to go abroad for a cooperative education experience. To date, physical therapy students have worked in Nepal, Peru, Costa Rica, Uganda, and South Africa for their cooperative education experience. In the latter portion of the curriculum, students can participate in short cultural immersion experiences abroad whereby they engage in community service projects under the direction of a physical therapy faculty member or on physical therapy academic exchanges with partner academic institutions.

## Ability to Minor in Another Field

Physical therapy undergraduate students work with their academic advisor to develop a schedule to complete a minor in another field such as psychology, exercise science, or a foreign language.

## Ability to Concentrate

Once in the program, students may have the ability to acquire additional information in two areas of concentration. The Certificate in Early Intervention (http://catalog.northeastern.edu/graduate/health-sciences/applied-psychology/early-intervention-graduate-certificate/ \#programrequirementstext) is an interprofessional program that meets the state and national requirements for personnel to work with families, infants, and toddlers with disabilities or who are at risk for developmental
delays. The concentration in sports performance prepares the physical therapy student to confidently pursue a sports physical therapy position working with athletes of all ages in a variety of settings. In both areas, students take additional course work, focused on research and clinical rotations that expand upon the entry-level physical therapy curriculum.

## Progression in the Program

To progress in the program, students must maintain acceptable standards of scholarship and academic performance as stated in the academic requirements section of this catalog. Students must develop appropriate motor skills, professional behaviors, and emotional maturity. The program in physical therapy is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association.

Graduates of the Doctor of Physical Therapy program are eligible to sit for the Physical Therapy Licensure Examination.

## Programs <br> Bachelor of Science

- Rehabilitation Studies (p. 450)


## Doctor of Physical Therapy, DPT

- Physical Therapy (p. 452)


## Rehabilitation Studies, BS

The Department of Physical Therapy, Movement, and Rehabilitation Sciences offers a four-year degree program leading to the Bachelor of Science in Rehabilitation Studies (BSRS). The program is designed to prepare students for careers in entry-level positions in the healthcare industry or to prepare graduates for admission into advanced degree (MS, PhD, PA, DPT) programs in the healthcare field. The BSRS does not qualify or prepare the graduate to sit for the physical therapy licensure exam. This program is open to students already enrolled in the Doctorate of Physical Therapy (DPT) program at Northeastern University who choose to opt out of pursuing licensure for direct patient care in the practice of physical therapy for a future career that is grounded in healthcare. The transition of a student from the DPT program to the BSRS program is seamless because the course work for the first three years of the sixyear DPT curriculum is identical to the BSRS curriculum. See "Changing Majors (p. 32)" for more information.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

The NUpath requirement Differences and Diversity (DD) is not explicitly satisfied by required courses. Students are responsible for satisfying this requirement with an open elective.


| PT 5151 | 1 |  |
| :--- | :--- | :--- |
| PHSC 4: | 4 |  |
| Elective | 4 | 8 |
|  | 16 | 8 |

Total Hours: 136

## Physical Therapy, DPT

The Doctor of Physical Therapy (DPT) degree is a professional doctoral degree offered by the department that leads to professional licensure in physical therapy.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

The NUpath requirement Differences and Diversity (DD) is not explicitly satisfied by required courses. Students are responsible for satisfying this requirement with an open elective.

## Physical Therapy Major Requirements

A 3.000 GPA and a 3.000 GPA in science prerequisites are required at the end of Summer 1 of the second year to progress into the professional phase of the program.

| Code | Title | Hours |
| :---: | :---: | :---: |
| YEAR 1 |  |  |
| PT 1000 | College: An Introduction | 1 |
| YEAR 2 |  |  |
| PT 2000 | Professional Development Co-op | 1 |
| PT 5101 and PT 5102 | Foundations of Physical Therapy and Lab for PT 5101 | 4 |
| YEAR 3 |  |  |
| PT 5131 and PT 5132 | Gross Anatomy and Lab for PT 5131 | 5 |
| PT 5133 and PT 5134 | Kinesiology and Lab for PT 5133 | 4 |
| PT 5160 and PT 5161 | Psychosocial Aspects of Healthcare and Psychosocial Aspects of Healthcare Seminar | 4 |
| EXSC 4500 | Exercise Physiology 1 | 4 |
| PT 5140 | Pathology | 4 |
| PT 5138 and PT 5139 | Neuroscience and Lab for PT 5138 | 5 |
| HLTH 5450 <br> and HLTH 5451 | Healthcare Research and Recitation for HLTH 5450 | 4 |
| PT 5500 | Pharmacology for Physical Therapy | 2 |

YEAR 4

| PT 5145 | Introduction to the Healthcare System | 2 |
| :---: | :---: | :---: |
| PT 5450 | Introduction to Therapeutic Activities | 2 |
| PT 5503 and PT 5504 | Cardiovascular and Pulmonary Management and Lab for PT 5503 | 5 |
| PT 5515 and PT 5516 | Integumentary Systems and Advanced Modalities and Lab for PT 5515 | 3 |
| PT 5540 | Clinical Integration 1: Evidence and Practice | 2 |
| PT 5150 and PT 5151 | Motor Control, Development, and Learning and Lab for PT 5150 | 5 |
| PT 6243 and PT 6244 | Health Education, Promotion, and Wellness and Recitation for PT 6243 | 3 |
| YEAR 5 |  |  |
| PT 5227 | Physical Therapy Project 1 | 3 |
| PT 5209 and PT 5210 | Neurological Rehabilitation 1 and Lab for PT 5209 | 5 |
| PT 6221 and PT 6222 | Neurological Rehabilitation 2 and Lab for PT 6221 | 5 |
| PT 5229 | Physical Therapy Project 2 | 2 |
| PT 5226 | Physical Therapy Professional Seminar 2 | 2 |
| PT 5230 | Pediatric and Geriatric Aspects of Life Span Management | 3 |
| PT 5505 and PT 5506 | Musculoskeletal Management 1 and Lab for PT 5505 | 5 |
| PT 6223 and PT 6224 | Musculoskeletal Management 2 and Lab for PT 6223 | 5 |
| PT 6241 | Screening for Medical Conditions in Physical Therapy Practice | 4 |
| PT 6000 | Leadership, Administration, and Management | 2 |
| PT 6441 | Clinical Education 1 (Summer) | 6 |
| PT 6215 and PT 6216 | Assistive Technology and Lab for PT 6215 (Summer) | 4 |
| PT 6250 | Clinical Integration 2: Evidence and Practice (Summer) | 2 |
| During the summer, complete one course in the following range: PT 6231 to PT 6237. |  | 4 |
| YEAR 6 |  |  |
| PT 6442 | Clinical Education 2 | 6 |
| PT 6448 | Clinical Education 3 | 9 |
| PT 6251 | Diagnostic Imaging | 3 |

## Minor Requirement

Students must declare and successfully complete a minor or minor equivalent as part of their program of study.

Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| YEAR 1 |  |  |
| MATH 1241 | Calculus 1 | 4 |
| PSYC 1101 | Foundations of Psychology | 4 |
| PSYC 3404 | Developmental Psychology | 4 |


| CHEM 1101 <br> and CHEM 1102 <br> and CHEM 1103 | General Chemistry for Health Sciences and Lab for CHEM 1101 and Recitation for CHEM 1101 | 5 |
| :---: | :---: | :---: |
| CHEM 1104 <br> and CHEM 1105 <br> and CHEM 1106 | Organic Chemistry for Health Sciences and Lab for CHEM 1104 and Recitation for CHEM 1104 | 5 |
| ENGW 1111 | First-Year Writing | 4 |
| YEAR 2 |  |  |
| BIOL 1117 and BIOL 1118 | Integrated Anatomy and Physiology 1 and Lab for BIOL 1117 | 5 |
| BIOL 1119 and BIOL 1120 | Integrated Anatomy and Physiology 2 and Lab for BIOL 1119 | 5 |
| PHYS 1145 and PHYS 1146 | Physics for Life Sciences 1 and Lab for PHYS 1145 | 5 |
| PHYS 1147 <br> and PHYS 1148 | Physics for Life Sciences 2 and Lab for PHYS 1147 | 5 |
| $\text { PHTH } 2210$ <br> or MATH 2280 | Foundations of Biostatistics Statistics and Software | 4 |
| ENGW 3306 | Advanced Writing in the Health Professions (a grade of C or higher required) | 4 |
| YEAR 3 |  |  |


| COOP 3945 | Co-op Work Experience | 0 |
| :--- | :--- | :--- |
| YEAR 4 |  | 0 |
| COOP 3945 | Co-op Work Experience | 0 |

## Physical Therapy Major Grade/GPA Requirement

A grade of $C$ or higher is required in all courses in the PT, HLTH, or EXSC subject areas.
Minimum 3.000 overall GPA required

## Program Requirements

206 total semester hours required
Minimum 3.000 GPA required

## Plan of Study <br> Six Years, Two Co-ops

Year 1

| Fall Ho | Hours | Spring Ho | Hours | Summer <br> 1 | Hour | $\begin{aligned} & \text { s Summer } \\ & 2 \end{aligned}$ | Hours |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PSYC 1101 | 101 | PSYC 3404 | 4 | Vacation | 0 | 0 Vacation | 0 | 0 |
| CHEM 1 | 4 | CHEM 1 | 4 |  |  |  |  |  |
| CHEM 1102 | 021 | CHEM 1105 | - 1 |  |  |  |  |  |
| CHEM 1 | 0 | CHEM 1 | 0 |  |  |  |  |  |
| MATH 1241 |  | Minor course or elective | 4 |  |  |  |  |  |
| PT 100C | 1 | Minor course or elective | 4 |  |  |  |  |  |
| ENGW 1111 | 114 |  |  |  |  |  |  |  |
|  | 18 |  | 17 |  | 0 | 0 | 0 | 0 |

Year 2


Year 3

| Fall | Hours Spring Hour |  | Hours | Summer Hours <br> Full <br> Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Co-op | 0 | PT 5131 | 4 | PT 5138 | 4 |
|  |  | PT 5132 | 1 | PT 513¢ | 1 |
|  |  | HLTH 5450 | 4 | PT 5140 | 4 |
|  |  | PT 516C | 3 | PT 513E | 3 |
|  |  | PT 5161 | 1 | PT 5134 | 1 |
|  |  | EXSC 4! | 4 | PT 550C | 2 |
|  | 0 |  | 17 |  | 15 |

Year 4


Year 5

| Fall | Hours Spring | Hours Summer <br> $\mathbf{1}$ | Hours Summer | $\mathbf{2}$ |
| :--- | :---: | :---: | :---: | :---: |
| PT 6241 | 4 PT 6221 | 4 PT 6441 | 6 PT <br> advanced <br> topics <br> course | 2 |
| PT 600C | 2 PT 6222 | 1 | PT 625C | 2 |
| PT 5209 | 4 PT 6223 | 4 | PT 6215 | 3 |
| PT 521C | 1 PT 6224 | 1 | PT 621€ | 1 |
| PT 5505 | 4 PT 5226 | 2 |  |  |


| PT 550€ | 1 PT 522؟ | 2 |  |  |  |
| :--- | ---: | ---: | ---: | :--- | :--- |
| PT 5227 | 3 PT 5230 | 3 |  |  |  |
|  | 19 | 17 | 6 | 8 |  |

Year 6

| Fall | Hours Spring | Hours |
| :--- | :---: | :---: |
| PT 6442 | 6 PT 6448 | 9 |
| PT 6251 | 3 |  |
|  | 9 | 9 |

Total Hours: 206

## School of Nursing

Website (http://www.northeastern.edu/bouve/nursing)

## Rhonda Board, PhD, RN, CCRN

Associate Professor and Interim Dean, School of Nursing
Brenda Douglas, PhD, RN, CNE
Associate Clinical Professor and Assistant Dean of Undergraduate Programs
Janet S. Rico, PhD, MBA, FNP
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## Office of the Dean

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The School of Nursing offers a traditional Bachelor of Science and both an Accelerated Bachelor of Science (ABSN) 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 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 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.

## Special Requirements

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 in cardiopulmonary resuscitation (CPR); recent negative tuberculosis screening (PPD); positive titres 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.

Clinical settings also require us to run a criminal background check. Additionally, international students require curricular practical training (CPT) clearance to meet federal requirements for all clinical and co-op experiences.

Students enrolled in the clinical courses may need access to a car to travel to assigned agencies. Students are responsible for their own transportation costs.

During academic semesters, students in the School of Nursing are required to wear the approved school uniform to their clinical site and in some clinical laboratory areas. Students are responsible for purchasing these uniforms, badges, and a lab supply pack.

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; or they can similarly investigate the requirements in the state where they expect to practice.

## RN to BSN Hybrid Option

The Bouvé College of Health Sciences School of Nursing allows qualified individuals to take the next step in their career toward becoming a baccalaureate-prepared registered nurse. The RN to BSN program offers a comprehensive clinical curriculum where students are exposed to all nursing specialties and aspects of nursing leadership. Program participation may be completed on a part-time or a full-time basis depending on preference. For more information, contact the School of Nursing program call center at 888.206.6004.

## Programs

## Bachelor of Science in Nursing (BSN)

- Nursing (p. 454)
- Accelerated Program for Second-Degree Students (p. 457)
- RN-to-BSN (p. 457)


## 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, evidencebased 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 course work, students must meet the cooperative education requirement, 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 program is accredited by the Commission on Collegiate Nursing Education (CCNE) and is approved by the Board of Registration in Nursing of the Commonwealth of Massachusetts (BORN). Accreditation and approval indicate that the program meets educational standards for faculty, curriculum design, student quality, and overall university support. The School of Nursing has also been designated as a National Hartford Center of Gerontological Nursing Excellence for its contributions in the area of geriatric nursing and research. The school subscribes to the standards established by the American Association of Colleges of Nursing (AACN), of which it is a member.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).
Nursing Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| NRSG 1000 | College: An Introduction | 1 |
| NRSG 2210 | Influences on Health and Illness: A Nursing Perspective | 3 |
| NRSG 2220 and NRSG 2221 | Nursing Interventions, Assessment, and Community Care and Lab for NRSG 2220 | 5 |
| NRSG 2312 | Pathophysiology | 4 |
| PHSC 4340 | Pharmacology for the Health Professions | 4 |
| NRSG 2000 | Professional Development for Co-op | 1 |
| NRSG 3323 and NRSG 3324 | Intermediate Interventions and Assessment and Lab for NRSG 3323 | 2 |
| NRSG 3320 and NRSG 3321 | Nursing Care of Adults 1 and Clinical for NRSG 3320 | 6 |
| NRSG 3302 and NRSG 3303 | Nursing with Women and Families and Clinical for NRSG 3302 | 5 |
| NRSG 3420 and NRSG 3421 | Nursing Care of Adults 2 and Clinical for NRSG 3420 | 6 |


| NRSG 3400 <br> and NRSG 3401 | Nursing and the Promotion of Mental <br> Health <br> and Clinical for NRSG 3400 | 5 |
| :--- | :--- | :---: |
| NRSG 5120 | Statistics for Health Science |  |
| NRSG 4502 <br> and NRSG 4503 | Nursing Care of the Child <br> and Clinical for NRSG 4502 | 3 |
| NRSG 4604 <br> and NRSG 4605 | Public Health Community Nursing <br> and Clinical for NRSG 4604 | 6 |
| NRSG 4610 Managing and Leading in Healthcare | 5 |  |
| HLTH 5450 4995 | Comprehensive Nursing Practicum | 4 |

## Supporting Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| CORE TERM 1 |  |  |
| BIOL 1117 and BIOL 1118 | Integrated Anatomy and Physiology 1 and Lab for BIOL 1117 | 5 |
| CHEM 1101 and CHEM 1102 | General Chemistry for Health Sciences and Lab for CHEM 1101 | 5 |
| HSCI 1105 | Human Nutrition | 4 |
| Complete one of the following: |  | 4 |


| MATH 1215 | Mathematical Thinking |
| :--- | :--- |
| MATH 1241 | Calculus 1 |
| MATH 1242 | Calculus 2 |
| MATH 1251 | Calculus and Differential Equations for <br> Biology 1 |
| MATH 1252 | Calculus and Differential Equations for <br> Biology 2 |
| MATH 1341 | Calculus 1 for Science and Engineering |
| CORE TERM 2 | Basic Microbiology  <br> BIOL 1121  <br> and BIOL 1122 and Lab for BIOL 1121 |
| BIOL 1119 <br> and BIOL 1120 | Integrated Anatomy and Physiology 2 <br> and Lab for BIOL 1119 |
| PSYC 1101 Foundations of Psychology | 5 |
| ENGW 1111 | First-Year Writing |


| CLINICAL TERM 2 |  |
| :--- | :--- |
| SOCL 1101 | Introduction to Sociology |

## CLINICAL TERM 3

PSYC 3404 Developmental Psychology 4

CLINICAL TERM 4

| ENGW 3306 | Advanced Writing in the Health <br> Professions |
| :--- | :--- |

## CLINICAL TERM 5

HLTH 2100 Interprofessional Ethics for Individual 4 and Population Health
or PHIL 1165 Moral and Social Problems in Healthcare

## Electives

Code Title Hours

Complete three courses outside nursing or nursing courses 12 not used in requirements above.

## 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 |
| NRSG 1000 | 1 BIOL 1121 | 4 | Vacation | 0 |
| HSCI 1105 | 4 | BIOL 1122 | 1 |  |
| MATH 1215 | 4 | ENGW 1111 | 4 |  |
| BIOL 1117 | 4 BIOL 1119 | 4 |  |  |
| BIOL 1118 | 1 BIOL 1120 | 1 |  |  |
| CHEM 1101 | 4 PSYC 1101 | 4 |  |  |
| CHEM 1102 | 1 |  |  | 0 |
| CHEM 1103 | 0 | 18 | 0 |  |


| Year 2 |  |  |  |  |
| :--- | ---: | ---: | :---: | ---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| NRSG 2220 | 4 NRSG 3323 | 1 PSYC 3404 | 4 Co-op | 0 |
| NRSG 2221 | 1 NRSG 3324 | 1 NRSG 3400 | 3 |  |
| PHSC 4340 | 4 NRSG 3320 | 4 NRSG 3401 | 2 |  |
| NRSG 2210 | 3 NRSG 3321 | 2 |  |  |
| NRSG 2312 | 4 NRSG 3302 | 3 |  |  |
|  | NRSG 3303 | 2 |  | 0 |


| Year 3 |  |  |  |  |
| :--- | ---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | 0 NRSG 4604 | 3 Vacation | 0 Co-op | 0 |
|  | NRSG 4605 | 2 |  |  |
|  | NRSG 3420 | 4 |  |  |
|  | NRSG 3421 | 2 |  | 0 |
|  | NRSG 5120 | 3 | 0 |  |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | 0 NRSG 4502 | 4 ENGW 3306 | 4 Co-op | 0 |
|  | NRSG 4503 | 2 Elective | 4 |  |
|  | Elective | 4 |  |  |
| HLTH 5450 | 4 |  | 0 |  |

Year 5

| Fall | Hours | Spring |
| :--- | :--- | ---: |
| Co-op | Hours |  |
|  | NRSG 4995 | 5 |
|  | HRSG 4610 | 4 |
|  | HLTH 2100 | 4 |
|  | or PHIL 1165 |  |
|  | Elective | 4 |
|  |  | 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 |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| BIOL 1117 | 4 BIOL 1121 | 4 Vacation | 0 Vacation | 0 |  |
| BIOL 1118 | 1 BIOL 1122 | 1 |  |  |  |
| MATH 1215 | 4 ENGW 1111 | 4 |  |  |  |
| HSCI 1105 | 4 BIOL 1119 | 4 |  |  |  |
| CHEM 1101 | 4 BIOL 1120 | 1 |  |  |  |
| CHEM 1102 | 1 PSYC 1101 | 4 |  | 0 |  |
| CHEM 1103 | 0 |  | 0 |  |  |
| NRSG 1000 | 1 | 18 |  |  |  |
|  | 19 |  |  |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :---: | ---: | ---: | ---: | ---: |
| NRSG 2220 | 4 Co-op | 0 Co-op | 0 PSYC 3404 | 4 |  |
| NRSG 2221 | 1 |  | NRSG 3302 | 3 |  |
| PHSC 4340 | 4 |  | NRSG 3303 | 2 |  |
| NRSG 2210 | 3 |  |  |  |  |
| NRSG 2312 | 4 |  |  | 9 |  |
| NRSG 2000 | 1 |  | 0 |  |  |
|  | 17 | 0 |  |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| SOCL 1101 | 4 Co-op | 0 Co-op | 0 NRSG 4604 | 3 |
| NRSG 3320 | 4 |  | NRSG 4605 | 2 |
| NRSG 3321 | 2 |  | Elective | 4 |
| NRSG 3400 | 3 |  |  |  |
| NRSG 3401 | 2 |  |  |  |
| NRSG 3323 | 1 |  |  | 9 |
| NRSG 3324 | 1 |  |  |  |
|  | 17 | 0 |  |  |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| NRSG 3420 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| NRSG 3421 | 2 |  |  |  |
| NRSG 5120 | 3 |  |  |  |
| ENGW 3306 | 4 |  | 0 | 0 |
|  | 13 | 0 |  |  |

Year 5
$\left.\begin{array}{lrr}\text { Fall } & \text { Hours Spring } & \text { Hours } \\ \text { NRSG 4502 } & 4 \text { NRSG 4610 } & 4 \\ \hline \text { NRSG 4503 } & 2 \text { NRSG 4995 } & 5 \\ \hline \text { HLTH 5450 } & 4 \text { HLTH 2100 } \\ & \text { or PHIL 1165 }\end{array}\right) 4$.

Total Hours: 133

## 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 course work 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, OB-GYN, pediatrics, behavioral and mental health, acute care, public health, health education, and management/leadership.

## Program Requirements

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

| Code | Title | Hours |
| :---: | :---: | :---: |
| SEMESTER 1 |  |  |
| NRSG 2220 and NRSG 2221 | Nursing Interventions, Assessment, and Community Care and Lab for NRSG 2220 | 5 |
| NRSG 2312 | Pathophysiology | 4 |
| NRSG 3302 and NRSG 3303 | Nursing with Women and Families and Clinical for NRSG 3302 | 5 |
| PHSC 4340 | Pharmacology for the Health Professions | 4 |
| SEMESTER 2 |  |  |
| 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 | Intermediate Interventions and Assessment and Lab for NRSG 3323 | 2 |
| SEMESTER 3 |  |  |
| 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 |


| HLTH 5450 | Healthcare Research | 4 |
| :--- | :--- | :---: |
| SEMESTER 4 |  | 5 |
| NRSG 4604 <br> and NRSG 4605 | Public Health Community Nursing <br> and Clinical for NRSG 4604 | 4 |
| NRSG 4610 | Managing and Leading in Healthcare | 5 |
| NRSG 4995 | Comprehensive Nursing Practicum | 3 |

## Program Requirement

67 total semester hours required

## Nursing, RN-to-BSN

The Bouvé College of Health Sciences School of Nursing prepares qualified individuals to take the next step in their career to become a baccalaureate-prepared registered nurse. The RN to BSN program offers a comprehensive curriculum to prepare students as practitioners and leaders in the professional role. Program participation may be completed on a part-time or a full-time basis depending on preference. The program consists of online course work and one clinical experience in the area of public health nursing. For more information, contact the School of Nursing program call center at 888.206.6004.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| NRSG 2312 | Pathophysiology | 4 |
| NRSG 4604 | Public Health Community Nursing | 5 |
| and NRSG 4605 | and Clinical for NRSG 4604 |  |
| NRSG 4610 | Managing and Leading in Healthcare | 4 |
| NRSG 4620 | Innovations in Nursing Practice | 4 |
| NRSG 5100 | Professional Development and <br> Scientific Basis | 3 |
| NRSG 5101 | Computer and Nursing Informatics <br> NRSG 5118 | Healthcare System and Professional <br> Role Development |
| NRSG 5120 | Statistics for Health Science | 3 |

## Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| ENGW 3250 | Writing for the Professions | 4 |
| HLTH 1510 | Introduction to Healthcare Ethics | 4 |
| HLTH 5450 | Healthcare Research | 4 |


| PHTH 2300 | Communication Skills for the Health <br> Professions |
| :--- | :--- |

## Program Requirement

45 total semester hours required ( 83 credits are transferred from initial degrees and other course work).

## School of Pharmacy

Website (http://www.northeastern.edu/bouve/pharmacy)

## John R. Reynolds, PharmD

Professor and Dean

## 140 The Fenway

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617.373 .7655 (fax)
schoolofpharmacy@northeastern.edu
The School of Pharmacy is dedicated to excellence in pharmacy-related education, research, and service, including the provision of patient care. We prepare students with knowledge, skills, and values for careers in pharmacy practice and the pharmaceutical sciences. Our 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 six-year (two years of preprofessional and four years of professional courses) program at Northeastern University leading to the professional Doctor of Pharmacy degree (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 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.

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's Academic Standing Committee.

The pharmacy curriculum includes introductory (cooperative education) and advanced pharmacy practice experiences (IPPEs and 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 the school's cooperative education coordinators. Students are required to earn a satisfactory (S) grade 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's Office of Experiential Education. Students may be able to petition for out-of-system APPEs; however, availability for such requests is limited.

To be eligible for a Doctor of Pharmacy degree (PharmD), 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 in the Bouvé College of Health Sciences Undergraduate Student Information Manual. The pharmacy program, which is fully accredited by the Accreditation Council for Pharmacy Education (ACPE), subscribes and adheres to the standards established by ACPE.

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 10 of the pharmacy curriculum. The Bachelor of Science in Pharmacy Studies does not allow for individuals to pursue licensure for direct patient care in the practice of pharmacy. To earn the PharmD degree, students must complete an additional 36 semester hours of APPEs (see "Requirements for the Doctor of Pharmacy Advanced Pharmacy Practice Experiences" below) with an overall GPA of 3.000 or greater in the Bouvé College of Health Sciences graduate program.

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 IPPEs (co-op) and APPEs.

The Bachelor of Science in Pharmaceutical Sciences is geared toward highly motivated students who are strongly focused on careers in biomedical/pharmaceutical research, biomedicine, and/or the pharmaceutical/biotech industries. 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 scientific curriculum with specialized educational opportunities. Pharmaceutical sciences are by nature highly interdisciplinary: they include pharmacology, physiology, structural biology, medicinal chemistry, pharmaceutics, and the allied
fields of toxicology, chemical biology, 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 and can then further specialize their education with elective courses in areas of their interest and their developing career trajectory. Entering students are expected to initiate a self-directed search for opportunities to participate in laboratory research. In the first year, students take Introduction to Health Science Research, a course that introduces students to the scientific literature, hypothesis generation, and use of the scientific method to investigate unsolved problems. To facilitate student identification and research, this course also introduces students to faculty researchers from within and outside of the university with the goal of matching students with faculty research mentors. 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, professional programs, or to enter the biopharmaceutical industry. The BS degree requires a minimum of four years of study and provides for at least one co-op period.

Professional and/or legal exigencies arise from time to time that 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.

## 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.

If the student learns the urine screen (aka test \#1) is positive, the student will notify the OEE (pharmacyoee@northeastern.edu) and immediately complete a second urine screen (aka test \#2). A professional concern form will be completed based on test \#1 results.

- If that 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 (aka 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.

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. Failure to complete these requirements as directed will likely result in delay of graduation.
6. Maintenance of a portfolio throughout the professional years and completion of all portfolio submission requirements within specified deadlines.
7. 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:

- Must comply with all stated Northeastern University general policies, regardless of the academic year.
- May be made at any time period during the freshman through 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 for students in the P3 year will not be permitted.
- During the P4 academic year, requests for a general leave cannot be made at any time.


## 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 criticalthinking 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.

## Programs

## Bachelor of Science (BS)

- Pharmaceutical Sciences (p. 460)
- Pharmacy Studies (p. 461)


## Doctor of Pharmacy (PharmD)

- Pharmacy (p. 463)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 467)

## Pharmaceutical Sciences, BS

The Bachelor of Science in Pharmaceutical Sciences is geared toward highly motivated students who are strongly focused on careers in biomedical/pharmaceutical research, biomedicine, and/or the pharmaceutical/biotech industries. 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 scientific curriculum with specialized educational opportunities. Pharmaceutical sciences are by nature highly interdisciplinary: pharmacology; physiology; structural biology; medicinal chemistry; pharmaceutics 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 educations with elective courses in areas of their interest and their developing career trajectories.

Entering students are expected to initiate a self-directed search for opportunities to participate in laboratory research. In the first year, students complete Introduction to Health Science Research (PHSC 2650), a course that introduces students to scientific literature, hypothesis generation, and use of the scientific method to investigate unsolved problems. To facilitate student identification and research, this course also introduces students to faculty researchers from within and outside of the university, with the goal of matching students with faculty research mentors.

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, or enter the biopharmaceutical industry. The BS degree requires a minimum of four years of study and provides for at least one co-op period. 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 SciencesProgression Standards

The Bachelor of Science in Pharmaceutical Sciences requires students to maintain a set of academic standards that include maintaining an overall GPA of 3.000 or better and a science GPA of 3.000 or better. A grade of $C$ is the minimal passing grade for any of the required courses in the major. The program also requires students to seek out and establish laboratory research opportunities with a faculty-level mentor. It is advised that students get involved in laboratory research during their first year in the program. It is required that the student secure a laboratory research opportunity by the spring semester of the second year and complete Lab Research Rotation (PHSC 2100) by the end of the second year.

All students admitted to the pharmaceutical sciences major will need to adhere to progression policies to enter the third year of the program. At the end of the second year, fall semester, failure to complete all required course work at or exceeding program standards and/or to not involve oneself in a laboratory research opportunity will be considered a professional deficiency. According to standard policy, affected students will be invited to meet with the School of Pharmacy Academic Standing Committee and may prepare a report describing how they will satisfy outstanding requirements by the end of the summer of the second year for consideration by the committee. If the plan is not accepted, or accepted but not executed by the end of summer of the second year (or as agreed), then the student will be dismissed from the program. Under such circumstances, the student can follow standard School of Pharmacy policies to appeal.

## Securing a Laboratory Research Opportunity

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 (Laboratory Research Rotation) and the writing and completion of an undergraduate thesis (comprised of Senior Thesis and Senior Thesis Continuation). Students must have 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 the Introduction to Health Science Research course during the spring of the first year and as needed, through work with a faculty advisor within the BS in 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. All students who wish to transfer into the program and have completed Biology 1 with lab and Chemistry 1 with
lab must have earned a grade of B or better and have an overall GPA of 3.000 or better.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required courses. Students are responsible for satisfying these requirements with open electives.

| Code | Title | Hours |
| :---: | :---: | :---: |
| SEMESTER 1 |  |  |
| PHMD 1000 | College: An Introduction | 1 |
| SEMESTER 2 |  |  |
| PHSC 2650 | Introduction to Health Science Research | 4 |
| SEMESTER 3 |  |  |
| PHMD 1201 and PHMD 1202 | Introduction to Pharmacy Practice and Lab for PHMD 1201 | 3 |
| $\begin{aligned} & \text { PHSC } 2301 \\ & \text { and PHSC } 2302 \end{aligned}$ | Human Physiology 1 and Human Anatomy Lab | 4 |
| SEMESTER 4 |  |  |
| PHSC 2100 | Lab Research Rotation | 4 |
| $\begin{aligned} & \text { PHSC } 2303 \\ & \text { and PHSC } 2304 \end{aligned}$ | Human Physiology 2 and Human Physiology Lab | 4 |
| PHSC 2400 | Research Ethics for Beginning Health Scientists | 4 |


| SEMESTER 5 |  |  |
| :--- | :--- | ---: |
| PHSC 2320 | Biochemistry | 4 |
| PHSC 3411 | Pharmaceutics 1 | 4 |
| PHSC 4501 | Pharmacology/Medicinal Chemistry 1 | 5 |
| SEMESTER 6 |  |  |
| PHSC 3412 | Pharmaceutics 2 | 4 |
| PHSC 3419 | Pharmaceutics Laboratory | 1 |
| PHSC 4502 | Pharmacology/Medicinal Chemistry 2 | 5 |
| PHSC 5360 | Anti-Infectives | 4 |
| Optional Elective |  | $0-4$ |
| SEMESTER 7 |  |  |
| PHSC 4997 | Senior Thesis | 4 |

## Statistics/Experimental Design Requirement

| PHTH 2210 | Foundations of Biostatistics |
| :---: | :--- |
| or PHSC 6214 | Experimental Design and Biostatistics |

Toxicology Requirement3

Complete at least 3 semester hours in the area of toxicology taken after successful completion of PHSC 4502. Contact your advisor for course options.

| NUpath Elective |  | 4 |
| :--- | :--- | ---: |
| SEMESTER 8 | Immunology | 3 |
| PHSC 2330 | Pharmacokinetics and <br> Biopharmaceutics | 3 |
| PHSC 3430 | Senior Thesis Continuation | 4 |
| PHSC 4998 |  | 4 |

## Supporting Courses

Code Title Hours

SEMESTER 1
BIOL 1111 General Biology 1 5
and BIOL 1112 and Lab for BIOL 1111

CHEM 1211 General Chemistry 1 5
and CHEM 1212 and Lab for CHEM 1211
and CHEM 1213 and Recitation for CHEM 1211
PSYC 1101 Foundations of Psychology 4
SEMESTER 2
BIOL 1113 General Biology 2 5
and BIOL 1114 and Lab for BIOL 1113

CHEM 1214 General Chemistry $2 \quad 5$
and CHEM 1215 and Lab for CHEM 1214
and CHEM 1216 and Recitation for CHEM 1214
MATH 1241 Calculus $1 \quad 4$
SEMESTER 3
PHYS 1149 Physics for Pharmacy 5

| and PHYS 1150 | and Lab for PHYS 1149 |
| :--- | :--- |
| CHEM 2311 | Organic Chemistry 1 |

CHEM 2311 Organic Chemistry 1
and CHEM 2312 and Lab for CHEM 2311
and CHEM 2319 and Recitation for CHEM 2311
SEMESTER 4
CHEM 2313
and CHEM 2314
and CHEM 2320
Organic Chemistry 2
5

## Writing Requirement

Code Title Hours
SEMESTER 1
ENGW 1111 First-Year Writing (a grade of C or 4
SEMESTER 5
ENGW $3306 \quad$ Advanced Writing in the Health 4

## Program Requirement

132 total semester hours required

## 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 didactic and laboratory courses in semesters 1 through 10 of the pharmacy curriculum with an overall grade-point average (GPA) of 2.000 or greater. The Bachelor of Science in

Pharmacy Studies does not allow for individuals to pursue licensure for direct patient care in the practice of pharmacy.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

The NUpath requirement Interpreting Culture (IC) is not explicitly satisfied by required courses. Students are responsible for satisfying this requirement with an open elective.

## Pharmacy Studies Major Grade Requirement

A grade of C or higher is required in all PHMD and PHSC courses.

## Pharmacy Major Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| SEMESTER 1 |  |  |
| PHMD 1000 | College: An Introduction | 1 |
| SEMESTER 2 |  |  |
| PHMD 1001 | Introduction to the Profession of Pharmacy | 1 |
| SEMESTER 3 |  |  |
| PHSC 2301 and PHSC 2302 | Human Physiology 1 and Human Anatomy Lab | 4 |
| SEMESTER 4 |  |  |
| 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 |
| GPA Progression Requirement for Third Year |  |  |
| A 3.000 GPA is required at the end of the second year to progress to the third year. |  |  |
| SEMESTER 5 |  |  |
| PHMD 2350 | Healthcare Systems | 3 |
| PHSC 2320 | Biochemistry | 4 |
| PHSC 4501 | Pharmacology/Medicinal Chemistry 1 | 5 |
| PHSC 3411 | Pharmaceutics 1 | 4 |
| SEMESTER 6 |  |  |
| PHMD 2310 and PHMD 2311 | Educational and Behavioral Interventions in Pharmacy Practice and Lab for PHMD 2310 | 2.5 |
| PHMD 5250 | Pharmacy Care Management | 3 |
| PHSC 4502 | Pharmacology/Medicinal Chemistry 2 | 5 |
| PHSC 3419 | Pharmaceutics Laboratory | 1 |
| PHSC 3412 | Pharmaceutics 2 | 4 |
| SEMESTER 7 |  |  |
| 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 |
| SEMESTER 8 |  |  |
| 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 |
| PHMD 5330 | Jurisprudence | 3 |
| SEMESTER 9 |  |  |
| PHMD 5223 | Evidence-Based Medicine | 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 |
| SEMESTER 10 |  |  |
| 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 5450 | Advanced Pharmacy Practice Experience Preparatory Seminar | 1 |
| PHMD 5270 | Economic Evaluation of Pharmaceuticals and Pharmacy Practice | 2 |

## Professional Elective and Capstone Requirements



## Open Electives

A minimum of 8 semester hours of open electives are 8 required. Additional electives may be required to fulfill the total semester hours required for your program.

## Professional Elective

Complete at least two semester hours during the professional 2
phase of the program (after semester 4) from the following:
From the Community to the Intensive
Care Unit: Approaching Interdisciplinary
Research in the Elderly
Alternative Medicine
Developing an Interdisciplinary
Approach to Health Management for Older Adults

| HLTH 5280 | The (in)Visibility of (dis)Ability in <br> Society |
| :--- | :--- |
| HSCI 5230 | Clinical Nutrition Applications in Health <br> and Disease |
| PHMD 3600 | Leadership and Advocacy in Health <br> Professions |
| PHMD 4350 | Exploring Academic Careers |
| PHMD 4581 | Cancer Chemotherapy |


| PHMD 4585 | Research Methods in Health Systems |
| :---: | :---: |
| PHMD 4880 | Special Topics |
| PHMD 4970 | Junior/Senior Honors Project 1 |
| PHMD 4971 | Junior/Senior Honors Project 2 |
| PHMD 4991 | Research |
| PHMD 4992 | Directed Study |
| PHSC 4971 | Junior/Senior Honors Project 2 |
| PHMD 4890 | Contemporary Issues in Geriatric Pharmacy |
| PHSC 4991 | Research |
| PHSC 4992 | Directed Study |
| PHSC 5100 | Concepts in Pharmaceutical Science |
| PHSC 6210 | Drug Design, Evaluation, and Development |
| PHSC 6212 | Research Skills and Ethics |
| PHSC 6218 | Biomedical Chemical Analysis |
| PHSC 6224 | Behavioral Pharmacology and Drug Discovery |
| PHSC 6226 | Imaging in Medicine and Drug Discovery |
| PMCL 6262 | Receptor Pharmacology |
| PMST 6250 | Advanced Physical Pharmacy |
| PMST 6252 | Pharmacokinetics and Drug Metabolism |
| PMST 6254 | Advanced Drug Delivery System |
| PHTH 5120 | Race, Ethnicity, and Health in the United States |
| PHTH 5202 | Introduction to Epidemiology |
| PHTH 5210 | Biostatistics in Public Health |
| PHTH 5212 | Public Health Administration and Policy |
| PHTH 5214 | Environmental Health |
| PHTH 5222 | Health Advocacy |
| PHTH 5224 | Social Epidemiology |
| PHTH 5226 | Strategic Management and Leadership in Healthcare |
| PHTH 5228 | Advances in Measuring Behavior |
| PHTH 5232 | Evaluating Healthcare Quality |
| PHTH 5234 | Economic Perspectives on Health Policy |
| PHTH 5236 | Public Health Nutrition |
| PHTH 5540 | Health Education and Program Planning |
| PHTH 6200 | Principles and History of Urban Health |
| PHTH 6204 | Society, Behavior, and Health |
| PHTH 6208 | Urban Community Health Assessment |
| PHTH 6320 | Qualitative Methods in Health and Illness |
| PSYC 4514 | Clinical Neuroscience |
| NRSG 1205 | Wellness |
| NRSG 6282 | Clinical Psychopharmacology |
| NRSG 6287 | Child and Adolescent Psychopharmacology |
| NRSG 6300 | Healthcare Finance and Marketing |
| NRSG 6302 | Health Policy and Law |
| NRSG 6306 | Health Informatics |


| NRSG 6310 | Nurse/Healthcare Entrepreneur |
| :--- | :--- |
| HINF 5101 | Introduction to Health Informatics and <br> Health Information Systems |
| HINF 5102 | Data Management in Healthcare <br> HINF 6205Creation and Application of Medical <br> Knowledge |
| SLPA 1101 | Introduction to Communication <br> Disorders |
| SPNS 1402 | Elementary Spanish 2 for Healthcare <br> Professionals |
| SPNS 2302 | Intermediate Spanish Immersion 2 |
| CAEP 6220 | Development Across the Life Span |
| CAEP 6290 | Reality Therapy |
| Capstone | Pharmacy Capstone |
| PHMD 5600 |  |

## Supporting Courses

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SEMESTER 1
BIOL 1111 General Biology 1 5
and BIOL 1112 and Lab for BIOL 1111
CHEM 1211 General Chemistry 1 5
and CHEM 1212 and Lab for CHEM 1211
PSYC 1101 Foundations of Psychology 4
SEMESTER 2
BIOL 1113 General Biology 2 5
and BIOL 1114 and Lab for BIOL 1113
CHEM 1214 General Chemistry $2 \quad 5$
$\begin{array}{lll}\text { and CHEM } 1215 & \text { and Lab for CHEM } 1214 \\ \text { MATH } 1241 & \text { Calculus 1 }\end{array}$
SEMESTER 3
PHYS $1149 \quad$ Physics for Pharmacy 5
and PHYS 1150 and Lab for PHYS 1149
CHEM $2311 \quad$ Organic Chemistry 1
5
and CHEM 2312 and Lab for CHEM 2311
SEMESTER 4
CHEM 2313
Organic Chemistry 2
5
and CHEM 2314 and Lab for CHEM 2313

## Writing Requirements

Code Title Hours

SEMESTER 1

ENGW 1111 | First-Year Writing (a grade of C or |
| :--- | :--- |
| higher required) |

SEMESTER 4
ENGW 3306 Advanced Writing in the Health 4

## Program Requirement

166 total semester hours required

## Pharmacy, PharmD

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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.

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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 a satisfactory (S) grade on one IPPE in a community setting and on one IPPE in an institutional/hospital practice setting.

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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 in the Bouvé College of Health Sciences Undergraduate Student Manual (https://bouve.northeastern.edu/ undergraduate/student-manual). The pharmacy program, which is fully accredited by the Accreditation Council for Pharmacy Education (ACPE) (https://www.acpe-accredit.org), subscribes and adheres to the standards established by ACPE.

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 10 of the pharmacy curriculum. The Bachelor of Science in Pharmacy Studies does not allow for individuals to pursue licensure for direct patient care in the practice of pharmacy. To earn the PharmD degree, students must complete an additional 36 semester hours of APPEs with an overall GPA of 3.000 or greater in the Bouvé College of Health Sciences graduate 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

The NUpath requirement Interpreting Culture (IC) is not explicitly satisfied by required courses. Students are responsible for satisfying this requirement with an open elective.

## Pharmacy Major (PharmD) Grade Requirement

A grade of $C$ or higher is required in all PHMD and PHSC courses.

## Pharmacy Major Requirements

A 3.000 GPA is required at the end of the second year to progress to the third year (first professional year).

| Code | Title | Hours |
| :---: | :---: | :---: |
| SEMESTER 1 |  |  |
| PHMD 1000 | College: An Introduction | 1 |
| SEMESTER 2 |  |  |
| PHMD 1001 | Introduction to the Profession of Pharmacy | 1 |
| SEMESTER 3 |  |  |
| PHSC 2301 and PHSC 2302 | Human Physiology 1 and Human Anatomy Lab | 4 |
| SEMESTER 4 |  |  |
| PHMD 1201 and PHMD 1202 | Introduction to Pharmacy Practice and Lab for PHMD 1201 | 3 |
| PHSC 2303 <br> and PHSC 2304 | Human Physiology 2 and Human Physiology Lab | 4 |
| SEMESTER 5 |  |  |
| PHMD 2350 | Healthcare Systems | 3 |
| PHSC 2320 | Biochemistry | 4 |
| PHSC 4501 | Pharmacology/Medicinal Chemistry 1 | 5 |
| PHSC 3411 | Pharmaceutics 1 | 4 |
| SEMESTER 6 |  |  |
| PHMD 2310 and PHMD 2311 | Educational and Behavioral Interventions in Pharmacy Practice and Lab for PHMD 2310 | 2.5 |
| PHMD 5250 | Pharmacy Care Management | 3 |
| PHSC 4502 | Pharmacology/Medicinal Chemistry 2 | 5 |
| PHSC 3419 | Pharmaceutics Laboratory | 1 |
| PHSC 3412 | Pharmaceutics 2 | 4 |
| SEMESTER 7 |  |  |
| 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 |
| SEMESTER 8 |  |  |
| PHMD 5330 | Jurisprudence | 3 |
| PHSC 5360 | Anti-Infectives | 4 |


| PHMD 4621 | Comprehensive Disease Management 2 | 6 | PHMD 4880 | Special Topics |
| :---: | :---: | :---: | :---: | :---: |
| PHMD 4622 | Comprehensive Disease Management 2 Seminar | 1 | PHMD 4890 | Contemporary Issues in Geriatric Pharmacy |
| PHMD 4623 | Comprehensive Disease Management 2 Skills Lab | 0.5 | PHMD 4970 | Junior/Senior Honors Project 1 |
|  |  |  | PHMD 4971 | Junior/Senior Honors Project 2 |
| SEMESTER 8 or 9 or 10 |  |  | PHMD 4991 | Research |
| PHMD 5600 | Pharmacy Capstone | 4 | PHMD 4992 | Directed Study |
| SEMESTER 9 |  |  | PHSC 4971 | Junior/Senior Honors Project 2 |
| PHMD 5223 | Evidence-Based Medicine | 2 | PHSC 4991 | Research |
| PHMD 4631 | Comprehensive Disease Management 3 | 6 | PHSC 4992 | Directed Study |
| PHMD 4632 | Comprehensive Disease Management 3 Seminar | 1 | PHSC 5100 | Concepts in Pharmaceutical Science |
| PHMD 4633 | Comprehensive Disease Management 3 Skills Lab | 0.5 | PHSC 6210 | Drug Design, Evaluation, and Development |
|  |  |  | PHSC 6212 | Research Skills and Ethics |
| SEMESTER 10 |  |  | PHSC 6218 | Biomedical Chemical Analysis |
| PHMD 4641 | Comprehensive Disease Management 4 | 6 | PHSC 6224 | Behavioral Pharmacology and Drug Discovery |
| PHMD 4642 | Comprehensive Disease Management 4 Seminar | 1 |  |  |
| PHMD 4643 | Comprehensive Disease Management 4 Skills Lab | 0.5 | PHSC 6226 | Imaging in Medicine and Drug Discovery |
|  |  |  | PMCL 6262 | Receptor Pharmacology |
| PHMD 5270 | Economic Evaluation of Pharmaceuticals and Pharmacy Practice | 2 | PMST 6250 | Advanced Physical Pharmacy |
|  |  |  | PMST 6252 | Pharmacokinetics and Drug Metabolism |
| PHMD 5450 | Advanced Pharmacy Practice Experience Preparatory Seminar | 1 | PMST 6254 | Advanced Drug Delivery System |
| SEMESTER 11 |  |  | PHTH 5120 | Race, Ethnicity, and Health in the United States |
| A minimum 3.000 GPA is required for Semester 11. |  |  | PHTH 5202 | Introduction to Epidemiology |
| Advanced Practice Experience |  |  | PHTH 5210 | Biostatistics in Public Health |
| Select courses in the following range to complete six, sixweek rotations: |  | 36 | PHTH 5212 | Public Health Administration and Policy |
| PHMD 6440 to PHMD 6474 |  |  | PHTH 5214 | Environmental Health |
|  |  |  | PHTH 5222 | Health Advocacy |
| Professional Elective and Capstone Requirements |  |  | PHTH 5224 | Social Epidemiology |
| Code Open Electives | Title | Hours | PHTH 5226 | Strategic Management and Leadership in Healthcare |
| A minimum of 8 semester hours of open electives are required. Additional electives may be required to fulfill the total semester hours required for your program. |  | 10 | PHTH 5228 | Advances in Measuring Behavior |
|  |  | PHTH 5232 | Evaluating Healthcare Quality |  |
|  |  | PHTH 5234 | Economic Perspectives on Health |  |
| Professional Elective |  |  |  |  | Policy |
| Complete at least two semester hours during the professional phase of the program (after semester 4) from the following: |  |  | 2 | PHTH 5236 | Public Health Nutrition |
|  |  | PHTH 5540 |  | Health Education and Program |
| HLTH 1010 | From the Community to the Intensive Care Unit: Approaching Interdisciplinary Research in the Elderly |  |  | Planning |
|  |  | PHTH 6200 |  | Principles and History of Urban Health |
|  |  | PHTH 6204 |  | Society, Behavior, and Health |
| HLTH 2302 | Alternative Medicine |  | PHTH 6208 | Urban Community Health Assessment |
| HLTH 5135 | Developing an Interdisciplinary Approach to Health Management for Older Adults |  | PHTH 6320 | Qualitative Methods in Health and Illness |
| HLTH 5280 | The (in)Visibility of (dis)Ability in Society |  | NRSG 1205 | Wellness |
| HSCI 5230 | Clinical Nutrition Applications in Health and Disease |  | NRSG 6282 | Clinical Psychopharmacology |
|  |  |  | NRSG 6287 | Child and Adolescent Psychopharmacology |
| PHMD 3600 | Leadership and Advocacy in Health Professions |  | NRSG 6300 | Healthcare Finance and Marketing |
| PHMD 4350 | Exploring Academic Careers |  | NRSG 6302 | Health Policy and Law |
| PHMD 4581 | Cancer Chemotherapy |  | NRSG 6306 | Health Informatics |
| PHMD 4585 | Research Methods in Health Systems |  | NRSG 6310 | Nurse/Healthcare Entrepreneur |


| HINF 5101 | Introduction to Health Informatics and Health Information Systems |  |
| :---: | :---: | :---: |
| HINF 5102 | Data Management in Healthcare |  |
| HINF 6205 | Creation and Application of Medical Knowledge |  |
| SLPA 1101 | Introduction to Communication Disorders |  |
| SPNS 1402 | Elementary Spanish 2 for Healthcare Professionals |  |
| SPNS 2302 | Intermediate Spanish Immersion 2 |  |
| CAEP 6220 | Development Across the Life Span |  |
| CAEP 6290 | Reality Therapy |  |
| Capstone |  |  |
| PHMD 5600 | Pharmacy Capstone | 4 |
| Supporting Courses |  |  |
| Code | Title | Hours |
| SEMESTER 1 |  |  |
| BIOL 1111 <br> and BIOL 1112 | General Biology 1 and Lab for BIOL 1111 | 5 |
| CHEM 1211 <br> and CHEM 1212 | General Chemistry 1 and Lab for CHEM 1211 | 5 |
| PSYC 1101 | Foundations of Psychology | 4 |
| SEMESTER 2 |  |  |
| BIOL 1113 <br> and BIOL 1114 | General Biology 2 <br> and Lab for BIOL 1113 | 5 |
| CHEM 1214 and CHEM 1215 | General Chemistry 2 and Lab for CHEM 1214 | 5 |
| MATH 1241 | Calculus 1 | 4 |
| SEMESTER 3 |  |  |
| PHYS 1149 and PHYS 1150 | Physics for Pharmacy and Lab for PHYS 1149 | 5 |
| CHEM 2311 <br> and CHEM 2312 | Organic Chemistry 1 and Lab for CHEM 2311 | 5 |
| SEMESTER 4 |  |  |
| CHEM 2313 <br> and CHEM 2314 | Organic Chemistry 2 <br> and Lab for CHEM 2313 | 5 |
| Writing Requirements |  |  |
| Code | Title | Hours |
| SEMESTER 1 |  |  |
| ENGW 1111 | First-Year Writing | 4 |
| SEMESTER 4 |  |  |
| ENGW 3306 | Advanced Writing in the Health Professions | 4 |

## Program Requirement

206 total semester hours required

## Plan of Study <br> Six Years, Three Co-ops



| PHMD 1 | 1 BIOL 11 | 4 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| PSYC 1101 | 4 BIOL 1114 | 1 |  |  |
| ENGW 1 | 4 PHMD 1 | 1 |  |  |
| BIOL 1111 | 4 MATH 1241 | 4 |  |  |
| BIOL 11 | 1 Elective | 4 | 0 | 0 |

Year 2

| Fall Hours Spring Hours | Summer Hours <br> Full <br> Semester |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CHEM 2311 | 4 CHEM 2313 | 4 | Co-op | 0 |
| CHEM 2 | 1 CHEM 2 | 1 |  |  |
| CHEM 2319 | 0 CHEM 2320 | 0 |  |  |
| PHSC 2: | 3 ENGW 3 | 4 |  |  |
| PHSC 2302 | 1 PHSC 2303 | 3 |  |  |
| PHYS 1 | 4 PHSC 2: | 1 |  |  |
| PHYS 1150 | 1 PHMD 1201 2.5 |  |  |  |
| Elective | 4 PHMD 1 | 0.5 |  |  |
|  | 18 | 16 |  |  |

Year 3

| Fall Hours Spring |  | Hours | Summer Hours <br> Full <br> Semester |  |
| :---: | :---: | :---: | :---: | :---: |
| PHSC 2320 | 4 Co-op | 0 | PHMD 2310 | 2 |
| PHSC 4 | 5 |  | PHMD 2 | 0.5 |
| PHMD 2350 | 3 |  | PHMD 5250 | 3 |
| PHSC 3. | 4 |  | PHSC 3. | 4 |
|  |  |  | PHSC 3419 | 1 |
|  |  |  | PHSC 4 | 5 |
|  | 16 | 0 |  | 5.5 |

Year 4

| Fall | Hours | Spring Hours |  | Summer Hours <br> Full <br> Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Co-op | 0 | PHSC 3430 | 3 | PHSC 5360 | 4 |
|  |  | PHSC 2: | 3 | PHMD 5 | 3 |
|  |  | PHMD 3450 | 3 | PHMD 4621 | 6 |
|  |  | PHMD 4 | 6 | PHMD 4 | 1 |
|  |  | PHMD 4612 | 1 | PHMD 46230 |  |
|  |  |  |  | Elective 0capston | 0-4 |
| 0 |  |  | 16 | 14.5-18 |  |

Year 5


PHMD 4633 0.5 PHMD 46430.5

| PHMD E | 2 PHMD 5 | 2 |
| :--- | ---: | ---: |
| Elective/ <br> capstone | 2-4 Elective/ <br> capstone | $2-4$ |
| Elective <br> capston | $0-4$ PHMD 5 | 1 |
|  | Elective/ <br> capstone | $0-4$ |



Total Hours: 194-210

Accelerated Bachelor/Graduate Degree 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 (https://bouve.northeastern.edu/health-sciences/programs).

## BS in Health Science/MPH-Master of Public Health

The Department of Health Sciences offers a combined undergraduate Bachelor of Science in Health Science and a Master of Public Health in Urban Health. This program allows undergraduate health science majors to complete both degrees in a shorter amount of time than it would take to do each program separately. Students in the combined degree program will meet the core curriculum requirements for both a BS and an MPH degree. Fifteen credits of the MPH degree are taken during the final undergraduate year, and the MPH degree is completed over one additional year.

Undergraduate students can enter the PlusOne Accelerated Program (BS/ MPH) via two ways:

- Undergraduate health science majors apply to the PlusOne program through the graduate school's Apply Yourself system in the spring semester of their junior year.
- Those students who were offered conditional acceptance to the PlusOne program as part of their undergraduate acceptance automatically matriculate into the program if they maintain at least a 3.500 cumulative grade-point average, take a health-related co-op, and officially commit to this program in the spring semester of their junior year. No additional application is required.

Once admitted, students may count a maximum of 15 semester hours of graduate credit toward the undergraduate degree. Consult the department for information on this program.

## PharmD-Doctor of Pharmacy/MPH-Master of Public Health

Undergraduate pharmacy majors enrolled in the joint Doctor of Pharmacy (PharmD)/Master of Public Health (MPH) program have the opportunity to take graduate courses in the MPH program while earning their PharmD. Up to 15 credit hours of these courses count toward both their PharmD and MPH, allowing these students to earn their MPH in a shorter amount of time than it would take to earn it separately from their PharmD.

Undergraduate pharmacy students can enter the PlusOne Accelerated Program (PharmD/MPH) by applying to the PlusOne program through the graduate school's Apply Yourself system in the spring semester of their P2 year.

Once admitted, students may count a maximum of 16 semester hours of graduate credit toward the undergraduate degree. Consult the department for information on this program.

## Psychology, BS/Applied Behavior Analysis, MS

The Department of Psychology in the College of Science and the Department of Applied Psychology in Bouvé College jointly offer a PlusOne program in applied behavior analysis. Undergraduate psychology majors have the opportunity to take graduate courses in applied behavior analysis during their final year of undergraduate studies (up to 15 credits) that count toward the student's undergraduate and graduate degrees. As a result, students in the PlusOne program may complete the Master of Science in three semesters after obtaining their undergraduate degree. Undergraduate students interested in this program are encouraged to apply during the fall of their junior year using Bouvé College's Apply Yourself application system. Questions regarding this program may be directed to the program director for the applied behavior analysis programs in the Department of Applied Psychology.

## Programs

- Health Science, BS/Law, JD
- Health Science, BS/Public Health, MPH
- Pharmacy, PharmD/Public Health, MPH
- Psychology, BS/Applied Behavior Analysis, MS

Website (http://www.northeastern.edu/cos)
Kenneth W. Henderson, PhD, Dean
Brent Nelson, PhD Associate Dean, Undergraduate Affairs
David E. Budil, PhD, Associate Dean, Research and Graduate Affairs
Frederick C. Davis, PhD, Associate Dean, Faculty Affairs, Diversity and Inclusion
TBD, Associate Dean, Administration and Finance
James Poulos, MA, Associate Dean, Development
Lauren Machunis, MS, Assistant Dean for Undergraduate Advising and Enrollment Management
Kellie Melchin, MS, Assistant Dean for Graduate Administration
Dean's Office
115 Richards Hall
617.373.5085
617.373 .8583 (fax)
cos@northeastern.edu
Student Services Office
206 Mugar Life Sciences Building
617.373.4475

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 awardwinning 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, as well as a Bachelor of Science/ Doctor of Philosophy (BS/PhD) in physics and many interdisciplinary programs, and emphasizes the value of a solid general education through the NU Core. 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. Students are normally eligible to participate in co-op in the second semester of their sophomore year.

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 such as biochemistry, biology, chemistry and chemical biology, mathematics, and physics 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. 37). In addition, students pursuing a Bachelor of Arts degree must fulfill the BA requirements (p. 40). Students pursuing a combined major involving a program in the College of Social Sciences and Humanities must, in addition, fulfill the Experiential Liberal Arts (https://www.northeastern.edu/cssh/ undergraduate) (ELA) 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 an ELA-designated course within the major; any CSSH course on a Dialogue of Civilizations; or any CSSH service-learning course. Please consult your academic advisor and your degree audit for the ELA options for your major.

## Academic Advising

The College of Science has an academic advising system that consists of professional advisors located in the College of Science Student Services Office in 206 Mugar Hall 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 Student Services Office in 206 Mugar Hall to determine their remaining graduation requirements. Some departments also require a meeting with a faculty advisor in their major/ program. 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 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 FirstYear 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 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, $\mathrm{NE}, \mathrm{U}$, 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 $\mathrm{F}, \mathrm{I}, \mathrm{W}$, $N E, U$, or missing grades)
- Not following a program of study approved by the student's academic advisor


## Academic Dismissal from Major

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 are 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 of their college (see following section). International students should 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 (http://www.northeastern.edu/cos/bns)

## M. Jade Zee, PhD

Assistant Teaching Professor and Program Director

## Jennifer Ingemi, PhD

Assistant Teaching Professor and Assistant Director
203 Mugar Life Sciences Building
bns@northeastern.edu
617.373.2852

The behavioral neuroscience major is an interdepartmental program for undergraduates, supported by neuroscience faculty across the College of Science. The field of neuroscience focuses on brain mechanisms and how they give rise to behavioral functions in humans and animals.

Behavioral neuroscience combines the disciplines of biology and psychology with a strong background in basic physical sciences and mathematics. The goal is to achieve an understanding of the anatomy and physiology of nerve cells, chemical transmission, neural circuits, fundamental biological processes such as inheritance and development, and then to see how these biological events give rise to normal and pathological behavior. The primary objective of the neuroscience major is to draw together faculty and students who are interested in this interdisciplinary topic and to provide undergraduates with an education in the field. This major also seeks to prepare students for advancement to graduate programs in the field of neuroscience or in biology or psychology programs with an emphasis in neurobiology. An additional objective of this major is to prepare its students for admission to medical school or other health profession programs. Finally, the goal of the curriculum is to prepare students for employment in clinical settings or in allied fields such as the biotech industry.

## Behavioral Neuroscience Minor

The behavioral neuroscience minor consists of five courses requiring a minimum of 20 semester hours of study. Students are required to take one intermediate-level survey course and four behavioral neuroscience core courses, two from each of the parent departments of the discipline (i.e., psychology and biology). All students regardless of their major, including those majoring in psychology and biology, may minor in behavioral neuroscience.

## Programs

## Bachelor of Science (BS)

- Behavioral Neuroscience (p. 469)


## Minor

- Behavioral Neuroscience (p. 472)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 621)

## 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. Students interested in interdisciplinary fields such as neurophilosophy, music therapy, music cognition, or the interface of neuroscience with the criminal justice system are encouraged to double major in philosophy, music, or criminal justice. Five-year, two co-op patterns of attendance exist for double majors in these complementary fields. Other combined or independent majors with behavioral neuroscience are not permitted.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Behavioral Neuroscience Core Requirements

| Code <br> Complete six of the following courses. At least three must be <br> numbered in the $4000-5999$ | Hours |
| :--- | :--- | :--- |
| BIOL 3403 | Animal Behavior |
| BIOL 3405 | Neurobiology |
| BIOL 3601 | Neural Systems and Behavior |
| BIOL 3605 | Developmental Neurobiology |
| BIOL 4705 | Neurobiology of Cognitive Decline |
| BIOL 5587 | Comparative Neurobiology |
| BIOL 5595 | Cell and Molecular Neuroscience |
| BIOL 5601 | Multidisciplinary Approaches in Motor |
| PSYC 3200 | 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 | Functional Human Neuroanatomy |
| and PT 5411 | 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 4624 | Laboratory in Affective Science |
| PSYC 4626 | Laboratory in Life-Span Emotional |
| PSYC 4991 | Development |
| 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

## Psychology Elective

An additional behavioral neuroscience core course may be used to fulfill this requirement.

Complete one of the following:

| 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 |  |
| Biology Elective |  |  |
| Complete one of the following: |  | 4-5 |
| BIOL 2321 <br> and BIOL 2322 | Microbiology and Lab for BIOL 2321 |  |
| BIOL 3401 | Comparative Vertebrate Anatomy |  |
| BIOL 3409 | Current Topics in Biology |  |
| BIOL 3603 | Mammalian Systems Physiology |  |
| BIOL 3609 | Developmental Biology |  |
| 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 5573 | Medical Microbiology |  |
| BIOL 5581 | Biological Imaging |  |
| BIOL 5591 | Advanced Genomics |  |
| Capstone Course |  |  |
| Complete one of the following: |  | 4 |
| BIOL 4701 | Biology Capstone |  |
| PSYC 4650 to P | C 4678 |  |

## Behavioral Neuroscience Major Requirements

| Code <br> Foundation Courses | Title |
| :--- | :--- |
| BNSC 1000 | Behavioral Neuroscience at <br> Northeastern |
| PSYC 1101 | Foundations of Psychology |
| PSYC 2320 | Statistics in Psychological Research |
| PSYC 3458 | Biological Psychology |
| BIOL 1107 <br> and BIOL 1108 | Foundations of Biology <br> and Lab for BIOL 1107 |
| BIOL 2299 | Inquiries in Biological Sciences |
| BIOL 2301 <br> and BIOL 2302 | Genetics and Molecular Biology <br> and Lab for BIOL 2301 |
| BIOL 2309 Breadth Courses | Biology Project Lab |
| MATH 1251 | Calculus and Differential Equations for <br> Biology 1 <br> or MATH 1241 |
| Calculus 1 |  |
| CHEM 1211 <br> and CHEM 1212 | General Chemistry 1 <br> and Lab for CHEM 1211 |
| CHEM 1214 <br> and CHEM 1215 | General Chemistry 2 <br> and Lab for CHEM 1214 |


| 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 |  |
| Complete one of the following: |  | 5 |
| PHYS 1145 and PHYS 1146 | Physics for Life Sciences 1 and Lab for PHYS 1145 |  |
| PHYS 1151 <br> and PHYS 1152 <br> and PHYS 1153 | Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151 |  |
| PHYS 1161 <br> and PHYS 1162 <br> and PHYS 1163 | Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161 |  |
| PHYS 1171 <br> and PHYS 1172 <br> and PHYS 1173 | Physics 1 for Bioscience and <br> Bioengineering <br> and Lab for PHYS 1171 <br> 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 |
| MATH 1251 | 4 | ENGW 1111 | 4 | BIOL 2301 <br> and <br> BIOL 2302 | 5 | Vacation | 0 |
| PSYC 1101 | 4 | PSYC 3458 | 4 | Adv PSYC elective | 4 |  |  |
| BIOL 1107 <br> and <br> BIOL 1108 | 5 | BIOL 2299 | 4 |  |  |  |  |
| CHEM 1211 <br> and <br> CHEM 1212 <br> and <br> CHEM 1213 | 5 | CHEM 1214 and <br> CHEM 1215 and CHEM 1216 | 5 |  |  |  |  |
| BNSC 1000 | 1 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 9 |  | 0 |


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CHEM 2311 <br> and | CHEM 2313 <br> and | 5 <br> BNS core <br> CHEM 2312 | CHEM 2314 | 4 Co-op |$\quad 0$



Total Hours: 132

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 1251 | 4 | ENGW 1111 | 4 | Vacation | 0 | Vacation | 0 |
| PSYC 1101 | 4 | PSYC 3458 | 4 |  |  |  |  |
| BIOL 1107 <br> and <br> BIOL 1108 | 5 | BIOL 2299 | 4 |  |  |  |  |
| CHEM 1211 <br> and <br> CHEM 1212 <br> and <br> CHEM 1213 | 5 | CHEM 1214 <br> and <br> CHEM 1215 <br> and <br> CHEM 1216 | 5 |  |  |  |  |
| BNSC 1000 | 1 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 0 |  | 0 |

Year 2


Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| BIOL 2309 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| PSYC 2320 | 4 |  |  |  |


| BNS core course 2 | 4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |
| Year 4 |  |  |  |  |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| PHYS 1145 <br> and <br> PHYS 1146 | 5 Co-op | 0 Co-op | 0 Vacation | 0 |
| BNS core course 3 | 4 |  |  |  |
| Adv PSYC elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 17 | 0 | 0 | 0 |

Year 5

| Fall | HoursSpring | Hours |
| :--- | ---: | ---: |
| BNS core | 4 BNS core | 4 |
| course 4 | course 5 |  |
| Adv BIOL <br> elective | BNS core <br> course 6 | 5 |
| ENGW 3307 | 4 <br> Capstone <br> course <br> Elective | 4 Elective |

Total Hours: 132

## 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 courses not completed above: | 8 |  |
| BIOL 3403 | Animal Behavior |  |
| BIOL 3405 | Neurobiology |  |
| BIOL 3601 | Neural Systems and Behavior |  |
| BIOL 3605 | Developmental Neurobiology |  |
| BIOL 4705 | Neurobiology of Cognitive Decline |  |
| BIOL 5587 | Comparative Neurobiology |  |
| BIOL 5595 | Cell and Molecular Neuroscience |  |

## Credit/GPA Requirement

20 total semester hours required
2.000 GPA required in the minor

## Biochemistry

Website (http://www.northeastern.edu/biochemistry)

## Susan Powers-Lee, PhD

Professor and Program Director
203 Mugar Life Sciences Building
617.373.2852

Morline Gordon-Grier, Administrative Secretary,
m.gordongrier@northeastern.edu

Advising website (http://www.northeastern.edu/biochemistry)
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 handson 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 facultymentored 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 prepares students to enter the job market directly or 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 <br> Bachelor of Science (BS)

- Biochemistry (p. 473)
- Data Science and Biochemistry (p. 354)


## Bachelor of Science in Chemical Engineering (BSCHE)

- Chemical Engineering and Biochemistry (p. 381)


## Minor

- Biochemistry, Minor (p. 479)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 621)

## Biochemistry, BS <br> Website (http://www.northeastern.edu/biochemistry) <br> Susan Powers-Lee, PhD <br> Professor and Program Director <br> 203 Mugar Life Sciences Building <br> 617.373.2852 <br> Morline Gordon-Grier, Administrative Secretary, <br> m.gordongrier@northeastern.edu <br> Advising website (http://www.northeastern.edu/biochemistry)

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 handson 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.

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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 prepares students to enter the job market directly or 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.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Biochemistry Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| BIOC 1000 | Biochemistry at Northeastern | 1 |
| Biology Foundations |  |  |
| Foundations |  |  |
| BIOL 1107 and BIOL 1108 | Foundations of Biology and Lab for BIOL 1107 | 5 |
| Inquiries |  |  |
| BIOL 2299 | Inquiries in Biological Sciences | 4 |
| Techniques |  |  |
| BIOL 2309 | Biology Project Lab | 4 |
| Genetics and Molecular Biology |  |  |
| BIOL 2301 and BIOL 2302 | Genetics and Molecular Biology and Lab for BIOL 2301 | 5 |
| General Chemistry 1 |  |  |
| CHEM 1211 and CHEM 1212 | General Chemistry 1 and Lab for CHEM 1211 | 5 |
| General Chemistry 2 |  |  |
| CHEM 1214 and CHEM 1215 | General Chemistry 2 and Lab for CHEM 1214 | 5 |
| Organic Chemistry 1 |  |  |
| CHEM 2311 and CHEM 2312 | Organic Chemistry 1 and Lab for CHEM 2311 | 5 |
| Organic Chemistry 2 |  |  |
| CHEM 2313 and CHEM 2314 | Organic Chemistry 2 and Lab for CHEM 2313 | 5 |
| Physical Chemistry |  |  |
| CHEM 3431 and CHEM 3432 | Physical Chemistry and Lab for CHEM 3431 | 5 |
| Biochemistry Courses |  |  |
| BIOL 3611 and BIOL 3612 | Biochemistry and Lab for BIOL 3611 | 5 |
| BIOL 4707 | Cell and Molecular Biology | 4 |
| CHEM 4620 | Introduction to Protein Chemistry | 4 |
| Experiential Learning Introduction |  |  |
| EESC 2000 | Professional Development for Co-op | 1 |
| Capstone |  |  |
| $\text { BIOL } 4701$ <br> or CHEM 4750 | Biology Capstone Senior Research | 4 |

## Biology and Chemistry Advanced Electives

Complete three courses for a total of at least 12 semester hours from biology and chemistry with a minimum of one course from each department. Up to 4 semester hours may be research in a biology or chemistry faculty lab from the list "Research Option" below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Biology |  |  |
| BIOL 2311 to BIOL 5999 |  |  |
| Chemistry |  |  |
| CHEM 2310 to CHEM 5999 |  |  |
| Research Option |  |  |
| Up to 4 semester hours may be research in a biology or chemistry faculty lab: |  | 4 |
| 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 |
| :---: | :---: | :---: |
| Mathematics Courses |  |  |
| Complete one of the following options: |  | 8 |
| Option 1 |  |  |
| MATH 1251 | Calculus and Differential Equations for Biology 1 |  |
| MATH 1252 | Calculus and Differential Equations for Biology 2 |  |
| Option 2 |  |  |
| 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 |  |
| PHYS 1151 and PHYS 1152 and PHYS 1153 | Physics for Engineering 1 <br> and Lab for PHYS 1151 <br> and Interactive Learning Seminar for <br> PHYS 1151 |  |
| PHYS 1145 and PHYS 1146 | Physics for Life Sciences 1 and Lab for PHYS 1145 |  |
| PHYS 1161 <br> and PHYS 1162 | Physics 1 <br> and Lab for PHYS 1161 |  |
| Physics 2 |  |  |
| Complete a lecture | nd lab set for Physics 2: | 5 |
| PHYS 1175 and PHYS 1176 and PHYS 1177 | Physics 2 for Bioscience and <br> Bioengineering <br> and Lab for PHYS 1175 <br> and Interactive Learning Seminar for <br> PHYS 1175 |  |


$\left.$| PHYS 1155 | Physics for Engineering 2 |
| :--- | :--- |
| and PHYS 1156 |  |
| and PHYS 1157 |  | | and Lab for PHYS 1155 |
| :--- |
| and Interactive Learning Seminar for |
| PHYS 1155 | \right\rvert\, | PHYS 1147 | Physics for Life Sciences 2 |
| :--- | :--- |
| and PHYS 1148 | and Lab for PHYS 1147 |

## Biochemistry Major Credit/GPA Requirements

Complete 92 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 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

| 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 1214 | 4 | BIOL 2302 | 1 | Elective 4 | 4 |
| CHEM 1211 | 4 | CHEM 1215 | 1 | Elective 2 | 4 |  |  |
| CHEM 1212 | 1 | CHEM 1216 | 0 |  |  |  |  |
| CHEM 1213 | 0 | ENGW 1111 | 4 |  |  |  |  |
| MATH 1251 | 4 | MATH 1252 | 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 | CHEM 2313 | 4 | BIOL 3611 | 4 | Co-op |  |
| CHEM 2311 | 4 | CHEM 2314 | 1 | BIOL 3612 | 1 |  |  |
| CHEM 2312 | 1 | PHYS 1155 | 3 | Elective 8 | 4 |  |  |
| 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 |  | 9 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | ---: | :---: | :---: |
| Co-op | CHEM 3431 | 4 BIOL 4707 | 4 Co-op |  |
|  | CHEM 3432 | 1 Elective 10 | 4 |  |
|  | CHEM 4620 | 4 |  | 0 |
|  | ENGW 3307 | 4 |  | 8 |


| Year 4 |  |
| :--- | ---: |
| Fall | Hours |
| BIOL or <br> CHEM <br> advanced <br> elective | 5 |
| BIOL or <br> CHEM <br> advanced <br> elective |  |
| BIOL or <br> CHEM <br> advanced <br> elective | 5 |
| CHEM 4750 <br> or BIOL 4701 | 5 |

## 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 1214 | 4 BIOL 2302 | 1 Elective 4 | 4 |
| CHEM 1211 | 4 CHEM 1215 | 1 Elective 2 | 4 |  |
| CHEM 1212 | 1 CHEM 1216 | 0 |  |  |
| CHEM 1213 | 0 ENGW 1111 | 4 |  |  |
| MATH 1251 | 4 MATH 1252 | 4 |  |  |
| Elective 1 | 4 |  |  | 8 |
| BIOC 1000 | 1 | 17 | 9 |  |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: | ---: |
| BIOL 2309 | 4 Co-op | Co-op | CHEM 2313 | 4 |
| CHEM 2311 | 4 |  | CHEM 2314 | 1 |
| CHEM 2312 | 1 |  | Elective 6 | 4 |
| PHYS 1151 | 3 |  |  |  |
| PHYS 1152 | 1 |  |  |  |
| PHYS 1153 | 1 |  |  |  |
| Elective 5 | 4 |  | 0 | 9 |
| EESC 2000 | 1 | 0 |  |  |
|  | 19 |  |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | ---: | ---: | ---: | ---: |
| BIOL 3611 | 4 Co-op | Co-op | BIOL 4707 | 4 |
| BIOL 3612 | 1 |  | Elective 8 | 4 |
| PHYS 1155 | 3 |  |  |  |
| PHYS 1156 | 1 |  |  |  |
| PHYS 1157 | 1 |  |  | 8 |
| ENGW 3307 | 4 |  |  |  |
| Elective 7 | 4 |  |  |  |
|  | 18 | 0 | 0 |  |

Year 4

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| CHEM 3431 |  | BIOL or <br> CHEM <br> advanced elective | 5 |
| CHEM 3432 |  | BIOL or <br> CHEM <br> advanced elective | 5 |
| CHEM 4620 |  | $\begin{aligned} & \text { CHEM } 4750 \\ & \text { or BIOL } 4701 \end{aligned}$ | 4 |
| BIOL or CHEM advanced elective | 5 | Elective 10 | 4 |
| Elective 9 | 4 |  |  |
|  | 18 |  | 18 |

## 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 1214 | 4 BIOL 2302 | 1 |  |  |
| CHEM 1211 | 4 CHEM 1215 | 1 | Elective 2 | 4 |  |
| CHEM 1212 | 1 CHEM 1216 | 0 |  |  |  |
| CHEM 1213 | 0 MATH 1252 | 4 |  |  |  |
| MATH 1251 | 4 ENGW 1111 | 4 |  | 0 |  |
| Elective 1 | 4 |  |  | 9 |  |
| BIOC 1000 | 1 | 17 |  |  |  |


| Year 2 |  |  |  |  |  |
| :--- | :---: | ---: | :---: | ---: | :--- |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| BIOL 2309 | 4 CHEM 2313 | 4 BIOL 3611 | 4 Co-op |  |  |
| CHEM 2311 | 4 CHEM 2314 | 1 | BIOL 3612 | 1 |  |
| CHEM 2312 | 1 PHYS 1155 | 3 Elective 6 | 4 |  |  |
| PHYS 1151 | 3 PHYS 1156 | 1 |  |  |  |
| PHYS 1152 | 1 PHYS 1157 | 1 |  |  |  |
| PHYS 1153 | 1 Elective 4 | 4 |  | 0 |  |
| Elective 3 | 4 Elective 5 | 4 |  |  |  |

$\left.\begin{array}{lcccc}\text { Year 3 } & & & & \\ \text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \text { BIOL 4707 } & 4 & \text { Vacation } & \text { Co-op }\end{array}\right]$

| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | CHEM 4620 | 4 Vacation | Co-op |  |


| BIOL or <br> CHEM <br> advanced <br> elective | 5 |  |  |
| :--- | :---: | :---: | :---: |
| Elective 8 | 4 | 0 | 0 |
| Elective 9 | 4 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | BIOL or <br> CHEM <br> advanced <br> elective | 5 |
| BIOL or <br> CHEM <br> advanced <br> elective | 5 |  |
| CHEM 4750 <br> or BIOL 4701 | 4 |  |
|  | Elective 10 | 4 |
| 0 | 18 |  |

Total Hours: 143

## 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 1214 | 4 BIOL 2302 | 1 |  |
| CHEM 1211 | 4 CHEM 1215 | 1 | Elective 2 | 4 |  |
| CHEM 1212 | 1 CHEM 1216 | 0 |  |  |  |
| CHEM 1213 | 0 MATH 1252 | 4 |  |  |  |
| MATH 1251 | 4 ENGW 1111 | 4 |  | 0 |  |
| Elective 1 | 4 |  |  | 9 |  |
| BIOC 1000 | 1 |  |  |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| BIOL 2309 | 4 Co-op | Co-op | CHEM 2313 | 4 |
| CHEM 2311 | 4 |  | CHEM 2314 | 1 |
| CHEM 2312 | 1 |  |  | 4 |
| PHYS 1151 | 3 |  |  |  |
| PHYS 1152 | 1 |  |  |  |
| PHYS 1153 | 1 |  |  | 9 |
| Elective 3 | 4 |  | 0 |  |
| EESC 2000 | 1 | 0 |  |  |
|  | 19 |  |  |  |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| BIOL 3611 | 4 Co-op | Co-op | Vacation |  |
| BIOL 3612 | 1 |  |  |  |
| PHYS 1155 | 3 |  |  |  |
| PHYS 1156 | 1 |  |  |  |
| PHYS 1157 | 1 |  |  |  |
| ENGW 3307 | 4 |  |  |  |


| Elective 5 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 18 |  | 0 |  | 0 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| BIOL 4707 |  | Co-op |  | Co-op |  | Vacation |  |
| CHEM 3431 | 4 |  |  |  |  |  |  |
| CHEM 3432 | 1 |  |  |  |  |  |  |
| CHEM 4620 | 4 |  |  |  |  |  |  |
| Elective 6 | 4 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 0 |
| Year 5 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |  |
| BIOL or | 5 | BIOL or | 5 |  |  |  |  |
| CHEM |  | CHEM |  |  |  |  |  |
| advanced elective |  | advanced elective |  |  |  |  |  |
| BIOL or <br> CHEM <br> advanced elective |  | CHEM 4750 or BIOL 4701 | 4 |  |  |  |  |
| Elective 7 | 4 | Elective 9 | 4 |  |  |  |  |
| Elective 8 | 4 | Elective 10 | 4 |  |  |  |  |
|  | 18 |  | 17 |  |  |  |  |

Total Hours: 143

## 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 course work 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Data Science Requirements

Code Title Hours

Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Discrete Structures

A grade of $\mathrm{C}-$ or higher is required:
CS 1800 Discrete Structures 5
and CS 1802 and Seminar for CS 1800

## Computer Science Foundations

| A grade of C - or higher is required: |  |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| Data Science Foundations |  |  |
| DS 4100 | Data Collection, Integration, and Analysis | 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 |
| Data Science Upper-Division Elective |  |  |
| Complete one of the following, not taken to fulfill previous requirements: |  | 4 |
| CS 2500 or higher, except CS 5010 |  |  |
| IS 2000 or higher, except IS 4900 |  |  |
| DS 2000 or higher, except DS 4900 |  |  |
| Supporting Courses for Data Science |  |  |
| THTR 1170 | The Eloquent Presenter | 1 |
| 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 <br> Code <br> College Writing | Title | Hours |
| :--- | :--- | ---: |
| ENGW 1111 |  |  |
| or ENGW 1102 | First-Year Writing | 4 |

Advanced Writing in the Disciplines

| ENGW 3302 | Advanced Writing in the Technical |
| :--- | :--- |
| or ENGW 3315 | Professions <br> Interdisciplinary Advanced Writing in the <br> Disciplines |

## Biochemistry Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 |
| Chemistry Foundations |  |  |
| CHEM 1211 <br> and CHEM 1212 | General Chemistry 1 and Lab for CHEM 1211 | 5 |
| CHEM 1214 <br> and CHEM 1215 | General Chemistry 2 and Lab for CHEM 1214 | 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 2331 and CHEM 2332 or CHEM 4620 | Bioanalytical Chemistry and Lab for CHEM 2331 <br> Introduction to Protein Chemistry | 4-5 |

## Integrative Requirement

| Code <br> Integrative Courses | Title | Hours |
| :--- | :--- | ---: |
| BINF 6308 | Bioinformatics Computational Methods | 4 |
| BINF 6309 | Bioinformatics Computational Methods | 4 |
| Complete one of the following: | 4 |  |
| BIOL 4701 | Biology Capstone | 4 |
| CHEM 4750 | Senior Research |  |
| DS 4900 | Data Science Senior Project |  |

Required General ElectivesComplete three general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS, IS, and DS courses

## Program Requirement

136 total semester hours required

## 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. Successful graduates will be well-qualified 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum required in CHME courses

## Mathematics/Science Requirement

Complete 44 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 |
| 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 |
| PHYS 1151 <br> and PHYS 1152 <br> 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:
BIOL 2311 to BIOL 5999

## Supplemental Credit

1 semester hour from the following course counts toward the 1 mathematics/science requirement:

$$
\text { GE } 1502 \quad \text { Cornerstone of Engineering } 2
$$

## Advanced Science Requirement

Complete 23 semester hours in advanced science as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| BIOL 1115 | General Biology 1 for Engineers | 4 |
| CHEM 2311 <br> and CHEM 2312 <br> and CHEM 2319 | Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311 | 5 |
| CHEM 2313 <br> and CHEM 2314 <br> and CHEM 2320 | Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313 | 5 |
| CHEM 2331 and CHEM 2332 | Bioanalytical Chemistry and Lab for CHEM 2331 | 5 |
| Advanced Chemistry Elective |  |  |
| Complete one course in the following range: |  | 4 |

CHEM 2310 to CHEM 5999

## Engineering

Complete 50 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Engineering |  |  |
| 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 | Chemical Engineering Experimental Design 1 | 4 |
| CHME 3322 | Chemical Engineering Thermodynamics $2$ | 4 |
| CHME 4315 | Chemical Engineering Experimental Design 2 | 4 |
| CHME 4510 | Chemical Engineering Kinetics | 4 |
| CHME 4512 | Chemical Engineering Process Control | 4 |
| CHME 4701 | Capstone Design 1: Process Analysis | 4 |
| CHME 4703 | Capstone Design 2: Chemical Process Design | 4 |
| Supplemental Credit |  |  |
| 3 semester hours from the following course count toward the engineering requirement: |  | 3 |
| GE 1501 | Cornerstone of Engineering 1 |  |
| 3 semester engineering | $m$ the following course count toward the ent: | 3 |

GE 1502 Cornerstone of Engineering 2

## Professional Development

Complete 4 semester hours in professional development as indicated below.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Professional Development |  |  |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| CHME 2000 | Introduction to Engineering Co-op | 1 |
| CHME 3000 | Education | 1 |

## Additional Required Courses

The remaining credit from the following course will apply to 1
the professional development area:
GE 1501 Cornerstone of Engineering 1
Additional NUpath Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Writing |  |  |
| A grade of C or higher is required: | 4 |  |
| ENGW 1111 | First-Year Writing | 4 |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions |  |
| or ENGW 3307 ENGW 3315 | Advanced Writing in the Sciences <br> Interdisciplinary Advanced Writing in the <br> Disciplines |  |

## NUpath Requirements Through General Electives

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.

## Required General Electives

Complete four academic, nonremedial, nonrepetitive courses, each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

145 total semester hours required

## Plan of Study

Five Years, Three Co-ops in Summer 2/Fall

| Year 1 |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall |  |  |  |
| CHEM 1151 <br> (ND) | Hours Spring | Hours Summer 1 <br> (FQ) | Hours Summer 2 | Hours

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIOL 1115 <br> (ND) | 4 | CHEM 2313 |  | BIOL 2301 <br> and <br> BIOL 2302 | 5 | Co-op | 0 |
| CHEM 2311 | 4 | CHEM 2314 | 1 | General elective | 4 |  |  |
| CHEM 2312 | 1 | CHEM 2320 | 0 |  |  |  |  |
| CHEM 2319 | 0 | CHEM 2331 <br> (AD, WI) | 4 |  |  |  |  |
| CHME 2310 | 4 | CHEM 2332 | 1 |  |  |  |  |
| MATH 2341 | 4 | CHME 2000 | 1 |  |  |  |  |
|  |  | CHME 2320 | 4 |  |  |  |  |
|  |  | General elective | 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 |


| CHME 3322 | 4 General <br> elective | 4 |  |
| ---: | ---: | ---: | ---: |
| ENGW 3315 | 4 | 9 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 BIOL 4707 | 4 | Vacation | 0 Co-op |$\quad 0$

Year 5

| Fall | Hours | Spring | Hours |  |
| :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | CHME 4512 | 4 |  |
|  |  | CHME 4703 <br> (EI, WI, CE) | 4 |  |
|  |  | Advanced chemistry elective | 4 |  |
|  |  | Advanced biology elective | 4 |  |

$0 \quad 16$
Total Hours: 145

## 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 or cell and molecular biology due to curricular overlap.

## Required Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses |  | 4 |
| BIOL 4707 | Cell and Molecular Biology | 5 |
| BIOL 3611 | Biochemistry |  |
| and BIOL 3612 | and Lab for BIOL 3611 | 4 |
| CHEM 4620 | Introduction to Protein Chemistry | 4 |

## Biology Core Course

Code Title
Hours
Complete one of the following course options: 4

| BIOL 2321 <br> and BIOL 2322 | Microbiology <br> and Lab for BIOL 2321 |
| :--- | :--- |
| BIOL 2327 | Human Parasitology |
| BIOL 3405 | Neurobiology |
| BIOL 3409 | Current Topics in Biology |


| BIOL 3605 | Developmental Neurobiology |
| :--- | :--- |
| BIOL 3609 | Developmental Biology |
| BIOL 5306 | Biological Clocks |
| BIOL 5307 | Biological Electron Microscopy |
| and BIOL 5308 | and Lab for BIOL 5307 |
| BIOL 5499 | Plant Biotechnology |
| BIOL 5541 | Endocrinology |
| BIOL 5543 | Stem Cells and Regeneration |
| BIOL 5549 | 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 |

## Chemistry Core Course

| Code |  |  |
| :--- | :--- | ---: |
| Complete one of the | following course options: | Hours |
| CHEM 2331 <br> and CHEM 2332 | Bioanalytical Chemistry <br> and Lab for CHEM 2331 |  |
| CHEM 3431 <br> and CHEM 3432 | Physical Chemistry <br> and Lab for CHEM 3431 |  |
| CHEM 4621 <br> and CHEM 4622 | Introduction to Chemical Biology <br> and Lab for CHEM 4621 |  |
| CHEM 4628 <br> and CHEM 4629 | Introduction to Spectroscopy of <br> Organic Compounds <br> and Identification of Organic <br> Compounds |  |
| CHEM 5550 | Introduction to Glycobiology and <br> Glycoprotein Analysis |  |
| CHEM 5611 | Analytical Separations <br> CHEM 5612 | Principles of Mass Spectrometry |
| CHEM 5613 | Optical Methods of Analysis |  |
| CHEM 5616 | Protein Mass Spectrometry <br> and Protein Mass Spectrometry <br> and CHEM 5617 <br> Laboratory |  |
| CHEM 5625 | Chemistry and Design of Protein <br> 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 course work 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: $B S$ in biochemistry; BS in behavioral neuroscience; $B S$ in computer science and biology; BS in biology and English; BS in biology and mathematics; BS in biology and political science; BS in biology/MS in biotechnology; $\mathrm{BS} / \mathrm{PhD}$ in biology. Students interested in marine biology should investigate the degree programs offered by marine and environmental science. Double majors involving any two of these biology programs are not available due to curricular overlap.

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, in medicine and other healthcare-related professions. Premedical, predental, 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. 480)
- Cell and Molecular Biology (p. 484)
- Biology and English (p. 488)
- Biology and Mathematics (p. 490)
- Biology and Political Science (p. 492)
- Computer Science and Biology (p. 293)


## Minors

- Biology (p. 497)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 621)

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Biology Major Requirements

Code Title Hours

| BIOL 1000 | Biology at Northeastern | 1 |
| :---: | :---: | :---: |
| Experiential Learning Introduction |  |  |
| EESC 2000 | Professional Development for Co-op | 1 |
| Required Biology |  |  |
| Foundations |  |  |
| BIOL 1107 <br> and BIOL 1108 | Foundations of Biology and Lab for BIOL 1107 | 5 |
| Inquiries |  |  |
| BIOL 2299 | Inquiries in Biological Sciences | 4 |
| Genetics |  |  |
| BIOL 2301 <br> and BIOL 2302 | Genetics and Molecular Biology and Lab for BIOL 2301 | 5 |
| Project Lab |  |  |
| BIOL 2309 | Biology Project Lab | 4 |
| Biochemistry |  |  |
| BIOL 3611 <br> and BIOL 3612 | Biochemistry and Lab for BIOL 3611 | 5 |

## Biology Capstone

| Code | Title |
| :--- | :--- |
| BIOL 4701 | Biology Capstone |

## Biology Major Electives

Code Title Hours
Organismal and Population Biology
Complete one of the following:

| BIOL 2321 <br> and BIOL 2322 | Microbiology and Lab for BIOL 2321 |  |
| :---: | :---: | :---: |
| BIOL 2327 | Human Parasitology |  |
| BIOL 3401 | Comparative Vertebrate Anatomy |  |
| EEMB 2302 and EEMB 2303 | Ecology and Lab for EEMB 2302 |  |
| EEMB 2400 | Introduction to Evolution |  |
| EEMB 2616 and EEMB 2617 | Invertebrate Zoology and Lab for EEMB 2616 |  |
| EEMB 2700 <br> and EEMB 2701 | Marine Biology and Lab for EEMB 2700 |  |
| 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 5534
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

| Mathematics | Calculus and Differential Equations for | 4 |
| :--- | :--- | :--- |
| MATH 1251 | Biology 1 |  |

## Statistics

| ENVR 2500 | Biostatistics | 5 |
| :--- | :--- | :--- |
| and ENVR 2501 | and Lab for ENVR 2500 |  |

Chemistry
General Chemistry
CHEM 1161 General Chemistry for the Biological 5
and CHEM 1162
and CHEM 1163 Sciences
and Lab for CHEM 1161
and Recitation for CHEM 1161
Organic Chemistry
CHEM $2311 \quad$ Organic Chemistry $1 \quad 5$
and CHEM 2312 and Lab for CHEM 2311
CHEM $2313 \quad$ Organic Chemistry 2
and CHEM 2314 and Lab for CHEM 2313
Physics
Physics 1
4 Complete one of the following lecture/lab pairs. PHYS 1145/ 5
PHYS 1146 is recommended:

| PHYS 1145 | Physics for Life Sciences 1 |
| :--- | :--- |
| and PHYS 1146 | and Lab for PHYS 1145 |
| PHYS 1151 | Physics for Engineering 1 |
| and PHYS 1152 | and Lab for PHYS 1151 |
| and PHYS 1153 | and Interactive Learning Seminar for <br> PHYS 1151 |
| PHYS 1161 Physics 1 <br> and PHYS 1162 and Lab for PHYS 1161 |  |

Physics 2
Complete one of the following lecture/lab pairs. PHYS 1147/ 5
PHYS 1148 is recommended:

| PHYS 1147 | Physics for Life Sciences 2 |
| :--- | :--- |
| and PHYS 1148 | and Lab for PHYS 1147 |\(\left|\begin{array}{ll}PHYS 1155 \& Physics for Engineering 2 <br>

and PHYS 1156 \& and Lab for PHYS 1155 <br>
and PHYS 1157 <br>
and Interactive Learning Seminar for <br>

PHYS 1155\end{array}\right|\)| PHYS 1165 | Physics 2 |
| :--- | :--- |
| and PHYS 1166 Lab for PHYS 1165 |  |

## Intermediate or Advanced Science

Complete one course from the following:
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 81 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 ENGW 1111 | 4 |  |  |
| MATH 1251 | 4 Elective | 4 |  |  |
| Elective | 4 |  |  | 0 |
| BIOL 1000 | 1 |  | 9 |  |

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 |  | 0 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | PHYS 1147 |  | Intermediate/ <br> Advanced <br> Biology <br> Elective | 4 | Co-op |  |
| ENGW 3307 | 4 | PHYS 1148 |  | (Intermediate <br> Advanced <br> Biology <br> Elective Lab) | 1 |  |  |
|  |  | Organismal/ <br> Population <br> Bio Elective | 4 | Elective | 4 |  |  |
|  |  | (Organismal/ <br> Population <br> Bio Elective <br> Lab) | 1 |  |  |  |  |



Total Hours: 140

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

Year 1


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 |  |  | 9 |
| EESC 2000 | 1 | 0 | 4 |  |
|  | 16 |  |  |  |



## Year 4

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| Intermediate/ <br> Advanced <br> Biology <br> Elective |  | Intermediate/ <br> Advanced <br> Biology <br> Elective | 4 |
| (Intermediate <br> Advanced <br> Biology <br> Elective Lab) |  | (Intermediate, <br> Advanced <br> Biology <br> Elective Lab) | 1 |
| Organismal/ <br> Population <br> Bio Elective | 4 | BIOL 4701 | 4 |
| (Organismal/ <br> Population <br> Bio Elective <br> Lab) | 1 | Elective | 4 |
| Elective | 4 | Elective | 4 |
| Elective | 4 |  |  |
| 18 |  |  | 17 |

## 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 |  |  | 0 |
| BIOL 1000 | 1 |  | 9 |  |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENVR 2500 | 4 | BIOL 2309 |  | Intermediate/ <br> Advanced <br> Biology <br> Elective | 4 | Co-op | 0 |
| ENVR 2501 | 1 | PHYS 1145 |  | (Intermediate <br> Advanced <br> Biology <br> Elective Lab) | ) |  |  |



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 <br> 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 |  | 0 |
| BIOL 1000 | 1 |  | 8 |  |  |


| 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 |  | 0 | 9 |
| EESC 2000 | 1 | 0 |  |  |
|  | 16 |  |  |  |

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 |  |  | 0 |
| Elective | 4 | 0 | 0 |  |
|  | 17 |  |  |  |

Year 4


| BIOL 2301 and BIOL 2302 | Genetics and Molecular Biology and Lab for BIOL 2301 | 5 |
| :---: | :---: | :---: |
| Project Lab |  |  |
| BIOL 2309 | Biology Project Lab | 4 |
| Inquiries |  |  |
| BIOL 2299 | Inquiries in Biological Sciences | 4 |
| Biochemistry |  |  |
| $\begin{aligned} & \text { BIOL } 3611 \\ & \text { and BIOL } 3612 \end{aligned}$ | Biochemistry and Lab for BIOL 3611 | 5 |
| Molecular Biology |  |  |
| BIOL 4707 | Cell and Molecular Biology | 4 |
| BIOL 5591 | Advanced Genomics | 4 |
| Intermediate/Advanced Cell and Molecular Biology Electives |  |  |
| Complete two of the following: |  |  |
| BIOL 2321 and BIOL 2322 | Microbiology and Lab for BIOL 2321 |  |
| BIOL 2329 | Bioethics |  |
| BIOL 3601 | Neural Systems and Behavior |  |
| BIOL 3603 | Mammalian Systems Physiology |  |
| BIOL 3605 | Developmental Neurobiology |  |
| BIOL 3609 | Developmental Biology |  |
| BIOL 5306 | Biological Clocks |  |
| BIOL 5307 | Biological Electron Microscopy |  |
| BIOL 5499 | Plant Biotechnology |  |
| BIOL 5541 | Endocrinology |  |
| BIOL 5543 | Stem Cells and Regeneration |  |
| BIOL 5549 | 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 |  |
| Research |  |  |
| 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

BIOL 4701 Biology Capstone

## Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Mathematics |  |  |
| MATH 1251 | Calculus and Differential Equations for <br> Biology 1 | 4 |
|  |  |  |

## Statistics

## Hours

| ENVR 2500 <br> and ENVR 2501 <br> Chemistry | Biostatistics <br> and Lab for ENVR 2500 | 5 |
| :--- | :--- | :--- |
| General Chemistry <br> CHEM 1161 <br> and CHEM 1162 <br> and CHEM 1163 | General Chemistry for the Biological <br> Sciences <br> and Lab for CHEM 1161 <br> and Recitation for CHEM 1161 | 5 |
| Organic Chemistry <br> CHEM 2311 <br> and CHEM 2312 | Organic Chemistry 1 <br> and Lab for CHEM 2311 | 5 |
| CHEM 2313 <br> and CHEM 2314 | Organic Chemistry 2 <br> and Lab for CHEM 2313 | 5 |
| Physics Physics 1 | 5 |  |
| Complete one of the following lecture/lab pairs. PHYS 1145/ |  |  |

## PHYS 1146 is recommended:

| PHYS 1145 | Physics for Life Sciences 1 |
| :--- | :--- |
| and PHYS 1146 | and Lab for PHYS 1145 |$|$| PHYS 1151 | Physics for Engineering 1 |
| :--- | :--- |
| and PHYS 1152 | and Lab for PHYS 1151 |
| and PHYS 1153 | and Interactive Learning Seminar for <br> PHYS 1151 |
| PHYS 1161 Physics 1 <br> and PHYS 1162 and Lab for PHYS 1161 |  |

Physics 2
Complete one of the following lecture/lab pairs. PHYS 1147/ 5
PHYS 1148 is recommended:

| PHYS 1147 | Physics for Life Sciences 2 |
| :--- | :--- |
| and PHYS 1148 | and Lab for PHYS 1147 |
| PHYS 1155 | Physics for Engineering 2 |
| and PHYS 1156 <br> and PHYS 1157 | and Lab for PHYS 1155 Interactive Learning Seminar for <br> and 1155 |
| PHYS 1165 Physics 2 <br> and PHYS 1166 and Lab for PHYS 1165 |  |

## Intermediate or Advanced Science

Complete one course from the following:
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

Hours Complete 84 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 |  |  |
| 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 |  |  | 0 |  |
| BIOL 1000 | 1 |  | 9 |  |  |

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/ <br> advanced <br> CMB elective | 4 Elective | 4 |  |  |
| (Intermediate, <br> advanced <br> CMB elective <br> lab) | 1 EESC 2000 |  |  |  |

Year 3
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \begin{array}{l}\text { Intermediate/ } \\ \text { advanced } \\ \text { CMB elective }\end{array} & 4 \text { BIOL 4707 } & 4 \text { Co-op }\end{array}\right]$

## Year 4

| Fall | Hours Spring | Hours |
| :--- | :--- | ---: |
| Co-op | BIOL 5591 | 4 |
|  | BIOL 4701 | 4 |
|  | Intermediate/ <br> advanced <br> science <br> elective |  |
| (Intermediate, <br> advanced <br> science <br> elective lab) |  |  |


| Elective | 4 |
| ---: | ---: |
| 0 | 17 |

Total Hours: 138

## 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 | 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/ <br> advanced <br> science <br> 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 H | Hours | Spring H | Hours |
| :---: | :---: | :---: | :---: |
| BIOL 5591 | 4 | BIOL 4701 | 4 |
| Intermediate/ advanced CMB elective |  | Intermediate/ advanced CMB elective | 4 |
| (Intermediate) <br> advanced <br> science <br> elective lab) |  | (Intermediate) <br> advanced <br> CMB elective <br> lab) | 1 |
| Elective | 4 | Elective | 4 |
| Elective | 4 | Elective | 4 |
| 17 |  |  | 17 |

Total Hours: 138

## 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 | 4 |  |
| CHEM 1162 | 1 ENGW 1111 | 4 |  |  |  |
| MATH 1251 | 4 Elective | 4 |  |  |  |
| Elective | 4 |  |  | 0 |  |
| BIOL 1000 | 1 |  | 9 |  |  |
|  | 19 | 17 |  |  |  |

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 |  | 0 |
|  | 18 | 18 | 5 |  |

$\left.\begin{array}{llccr}\text { Year 3 } & & & & \\ \text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \text { BIOL 4707 } & 4 & \text { Vacation } & \text { Co-op }\end{array}\right]$

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/ <br> advanced <br> science <br> elective | 4 |  |  |  |  |
|  |  | Intermediate/ <br> advanced <br> science <br> 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, 1 |
| :--- |
| advanced <br> CMB elective <br> lab) |
| Elective |
| 0 |

Total Hours: 138

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

Year 1


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 |  |  | 9 |
| EESC 2000 | 1 |  |  |  |
|  | 16 | 0 |  |  |

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 |  |  | 0 |
| Elective | 4 | 0 | 0 | 0 |
|  | 17 |  |  |  |

Year 4


## Year 5

| Fall H | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| BIOL 4701 |  | Intermediate/ <br> advanced <br> science <br> elective | 4 |
| Intermediate/ advanced CMB elective |  | (Intermediate, <br> advanced <br> science <br> elective lab) | 1 |
| (Intermediate/ advanced CMB elective lab) | / | Elective | 4 |
| Elective | 4 | Elective | 4 |
| Elective | 4 |  |  |
| 17 |  |  | 13 |

Total Hours: 138

## Biology and English, BS

In the BS, combined biology and English 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 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Biology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| BIOL 1000 Biology at Northeastern <br> or ENGL 1000 English at Northeastern | 1 |  |


| Experiential Learning Introduction |  |  |
| :---: | :---: | :---: |
| EESC 2000 | Professional Development for Co-op | 1 |
| Required Biology |  |  |
| Foundations |  |  |
| BIOL 1107 and BIOL 1108 | Foundations of Biology and Lab for BIOL 1107 | 5 |
| Inquiries |  |  |
| BIOL 2299 | Inquiries in Biological Sciences | 4 |
| Genetics |  |  |
| BIOL 2301 <br> and BIOL 2302 | Genetics and Molecular Biology and Lab for BIOL 2301 | 5 |
| Project Lab |  |  |
| BIOL 2309 | Biology Project Lab | 4 |
| Biochemistry |  |  |
| BIOL 3611 <br> and BIOL 3612 | Biochemistry and Lab for BIOL 3611 | 5 |
| Biology Elective |  |  |
| Code | Title | Hours |
| Organismal and Population Biology |  |  |
| Complete one of the following: |  | 4-5 |
| BIOL 2321 <br> and BIOL 2322 | Microbiology and Lab for BIOL 2321 |  |
| BIOL 2327 | Human Parasitology |  |
| BIOL 3401 | Comparative Vertebrate Anatomy |  |
| EEMB 2302 and EEMB 2303 | Ecology and Lab for EEMB 2302 |  |
| EEMB 2400 | Introduction to Evolution |  |
| EEMB 2616 and EEMB 2617 | Invertebrate Zoology and Lab for EEMB 2616 |  |
| EEMB 2700 <br> and EEMB 2701 | Marine Biology and Lab for EEMB 2700 |  |

## Supporting Courses for Biology

Code Title Hours

Mathematics

| MATH 1251 | Calculus and Differential Equations for <br> Biology 1 | 4 |
| :--- | :--- | ---: |
| Statistics |  | 5 |
| ENVR 2500 <br> and ENVR 2501 | Biostatistics <br> and Lab for ENVR 2500 | 5 |

Chemistry
General Chemistry
CHEM 1161 General Chemistry for the Biological 5
and CHEM 1162 Sciences
and CHEM 1163 and Lab for CHEM 1161
and Recitation for CHEM 1161

## Organic Chemistry

CHEM $2311 \quad$ Organic Chemistry $1 \quad 5$
and CHEM 2312 and Lab for CHEM 2311
CHEM $2313 \quad$ Organic Chemistry 2
and CHEM 2314 and Lab for CHEM 2313
Physics
Physics 1
Complete one of the following lecture/lab pairs. PHYS 1145/ 5
PHYS 1146 is recommended:

| PHYS 1145 and PHYS 1146 | Physics for Life Sciences 1 and Lab for PHYS 1145 |  |
| :---: | :---: | :---: |
| PHYS 1151 <br> and PHYS 1152 <br> 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: |  | 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 |  |  |

## English Requirements

Code Title Hours

## 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 <br> ENGL $1000 \quad$ English at Northeastern 1

Foundational Courses

| ENGL 1400 | Introduction to Literary Studies | 4 |
| :--- | :--- | :---: |
| ENGL 1160 | Introduction to Rhetoric | 4 |
| or ENGL 1410 | Introduction to Writing Studies |  |
| Diversity |  | 4 |

Complete one of the following courses. This course may also 4 be used to fulfill an additional English requirement below:

| ENGL 2150 | Literature and Digital Diversity |
| :--- | :--- |
| ENGL 2296 | Early African-American Literature |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2760 | Writing in Global Contexts |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in <br> Literature |

ENGL $3678 \quad \begin{aligned} & \text { Bedrooms and Battlefields: Hebrew } \\ & \text { Bible and the Origins of Sex, Gender, } \\ & \text { and Ethnicity }\end{aligned}$
ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
Pre-Nineteenth-Century Literature
Complete one of the following:

| ENGL 1600 | Introduction to Shakespeare |
| :--- | :--- |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following: 4

| ENGL 2260 | Romantic Poetry |
| :--- | :--- |
| ENGL 2330 | The American Renaissance |
| ENGL 2340 | American Realism |
| ENGL 3619 | Emerson and Thoreau |
| ENGL 3720 | 19th-Century Major Figure |
| ENGL 4040 | Topics in 19th-Century Literatures |
| ENGL 2301 | The Graphic Novel |
| ENGL 2410 | Contemporary American Literature |
| ENGL 2440 | The Modern Bestseller |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2610 | Contemporary Israeli Literature and Art |

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
ENGL 3730 20th- and 21 st-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 Writing Studies |
| 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 |
| ENGL 3700 | Writing |
| ENGL 4100 | Toprative Medicine in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and |
| LING 2350 | Linguistics |
| 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 1120 | Trouble in Utopia |  |
| ENGL 1130 | Animals, Objects, Humans |  |
| ENGL 1450 | Reading and Writing in the Digital Age |  |
| ENGL 1500 | British Literature to 1800 |  |
| ENGL 1502 | American Literature to 1865 |  |
| ENGL 1503 | American Literature 1865 to Present |  |
| ENGL 2150 | Literature and Digital Diversity |  |
| ENGL 2370 | The Modern Short Story |  |
| ENGL 2380 | The Modern Novel |  |
| ENGL 2400 | Modern Poetry |  |
| ENGL 2420 | Contemporary Poetry |  |
| ENGL 2430 | Contemporary Fiction |  |
| ENGL 2450 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2510 | Horror Fiction |  |
| ENGL 2520 | Science Fiction |  |
| ENGL 2600 | Irish Literary Culture (Abroad) |  |
| ENGL 2620 | What Is Nature? (Abroad) |  |
| ENGL 2690 | Boston in Literature |  |
| ENGL 3427 | The Literature of Science |  |
| ENGL 3487 | Film and Text (Abroad) |  |
| ENGL 3582 | Children's Literature |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| ENGL 4070 | Topics in Genre |  |
| Writing |  |  |
| Complete one of the following: |  | 4 |
| ENGL 2700 | Creative Writing |  |
| ENGL 2710 | Style and Editing |  |
| ENGL 2730 | Digital Writing |  |
| 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 | Topics in Writing |  |
| ENGL 3382 | Publishing in the 21 st Century |  |
| ENGL 3384 | The Writer's Marketplace |  |
| Capstone |  |  |

ENGL 4710
or ENGL 4720
Capstone Seminar Capstone Project

## English Electives

Complete two additional ENGL electives.

## Integrative Courses

| CodeTitle <br> Integrative English Course |
| :--- |
| Complete one of the following: Hours <br> ENGL 2770 Writing to Heal <br> ENGL 3340 Technologies of Text <br> ENGL 3427 The Literature of Science <br> Integrative General Biological Sciences Course 4 <br> Complete one of the following:  <br> PSYC 3464 Psychology of Language <br> PSYC 4520 Language and the Brain <br> SOCL 3441 Sociology of Health and Illness <br> SOCL 3485 Environment, Technology, and Society |

## Capstone Requirement

Complete one of the following capstone options:

| Code <br> Biology Capstone | Title | Hours |
| :--- | :--- | ---: |
| BIOL 4701 | Biology Capstone | 4 |
| English Capstone | 4 |  |
| ENGL 4710 <br> or ENGL 4720 | Capstone Seminar <br> 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

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

| Biology Requirements <br> Code <br> Introduction to College | Title |
| :--- | :--- | :--- |
| BIOL 1000 |  |
| or MATH 1000 |  |$\quad$| Biology at Northeastern |
| :--- |
| Mathematics at Northeastern |
| Biology |$\quad$ Hours

Organismal and Population Biology Elective
Complete one of the following: 4-5
BIOL 2321 Microbiology
and BIOL 2322 and Lab for BIOL 2321
BIOL 2327 Human Parasitology
BIOL 3401 Comparative Vertebrate Anatomy
EEMB 2302 Ecology
and EEMB 2303 and Lab for EEMB 2302
EEMB 2400 Introduction to Evolution
EEMB 2616 Invertebrate Zoology
and EEMB 2617 and Lab for EEMB 2616
EEMB 2700 Marine Biology
and EEMB 2701 and Lab for EEMB 2700

## Mathematics Requirements

Code Title Hours

## Calculus 1

MATH 1341
or MATH 1251
Calculus 1 for Science and Engineering Calculus and Differential Equations for Biology 1

Calculus 2 and Calculus 3

| MATH 1342 | Calculus 2 for Science and Engineering | 4 |
| :--- | :--- | :--- |
| or MATH 1252 | Calculus and Differential Equations for Biology 2 | 4 |
| MATH 2321 | Calculus 3 for Science and Engineering | 4 |
| Physics |  | 5 |
| PHYS 1161 <br> and PHYS 1162 | Physics 1 <br> and Lab for PHYS 1161 |  |

Required Mathematics Courses

| MATH 1365 | Introduction to Mathematical | 4 |
| :--- | :--- | :---: |
| MATH 2341 | Reasoning | 4 |
| MATH 3081 | Differential Equations and Linear | 4 |

## Mathematics Electives

Complete three of the following: 12

MATH 2331 Linear Algebra
MATH 3001 to MATH 4899

## Additional Requirements

Code Title Hours

Experiential Learning Introduction

| EESC 2000 | Professional Development for Co-op | 1 |
| :--- | :--- | :--- |
| MATH 3000 | Co-op and Experiential Learning | 1 |

## Capstone

Complete one of the following: 4

| BIOL 4701 | Biology Capstone |
| :--- | :--- |
| MATH 4020 | Research Capstone |
| MATH 4025 | Applied Mathematics Capstone |
| MATH 5131 | Introduction to Mathematical Methods <br> and Modeling |

Biology/Mathematics Integrative Courses
Complete two of the following: 8-10

| CS 2500 | Fundamentals of Computer Science 1 |
| :--- | :--- |
| and CS 2501 | and Lab for CS 2500 |
| CS 2510 | Fundamentals of Computer Science 2 |
| and CS 2511 | 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 |

BINF 6309 Bioinformatics Computational Methods 2
Intermediate or Advanced Science
Complete one course from the following:
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
Writing Requirement
ENGW 3307 Advanced Writing in the Sciences 4

## 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. Course work 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Biology Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| BIOL 1000 or POLS 1000 | Biology at Northeastern <br> Political Science at Northeastern | 1 |
| Biology |  |  |
| Foundations |  |  |
| BIOL 1107 and BIOL 1108 | Foundations of Biology and Lab for BIOL 1107 | 5 |
| Inquiries |  |  |
| BIOL 2299 | Inquiries in Biological Sciences | 4 |
| Genetics |  |  |
| BIOL 2301 and BIOL 2302 | Genetics and Molecular Biology and Lab for BIOL 2301 | 5 |


| Project Lab |  |  |
| :---: | :---: | :---: |
| BIOL 2309 | Biology Project Lab | 4 |
| Biochemistry |  |  |
| BIOL 3611 and BIOL 3612 | Biochemistry and Lab for BIOL 3611 | 5 |
| Organismal and Population Biology Elective |  |  |
| Complete one of the following: |  | 4-5 |
| BIOL 2321 and BIOL 2322 | Microbiology and Lab for BIOL 2321 |  |
| BIOL 2327 | Human Parasitology |  |
| BIOL 3401 | Comparative Vertebrate Anatomy |  |
| EEMB 2302 <br> and EEMB 2303 | Ecology and Lab for EEMB 2302 |  |
| EEMB 2400 | Introduction to Evolution |  |
| EEMB 2616 and EEMB 2617 | Invertebrate Zoology and Lab for EEMB 2616 |  |
| EEMB 2700 and EEMB 2701 | Marine Biology and Lab for EEMB 2700 |  |
| Mathematics |  |  |
| MATH 1251 | Calculus and Differential Equations for Biology 1 | 4 |
| Chemistry |  |  |
| General Chemistry |  |  |
| CHEM 1161 <br> and CHEM 1162 <br> and CHEM 1163 | General Chemistry for the Biological Sciences and Lab for CHEM 1161 and Recitation for CHEM 1161 | 5 |
| 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 <br> and PHYS 1148 | Physics for Life Sciences 2 and Lab for PHYS 1147 | 5 |
| Intermediate or Advanced Science |  |  |
| Complete one cour | 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 PSY | C 5999 |  |

## Political Science Requirements

Code Title Hours

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 <br> and ENVR 2501 | Biostatistics and Lab for ENVR 2500 |  |
| :---: | :---: | :---: |
| Political Thought |  |  |
| Complete one of the following: |  | 4 |
| POLS 2328 | Modern Political Thought |  |
| POLS 2330 | American Political Thought |  |
| POLS 2332 | Contemporary Political Thought |  |
| Political Science Upper-Division Electives |  |  |
| Complete four of the following: |  | 16 |
| POLS 2340 | Business and Government |  |
| POLS 2390 | Science, Technology, and Public Policy |  |
| POLS 2395 | Environmental Politics and Policy |  |
| POLS 2399 | Research Methods in Political Science |  |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |  |
| POLS 3324 | Law and Society |  |
| Political Science Elective |  |  |
| Complete one addit | nal course in political science numbered | 4 | 2300 or above.

## 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. ).

- Law and legal studies
- Public policy
- Security studies


## Integrative Requirement and Capstone

Note: Science, Technology, and Public Policy (POLS 2390) cannot be used both as an integrative course and as an elective above.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Integrative Requirement |  |  |
| $\begin{aligned} & \text { POLS } 2390 \\ & \text { or POLS } 2395 \end{aligned}$ | Science, Technology, and Public Policy Environmental Politics and Policy | 4 |
| Capstone |  |  |
| $\begin{aligned} & \text { BIOL } 4701 \\ & \text { or POLS } 4701 \end{aligned}$ | Biology Capstone <br> Political Science Senior Capstone | 4 |
| Program Requirement <br> 136 total semester hours required |  |  |
| Concentrations |  |  |
| 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 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
Electives
Complete three of the following: 12

| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> 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 3427 | Civil-Military Relations |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 3487 | Politics of Developing Nations |
| POLS 4918 | Model NATO |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

Code Title Hours

## Computer Science Overview

CS 1200 Leadership Skill Development ${ }^{1}$

CS $1210 \quad \begin{aligned} & \text { Professional Development for CCIS Co- } \\ & \text { op }\end{aligned}$

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| CS 1800 | Discrete Structures |  |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 |  |
| and CS 2501 | and Lab for CS 2500 | 5 |
| CS 2510 |  |  |
| and CS 2511 | Fundamentals of Computer Science 2 |  |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 5 |
| CS 3200 | Database Design <br> CS 3500 | Object-Oriented Design |
| CS 3800 | Theory of Computation (integrative <br> course) | 4 |
| CS 4500 | Software Development <br> and Recitation for CS 4500 | 4 |

## Presentation Requirement

## THTR 1170 The Eloquent Presenter

## Computer Science 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, IS, or DS classes that are not
already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900
1 Students entering through the biology department may take Biology at Northeastern (BIOL 1000).
${ }^{2}$ Students entering through the biology department may take Professional Development for Co-op (EESC 2000).

## Biology Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Foundations of Biology |  |  |
| BIOL 1107 and BIOL 1108 | Foundations of Biology and Lab for BIOL 1107 | 5 |
| Inquiries |  |  |
| BIOL 2299 | Inquiries in Biological Sciences | 4 |
| Molecular Biology |  |  |
| 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 |
| Techniques in Biology |  |  |
| BIOL 2309 | Biology Project Lab | 4 |
| Chemistry |  |  |
| CHEM 1161 <br> and CHEM 1162 <br> and CHEM 1163 | General Chemistry for the Biological Sciences 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 $2313 \quad$ Organic Chemistry 2 5
and CHEM 2314
Biology Capstone
BIOL 4701
Intermediate and Advanced Biology Electives

BIOL 2311 to 4999 EEMB 2290 to 5515 , EEMB
5534,EEMB 5548 to 5569, EEMB 2400

## Biology Integrative Course

Complete one of the following: 4-5

| BIOL 5569 | Advanced Microbiology |
| :--- | :--- |
| BINF 6308 | Bioinformatics Computational Methods |
| BIOL 4707 | Cell and Molecular Biology |
| BIOL 5581 | Biological Imaging |
| BIOL 5587 | Comparative Neurobiology |
| BIOL 5591 | Advanced Genomics |
| EEMB 5548 | Sociobiology |

## Supporting Courses

Code Title Hours

## Calculus

| Complete two calculus courses with a grade of C-or higher: |  |  |
| :--- | :--- | :--- |
| MATH 1251 | Calculus and Differential Equations for <br> Biology 1 | 4 |
| MATH 1252 | Calculus and Differential Equations for <br> Biology 2 | 4 |

Probability and Statistics
Complete one of the following:
MATH $3081 \quad$ Probability and Statistics
ENVR 2500 Biostatistics
and ENVR 2501 and Lab for ENVR 2500
Computing and Social Issues
Complete one of the following:

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |


| SOCL 3485 | Environment, Techn |  |
| :---: | :---: | :---: |
| SOCL 4528 | Computers and Soc |  |
| 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 |  |  |
| Writing Requirements |  |  |
| Code | Title | Hours |
| College Writing |  |  |
| ENGW 1111 | First-Year Writing | 4 |


| Advanced Writing in the Disciplines |  |
| :--- | :--- |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Complete five general electives.

## 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.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | BIOL 2301 | 4 | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | BIOL 2299 | 4 | BIOL 2302 | 1 |  |  |
| CS 2500 <br> and CS 2501 | 5 | ENGW 1111 | 4 | Elective | 4 |  |  |
| BIOL 1107 <br> and <br> 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 | 4 CS 1210 | 1 Elective | 4 Co-op |  |
| CHEM 2311 <br> and <br> CHEM 2312 | CHEM 2313 <br> and | 5 BIOL 2309 | 4 |  |
| CS 3200 | 4 CS 3000 2314 |  | 4 |  |
| MATH 1251 | 4 BIOL 3611 | 4 |  |  |
|  | BIOL 3612 | 1 |  | 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 <br> and <br> ENVR 2501 <br> (or MATH <br> 3081) | 5 |  |  |
|  |  | BIOL elective | 5 |  |  |  |  |
|  |  | BIOL <br> integrative <br> elective | 4 |  |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |  |
|  | 0 |  | 18 |  | 9 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | CS 4500 <br> and CS 4501 | 4 Elective | 4 Co-op |  |
|  | BIOL 4701 | 4 Elective | 4 |  |
|  | BIOL elective | 4 |  |  |
| Computer <br> science <br> elective | 4 | 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | BIOL 2299 | 4 |  |  |  |  |
| BIOL 1107 <br> and BIOL 1108 | 5 | ENGW 1111 | 4 |  |  |  |  |
| CS 1200 | 1 | MATH 1251 | 4 |  |  |  |  |
| CHEM 1161 | 4 |  |  |  |  |  |  |
| CHEM 1162 | 1 |  |  |  |  |  |  |



| Computing <br> and social <br> issues | 4 Elective | 4 |
| :--- | :---: | :---: |
|  | 18 | 16 |

Total Hours: 142

## 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, and one science course chosen from a range of science departments.

## 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, or any combined major that involves biology.

## Required Biology Courses

Complete five biology courses for a total of at least 22 semester hours. Three of the five courses must be at the 2000 level or above. Two of the five courses must contain a lab corequisite.

Options:
Code Title
BIOL 2000 to BIOL 3999
BIOL 5000 to BIOL 5999
EEMB 2290 to EEMB 5515
EEMB 5520 to EEMB 5534
EEMB 5548 to EEMB 5569

## Science Course

Code Title
Hours
Complete one course from the BIOL, CHEM, EEMB, ENVR, or
PHYS subject areas.

## GPA Requirement

2.000 GPA required in the minor

## Chemistry and Chemical Biology

Website (http://www.northeastern.edu/chemistry)

## Michael Pollastri, PhD

Professor and Chair

## Kay Onan, PhD

Associate Professor and Associate Chair
102 Hurtig Hall
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. 497)
- Environmental Geology and Chemistry (p. 499)


## Minor

- Chemistry (p. 501)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 621)

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Chemistry Major Requirements

| Code Title | Hours |
| :--- | :--- |
| Introduction to College |  |


| CHEM 1000 | Chemistry/Chemical Biology at <br> Northeastern | 1 |
| :--- | :--- | :--- |

Experiential Learning Introduction
EESC $2000 \quad$ Professional Development for Co-op

## General Chemistry

| CHEM 1211 | General Chemistry 1 | 5 |
| :--- | :--- | :--- |

and CHEM 1212 and Lab for CHEM 1211
and CHEM 1213 and Recitation for CHEM 1211
CHEM 1214 General Chemistry 2 5
and CHEM 1215 and Lab for CHEM 1214
and CHEM 1216 and Recitation for CHEM 1214

| Organic Chemistry |  |  |
| :---: | :---: | :---: |
| CHEM 2315 <br> and CHEM 2316 | Organic Chemistry 1 for Chemistry Majors and Lab for CHEM 2315 | 6 |
| CHEM 2317 <br> and CHEM 2318 | Organic Chemistry 2 for Chemistry Majors and Lab for CHEM 2317 | 6 |
| Bioanalytical Chemistry |  |  |
| CHEM 2331 <br> and CHEM 2332 | Bioanalytical Chemistry and Lab for CHEM 2331 | 5 |
| Physical Chemistry |  |  |
| CHEM 3431 | Physical Chemistry | 5 |

and CHEM $3432 \quad$ and Lab for CHEM 3431
Intermediate-Level Chemistry 2
Complete one of the following:
and CHEM 3404 and Lab for CHEM 3403
CHEM $4456 \quad$ Organic Chemistry 3: Organic Chemistry
and CHEM 4457 of Drug Design and Development and Lab for CHEM 4456

| Advanced-Level Chemistry |
| :--- |
| Complete one of the following: |

CHEM $3501 \quad$ Inorganic Chemistry
and CHEM 3502 and Lab for CHEM 3501
CHEM 3505 Introduction to Bioinorganic Chemistry
and CHEM 3506 and Lab for CHEM 3505

Complete the following courses:
CHEM 3521

and CHEM 3522 $\quad$| Instrumental Methods of Analysis |
| :--- |
| and Instrumental Methods of Analysis |
| Lab |$\quad 5$

## Supporting Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Mathematics |  |  |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| MATH 1342 | Calculus 2 for Science and Engineering | 4 |
| Physics |  |  |
| PHYS 1151 <br> and PHYS 1152 <br> and PHYS 1153 | Physics for Engineering 1 <br> and Lab for PHYS 1151 <br> and Interactive Learning Seminar for PHYS 1151 | 5 |
| PHYS 1155 and PHYS 1156 and PHYS 1157 | Physics for Engineering 2 <br> and Lab for PHYS 1155 <br> and Interactive Learning Seminar for PHYS 1155 | 5 |

## Chemistry Major Credit Requirement

Complete 86 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 1211 | 4 | CHEM 1214 | 4 | Open | 0 | Open | 0 |
| CHEM 1212 | 1 | CHEM 1215 | 1 |  |  |  |  |
| CHEM 1213 | 0 | CHEM 1216 | 0 |  |  |  |  |
| MATH 1341 | 4 | MATH 1342 | 4 |  |  |  |  |
| ENGW 1111 | 4 | PHYS 1151 | 3 |  |  |  |  |
| CHEM 1000 | 1 | PHYS 1152 | 1 |  |  |  |  |
| Elective | 4 | PHYS 1153 | 1 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 18 |  | 18 |  | 0 |  | 0 |
| Year 2 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CHEM 2315 | 4 | CHEM 2317 |  | CHEM 3521 | 1 | Co-op | 0 |


| CHEM 2316 | 2 CHEM 2318 | 2 CHEM 3522 | 4 |  |
| :--- | :--- | :--- | :--- | :--- |
| PHYS 1155 | 3 CHEM 2331 | 4 CHEM 3531 | 1 |  |
| PHYS 1156 | 1 CHEM 2332 | 1 CHEM 3532 | 4 |  |
| PHYS 1157 | 1 EESC 2000 | 1 |  |  |
| Elective | 4 Elective | 4 |  | 0 |
| Elective | 4 Elective | 4 | 10 |  |
|  | 19 | 20 |  |  |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | 0 CHEM 3431 | 4 | Open | Co-op |

## Year 4



## Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | 0 CHEM 3403 | 4 |
|  | CHEM 3404 | 1 |
|  | CHEM 4621 | 4 |
|  | CHEM 4622 | 1 |
|  | CHEM 4750 | 4 |
|  | 0 | 14 |

Total Hours: 135

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

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :---: | :---: | :---: | :---: | :--- |
| CHEM 1211 | 4 CHEM 1214 | 4 Elective | 4 Open |  |  |
| CHEM 1212 | 1 CHEM 1215 | 1 Elective | 4 |  |  |
| CHEM 1213 | 0 | CHEM 1216 | 0 |  |  |
| MATH 1341 | 4 MATH 1342 | 4 |  |  |  |
| CHEM 1000 | 1 PHYS 1151 | 3 |  |  |  |
| ENGW 1111 | 4 PHYS 1152 | 1 |  | 0 |  |
| Elective | 4 PHYS 1153 | 1 |  |  |  |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | :---: |
| CHEM 2315 | 4 CHEM 2317 | 4 Open | Co-op |  |
| CHEM 2316 | 2 CHEM 2318 | 2 |  |  |
| PHYS 1155 | 3 CHEM 2331 | 4 |  |  |
| PHYS 1156 | 1 CHEM 2332 | 1 |  |  |


| PHYS 1157 | 1 EESC 2000 | 1 |  |  |
| :--- | :---: | ---: | :--- | :--- |
| Elective | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :--- | :--- | :--- |
| Co-op | CHEM 3431 | 4 CHEM 3521 | 1 ENGW 3307 | 4 |
|  | CHEM 3432 | 1 CHEM 3522 | 4 Co-op |  |
|  | CHEM 4456 | 4 CHEM 3531 | 1 |  |
|  | CHEM 4457 | 1 CHEM 3532 | 4 |  |
|  | CHEM 4628 | 4 |  | 4 |
|  | CHEM 4629 | 2 |  | 4 |

## Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | CHEM 3505 | 4 |
|  | CHEM 3506 | 1 |
|  | CHEM 4621 | 4 |
|  | CHEM 4622 | 1 |
|  | CHEM 4750 | 4 |
|  | Elective | 4 |
|  | 0 | 18 |

Total Hours: 135

## Environmental Geology and Chemistry, BS

Jonathan Grabowski, PhD
Associate Professor
Marine Science Center, Nahant
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The Departments of Marine and Environmental Sciences and Chemistry provide education in basic environmental science and chemistryrelated 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, bio-remediation, 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 warming.

Key general objectives are the development of qualitative and quantitative problem-solving skills and effective communication skills. Specific learning objectives for this combined major include 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 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.

Most of our combined majors will 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.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

| Environmental Geology Major Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Earth Foundations |  |  |
| ENVR 1200 and ENVR 1201 | Dynamic Earth and Lab for ENVR 1200 | 5 |
| ENVR 1202 and ENVR 1203 | History of Earth and Life and Interpreting Earth History | 5 |
| ENVR 2310 and ENVR 2311 | Earth Materials and Lab for ENVR 2310 | 5 |
| Geomorphology |  |  |
| ENVR 2340 and ENVR 2341 | Earth Landforms and Processes and Lab for ENVR 2340 | 5 |
| Environmental Geology Intermediate/Advanced Electives |  |  |
| Complete two inte 2300 to ENVR 599 | ediate or advanced electives from ENVR | 8-10 |

Supporting Courses for Environmental Geology

| Code <br> Mathematics | Title | Hours |
| :--- | :--- | ---: |
| MATH 1241 | Calculus 1 | 4 |
| MATH 1242 | Calculus 2 | 4 |
| Science Requirement |  |  |
| Complete one of the following options: | 10 |  |
| Biology Option |  |  |
| BIOL 1111 | General Biology 1 |  |
| and BIOL 1112 | and Lab for BIOL 1111 |  |
| BIOL 1113 | General Biology 2 |  |
| and BIOL 1114 | and Lab for BIOL 1113 |  |


| PHYS 1161 | Physics 1 |
| :--- | :--- |
| and PHYS 1162 | and Lab for PHYS 1161 |
| PHYS 1165 | Physics 2 |
| and PHYS 1166 | and Lab for PHYS 1165 |

## Chemistry Major Requirements

Code Title Hours

## General Chemistry

CHEM 1211 General Chemistry 1 5
and CHEM 1212 and Lab for CHEM 1211

CHEM 1214 General Chemistry $2 \quad 5$
and CHEM 1215 and Lab for CHEM 1214
Intermediate-Level Chemistry

| CHEM 2311 | Organic Chemistry 1 |  |
| :--- | :--- | ---: |
| and CHEM 2312 | and Lab for CHEM 2311 | 5 |
| CHEM 2313 | Organic Chemistry 2 <br> and CHEM 2314 <br> and Lab for CHEM 2313 | 5 |
| CHEM 2331 | Bioanalytical Chemistry <br> and CHEM 2332 <br> and Lab for CHEM 2331 | 5 |
| CHEM 3403 <br> and CHEM 3404 | Quantum Chemistry and Spectroscopy <br> and Lab for CHEM 3403 | 5 |
| CHEM 3431 | Physical Chemistry <br> and CHEM 3432 | and Lab for CHEM 3431 |

Advanced-Level Chemistry
CHEM 3521 Instrumental Methods of Analysis 5
and CHEM 3522 and Instrumental Methods of Analysis
Lab

## Environmental Geology/Chemistry Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | :--- |
| Choose two courses from the following: |  |  |
| ENVR 3410 | Environmental Geochemistry |  |
| ENVR 5190 | Soil Science |  |

## Environmental Geology/Chemistry Major Credit Requirement

Complete 94 semester hours in the major.

## Program Requirement

128 total semester hours required.

## Plan of Study <br> Five Years, Three Co-ops in Summer 2/Fall

Year 1

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CHEM 1211 and | 5 | CHEM 1214 and | 5 Vacation | 0 Vacation | 0 |
| CHEM 1212 and |  | CHEM 1215 and |  |  |  |
| CHEM 1213 |  | CHEM 1216 |  |  |  |
| ENGW 1111 | 4 | ENVR 1202 <br> and ENVR 1203 | 5 |  |  |
| ENVR 1200 <br> and ENVR 1201 | 5 | MATH 1242 | 4 |  |  |
| MATH 1241 | 4 | Elective | 4 |  |  |
|  | 18 |  | 18 | 0 | 0 |


| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CHEM 2311 and CHEM 2312 | 5 | CHEM 2313 and CHEM 2314 | 5 | Vacation | 0 Co-op | 0 |
| ENVR 2310 <br> and <br> ENVR 2311 | 5 | EESC 2000 | 1 |  |  |  |
| Physics 1 or Biology 1 |  | GEOL <br> intermediate/ <br> advanced <br> undergraduat elective | 4 <br> 4 |  |  |  |
|  |  | Physics 2 or Biology 2 | 5 |  |  |  |
|  | 15 |  | 15 |  | 0 | 0 |

## Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | CHEM 2331 <br> and <br> CHEM 2332 | 5 | Elective | 4 | Co-op | 0 |
|  |  | ENVR 2340 <br> and <br> ENVR 2341 | 5 | Elective | 4 |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  |  | Integrative course | 5 |  |  |  |  |
|  | 0 |  | 19 |  | 8 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | CHEM 3431 | 4 | CHEM 3521 <br> and <br> CHEM 3522 | 5 | Co-op | 0 |
|  |  | CHEM 3432 | 1 | Elective | 4 |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  |  | GEOL <br> intermediate/ advanced undergraduat elective | 4 |  |  |  |  |
|  |  | Integrative course | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 9 |  | 0 |


| Year 5 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| Co-op | ENGW 3303, | 4 |
|  | 3307, or <br> 3315 |  |
|  | CHEM 3403 | 4 |
|  | CHEM 3404 | 1 |
|  | Elective | 4 |
|  | Elective | 4 |
|  | 0 | 17 |

[^12]
## 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.

## Required Courses

Note: Engineering students may take General Chemistry for Engineers (CHEM 1151) in place of General Chemistry 1 (CHEM 1211) and two other chemistry courses in place of General Chemistry 2 (CHEM 1214) and Physical Chemistry (CHEM 3431).

| Code | Title | Hours |
| :---: | :---: | :---: |
| General Chemistry |  |  |
| CHEM 1211 and CHEM 1212 | General Chemistry 1 and Lab for CHEM 1211 | 5 |
| CHEM 1214 and CHEM 1215 | General Chemistry 2 and Lab for CHEM 1214 | 5 |
| Organic Chemistry |  |  |
| CHEM 2311 <br> and CHEM 2312 | Organic Chemistry 1 and Lab for CHEM 2311 | 5 |
| CHEM 2313 <br> and CHEM 2314 | Organic Chemistry 2 and Lab for CHEM 2313 | 5 |
| Physical Chemistry |  |  |
| CHEM 3431 and CHEM 3432 | Physical Chemistry and Lab for CHEM 3431 | 5 |
| Advanced Lab |  |  |
| Complete one of the | following: | 5 |
| CHEM 3403 <br> 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

## Linguistics

Website (http://www.northeastern.edu/linguistics)
Neal J. Pearlmutter, PhD
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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, computer science, artificial
intelligence, sociology, language teaching, anthropology, and education. Linguistics is a key component of the field of cognitive science, the study of the structure and functioning of human cognitive processes.

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. Cutting-edge work in cognitive science investigates how natural languages are learned and processed. Grammar checkers and translation programs use language parsers; search engines, browsers, and editors apply the results of linguistic theory and computational linguistics. Linguistics is behind every application that recognizes or synthesizes speech. 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 in the theory and 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); the psychology of language (offered by the Department of Psychology); and applications to related domains (such as language acquisition, language change, and historical linguistics) that cross into the humanities and social sciences.

Students can pursue a major in linguistics as well as in one of the combined majors: linguistics and psychology, linguistics and cultural anthropology, linguistics and English, linguistics and communication studies, computer science and linguistics, and American Sign Language (ASL) and linguistics. 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 speech perception and language processing 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 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. 502)
- American Sign Language and Linguistics (p. 504)
- Computer Science and Linguistics (p. 327)
- Linguistics and Cultural Anthropology (p. 507)
- Linguistics and Psychology (p. 509)


## Bachelor of Arts (BA)

- Linguistics and Communication Studies (p. 131)
- Linguistics and English (p. 512)


## Minor

- Linguistics (p. 515)


## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## 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 Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| LING 1150 | Introduction to Language and <br> Linguistics | 4 |
| LING 2350 | Linguistic Analysis | 4 |
| LING 3412 | Language and Culture | 4 |
| LING 3422 | Phonology | 4 |
| LING 3424 | Morphology | 4 |
| or LING 3452 | Semantics | 4 |
| LING 3450 | Syntax | 4 |
| PSYC 3464 | Psychology of Language | 4 |
| Laboratory |  | 4 |
| Prerequisites |  | 4 |
| PSYC 1101 | Foundations of Psychology | 4 |
| PSYC 2320 | Statistics in Psychological Research | 4 |
| Laboratory |  | 4 |


| 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 advisor to discuss this option: |  |  |
| LING 4891 | Research Seminar in Linguistics |  |
| LING 4991 | Directed Study Research |  |
| PSYC 4991 | Directed Study Research |  |
| Linguistics Seminar |  |  |
| LING 4654 or PSYC 4658 | Seminar in Linguistics <br> Seminar in Psycholinguistics | 4 |

## Experiential Learning

Complete one of the following options, or complete a study 4
abroad (not a Dialogue of Civilizations):
Directed Study

| LING 4991 | Directed Study Research |
| :--- | :--- |
| Junior/Senior Honors Project |  |
| LING 4970 | Junior/Senior Honors Project 1 |
| and LING 4971 | and Junior/Senior Honors Project 2 |


| DEAF 2700 | ASL Linguistics |
| :--- | :--- |
| LING 3420 | Phonetics |
| 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 4654 | Seminar in Linguistics |


| LING 4891 | Research Seminar in Linguistics |
| :---: | :--- |
| or LING 4970 | Junior/Senior Honors Project 1 |


| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | LING 3424 or 3452 | 4 | Elective | 4 | Co-op | 0 |
|  |  | Laboratory course | 4 | Elective | 4 |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |
| Year 5 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |  |
| Co-op | 0 | Linguistics seminar | 4 |  |  |  |  |
|  |  | Linguistics elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  |  |  |  |

[^13]4 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 Elective | 4 |  |  |
| MATH 1215 | 4 Foreign <br> language <br> course | 4 |  |  |
| LING 1000 | 1 | 16 | 0 | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LING 3412 | 4 | LING 3422 | 4 | Vacation | 0 | Co-op | 0 |
| PSYC 2320 | 4 | Linguistics elective | 4 |  |  |  |  |
| Linguistics elective | 4 | Elective | 4 |  |  |  |  |
| Foreign language course | 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 LING 3450 | 4 Elective | 4 Co-op | 0 |
|  | Linguistics | 4 Elective | 4 |  |
|  | elective |  |  |  |
|  | ENGW 3315 | 4 |  | 0 |
|  | Elective | 4 | 8 |  |
| 0 | 16 |  |  |  |

## Year 4

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| American Sign Language Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Language Requirement |  |  |
| 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 |
| Interpreting |  |  |
| INTP 3500 | The Interpreting Profession | 2 |
| INTP 3510 | Interpreting Inquiry Texts | 4 |

## Linguistics Requirements

Code Title Hours
Core Linguistics Requirements

| LING 1150 | Introduction to Language and <br>  <br>  <br> Linguistics | 4 |
| :--- | :--- | :---: |
| LING 2350 | Linguistic Analysis | 4 |
| LING 3422 | Phonology | 4 |
| LING 3424 | Morphology | 4 |
| or LING 3452 | Semantics |  |


| LING 3450 | Syntax | 4 |
| :---: | :---: | :---: |
| Psychology of Language |  |  |
| PSYC 1101 | Foundations of Psychology | 4 |
| PSYC 2320 | Statistics in Psychological Research | 4 |
| PSYC 3464 | Psychology of Language | 4 |
| Electives |  |  |
| Complete two | s from the following: | 8 |
| 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 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 |  |
| PSYC 4520 | Language and the Brain |  |
| PSYC 4610 | Laboratory in Psycholinguistics |  |
| PSYC 4658 | Seminar in Psycholinguistics |  |
| PSYC 4991 | Directed Study Research |  |
| Seminar Requirement |  |  |
| Complete one following: | (not counted elsewhere) from the | 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 Practicum | 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 <br> Complete 92 semester hours in the major.

## 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 LING 3450 | 4 |
| INTP 3500 | 2 LING 3424 or 3452 | 4 |
| INTP 3510 | 4 PSYC 3464 | 4 |
| LING 3422 | 4 NUpath/Elective | 4 |
| NUpath/Elective | 4 | 16 |
|  | 18 |  |


| Year 4 |  |  |
| :--- | ---: | ---: |
| Fall | Hours Spring | Hours |
| INTP 4940 | 4 Linguistics Seminar | 4 |
| Linguistics Elective | 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

Code Title Hours

## Computer Science Overview

CS 1200 Leadership Skill Development

CS 1210

- op


## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | :--- |
| and CS 1802 | and Seminar for CS 1800 |  |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |

and CS 2501 and Lab for CS 2500
CS $2510 \quad$ Fundamentals of Computer Science 2
and CS 2511 and Lab for CS 2510
Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :--- |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3800 | Theory of Computation (Integrative <br> course) | 4 |
| CS 4100 | Artificial Intelligence (Integrative | 4 |

course)

| CS 4120 | Natural Language Processing <br> (Integrative course) | 4 |
| :--- | :--- | :---: |
| CS 4400 | Programming Languages (Integrative <br> course) | 4 |
| CS 4500 | Software Development <br> and CS 4501 | and Recitation for CS 4500 |

## Presentation Requirement

THTR $1170 \quad$ The Eloquent Presenter 1

Computer Science Elective Courses
With advisor approval, directed study, project study, and appropriate graduate-level courses may also be taken as upper-division electives.
Complete 4 credits of CS, IS, or DS courses that are not
already required. Choose courses within the following range:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Linguistics Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introductory Linguistics |  |  |
| LING 1150 | Introduction to Language and Linguistics | 4 |
| Intermediate/Advanced Linguistics |  |  |
| LING 2350 | Linguistic Analysis (Integrative course) | 4 |
| LING 3412 | Language and Culture | 4 |
| LING 3422 | Phonology | 4 |
| LING 3450 | Syntax (Integrative course) | 4 |
| Intermediate/Advanced Linguistics Elective |  |  |
| LING 3424 | Morphology | 4 |
| or 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 | following: | 4 |
| LING 4891 | Research Seminar in Linguistics |  |


| LING 4991 | Directed Study Research |  |
| :---: | :---: | :---: |
| PSYC 4610 | Laboratory in Psycholinguistics |  |
| Seminar Requirement |  |  |
| LING 4654 or PSYC 4658 | Seminar in Linguistics <br> Seminar in Psycholinguistics | 4 |
| Linguistics Elective |  |  |
| Complete one of the following: |  | 4 |
| DEAF 2700 | ASL Linguistics |  |
| LING 3420 | Phonetics |  |
| 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 4654 | Seminar in Linguistics |  |
| PSYC 3466 | Cognition |  |
| PSYC 4520 | Language and the Brain |  |
| 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 |  |


| ENGW 3302 | Advanced Writing in the Technical |
| :--- | :--- |
| or ENGW 3315 | Professions <br> Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Complete five general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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 |  | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 Vacation | Vacation |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | LING 2350 | 4 |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | Elective | 4 |  |
| LING 1150 | 4 | PSYC 1101 | 4 |  |
| ENGW 1111 | 4 |  |  |  |
|  | 19 |  | 17 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| CS 3500 | 4 CS 1210 | 1 Elective | 4 Co-op |  |
| MATH 1341 | 4 CS 3000 | 4 Elective | 4 |  |
| LING 3412 | 4 CS 3800 | 4 |  |  |
| PSYC 3464 | 4 LING 3422 | 4 |  |  |
|  | PSYC 2320 | 4 |  | 0 |

Computer Science Writing Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  | 4 |
| ENGW 1111 | First-Year Writing | 4 |

Advanced Writing in the Disciplines

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 |  |
|  | LING 3450 | 4 |  |  |


| ENGW 3302 | 4 |  |  |
| :---: | :---: | :---: | :---: |
| THTR 1170 | 1 |  |  |
| 0 | 17 | 8 | 0 |

## Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| CS 4500 | 4 CS 4100 | 4 |
| LING <br> seminar | 4 CS elective | 4 |
| Computing <br> and social <br> issues | 4 LING elective | 4 |
| LING 3424 or <br> 3452 | 4 LING lab <br> (or directed <br> 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 <br> CS 2510 <br> and CS 2511 | 5 Vacation | 0 Vacation | 0 |
| CS 2500 <br> and CS 2501 | 5 LING 2350 | 4 |  |  |
| CS 1800 <br> and CS 1802 | 5 PSYC 1101 | 4 |  |  |
| LING 1150 | 4 Elective | 4 |  |  |
| ENGW 1111 | 4 |  | 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 1341 | 4 CS 3000 | 4 |  |  |
| LING 3412 | 4 CS 3800 | 4 |  |  |
| PSYC 3464 | 4 LING 3422 | 4 |  |  |
|  | PSYC 2320 | 4 | 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 |  |
|  | LING 3450 | 4 |  |  |
|  | ENGW 3302 | 4 |  |  |
|  | THTR 1170 | 1 |  | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 CS 4100 | 4 Elective | 4 Co-op | 0 |
|  | CS elective | 4 Elective | 4 |  |
|  | LING lab <br> (or directed <br> study) | 4 |  |  |
|  |  |  |  |  |


|  |  | $\begin{aligned} & \text { LING } 3424 \text { or } \\ & 3452 \end{aligned}$ | 4 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 |  | 16 | 8 | 0 |
| Year 5 |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |
| Co-op | 0 | CS 4500 | 4 |  |  |
|  |  | LING seminar | 4 |  |  |
|  |  | Computing and social issues | 4 |  |  |
|  |  | LING 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## 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 |
| :--- | :--- | ---: |
| Introductory Linguistics | 4 |  |
| LING 1150 | Introduction to Language and <br>  <br>  <br>  <br> Intermediate/Advanced Linguistics |  |
| LING 2350 | Linguistic Analysis | 4 |
| LING 3422 | Phonology | 4 |



Total Hours: 128

## Plan of Study

Five Years, Three Co-ops in Summer 2/Fall
Year 1

Year 2

Year 3

Year 4
Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours
Co-op

Year 5

## 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 |  | Foreign language course | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

Year 2
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { LING 3422 } & 4 \text { LING } 3442 & 4 \text { Vacation } & \text { Vacation }\end{array}\right]$

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 | Linguistics elective | 4 |  |  |  |  |
| Elective |  | Anthropology advanced area course | 4 |  |  |  |  |
| ENGW 3315 | 4 | Elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Linguistics <br> research | 4 ANTH 4600 | 4 |
| Anthropology <br> advanced <br> area course | 4Linguistics <br> elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 128

## Linguistics and Psychology, BS

This combined major educates 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Linguistics 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

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introductory Linguistics |  |  |
| LING 1150 | Introduction to Language and Linguistics | 4 |
| Intermediate/Advanced Linguistics |  |  |
| LING 2350 | Linguistic Analysis | 4 |
| LING 3412 | Language and Culture | 4 |
| LING 3422 | Phonology | 4 |
| LING 3450 | Syntax | 4 |
| Linguistics Electives |  |  |
| Complete three of the following: |  | 12 |
| DEAF 2700 | ASL Linguistics |  |
| LING 3420 | Phonetics |  |
| 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 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 |  |

## Psychology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introductory and Intermediate Psychology |  |  |
| PSYC 1101 | Foundations of Psychology | 4 |
| PSYC 2320 | Statistics in Psychological Research | 4 |

## Advanced Psychology

| PSYC 3402 | Social Psychology | 4 |
| :--- | :--- | :--- |
| PSYC 3466 | Cognition | 4 |

## Psychology Lab

Complete one of the laboratory courses or, with prior approval, 4 a directed study or honors project on a topic related to psycholinguistics or cognition:

| 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 |  |
| Psychology Seminar |  |  |
| Complete one of the following: |  | 4 |
| PSYC 4658 | Seminar in Psycholinguistics |  |
| PSYC 4660 | Seminar in Cognition |  |
| PSYC 4674 | Seminar in Cognitive Neuroscience |  |
| Psychology Electives |  |  |
| A directed study on a topic related to psycholinguistics or cognition may be taken with prior approval. |  |  |
| Complete two of the following: |  | 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 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 Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| PSYC 3464 | Psychology of Language | 4 |
| Complete a directed study, two junior/senior honors project <br> courses, or a study | $4-8$ |  |
| LING 4991 | Directed Study Research |  |
| LING 4996 |  |  |
| LING 4970 <br> and LING 4971 | Junior/Senior Honors Project 1 <br> and Junior/Senior Honors Project 2 |  |
| PSYC 4970 <br> and PSYC 4971 | Junior/Senior Honors Project 1 <br> and Junior/Senior Honors Project 2 |  |
| PSYC 4991 | Directed Study Research |  |

## Linguistics and Psychology Combined-Major Credit Requirement

Complete 68 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 Foreign <br> language <br> course | 4 |  |  |
| :--- | :---: | :---: | :---: | :---: |
| MATH 1215 | 4 Elective | 4 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| LING 3412 | 4 LING 3422 | 4 Vacation | 0 Co-op | 0 |
| PSYC 2320 | Linguistics <br> elective | 4 |  |  |
| PSYC 3466 | 4 PSYC 3402 | 4 |  |  |
| Foreign <br> language <br> course | 4 <br> Psychology <br> elective | 4 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 LING 3450 | 4 Elective | 4 Co-op | 0 |
|  | Linguistics <br> or <br> psychology <br> elective | 4 Elective | 4 |  |
|  | Psychology <br> laboratory | 4 |  |  |
|  | ENGW 3315 | 4 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 Linguistics elective | 4 Elective | 4 Co-op | 0 |
|  | Linguistics or psychology elective | 4 Elective | 4 |  |
|  | Psychology seminar | 4 |  |  |
|  | Elective | 4 |  |  |
|  | 0 | 16 | 8 | 0 |

Year 5

| Fall | Hours | Spring |
| :--- | ---: | ---: |
| Co-op | 0 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 <br> Foreign <br> language <br> course | 4 |  |  |
|  |  |  |  |  |


| MATH 1215 | 4 | Elective | 4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 16 |  | 16 |  | 0 | 0 |
| Year 2 |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| LING 3412 | 4 | LING 3422 | 4 | Vacation | 0 Vacation | 0 |
| PSYC 2320 | 4 | PSYC 3402 | 4 |  |  |  |
| PSYC 3466 | 4 | Linguistics elective | 4 |  |  |  |
| Foreign language course | 4 | Psychology elective | 4 |  |  |  |
|  | 16 |  | 16 |  | 0 | 0 |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours |  | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Linguistics elective | 4 | LING 3450 | 4 | Vacation |  | Vacation |  |
| Psychology lab | 4 | Linguistics or psychology elective | 4 |  |  |  |  |
| ENGW 3315 | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

## Year 4

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Linguistics <br> or <br> psychology <br> elective | 4 Elective | 4 |
| Psychology <br> seminar | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 128

## Linguistics and Communication Studies, BA

In the combined major in linguistics and communication studies, students have an opportunity to 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Linguistics Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Linguistics | Courses |  |
| LING 1150 | Introduction to Language and <br>  <br>  <br> Linguistics | 4 |
| LING 2350 | Linguistic Analysis | 4 |
| LING 3412 | Language and Culture | 4 |
| LING 3422 | Phonology | 4 |
| LING 3450 | Syntax | 4 |
| LING 3424 | Morphology | 4 |
| or LING 3452 | Semantics | 8 |
| Linguistics Electives |  | 4 |

linguistics required courses above:

| DEAF 2700 | ASL Linguistics |
| :--- | :--- |
| LING 3420 | Phonetics |
| 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 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 |
| PSYC 3464 | Psychology of Language |
| PSYC 4610 | Laboratory in Psycholinguistics |
| PSYC 4658 | Seminar in Psycholinguistics |

## Communication Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Communication Studies Required Courses |  |  |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking | 4 |
| COMM 2301 | Communication Research Methods | 4 |
| Foundation Course |  | 4 |
| Complete one course from the following: |  |  |
| 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 3330 | Argumentation Theory |  |
| COMM 3400 | Rhetoric of Science |  |
| COMM 3414 | Great Speakers and Speeches 2, 1930Present |  |
| 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 | Communication, Politics, and Social Change |  |
| 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 |  |
| Sociolinguistics |  |  |
| 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 4602 | Contemporary Rhetorical Theory |  |
| COMM 4608 | Strategic Communication Capstone |  |
| COMM 4625 | Online Communities |  |

## Linguistics and Communication Studies Combined-Major Credit Requirement

Complete 76 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Linguistics Requirements

$\left.\begin{array}{llr}\text { Code } & \text { Title } & \text { Hours } \\ \begin{array}{ll}\text { Introductory Linguistics }\end{array} & \text { Introduction to Language and } \\ \text { LING } 1150 & \text { Linguistics }\end{array}\right] 4$

| DEAF 2700 | ASL Linguistics |
| :--- | :--- |
| LING 3420 | Phonetics |
| LING 3424 | Morphology |
| LING 3434 | Bilingualism |
| LING 3442 | Sociolinguistics |
| LING 3452 | Semantics |
| LING 3456 | Language and Gender |
| LING 3458 | Topics in Linguistics |
| LING 4654 | Seminar in Linguistics |
| PSYC 3464 | Psychology of Language |


| PSYC 3466 | Cognition |
| :--- | :--- |
| PSYC 4520 | Language and the Brain |
| 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 <br> Hours

## 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 |
| Foundational Courses |  |  |
| ENGL 1400 | Introduction to Literary Studies | 4 |
| ENGL 1160 or ENGL 1410 | Introduction to Rhetoric Introduction to Writing 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 2450 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2760 | Writing in Global Contexts |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| 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: |  |
| :--- | :--- |
| ENGL 1600 | Introduction to Shakespeare |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following:

ENGL 2260 Romantic Poetry
ENGL 2330 The American Renaissance
ENGL 2340 American Realism
ENGL 3619 Emerson and Thoreau
ENGL 3720 19th-Century Major Figure
ENGL 4040 Topics in 19th-Century Literatures
ENGL 2301 The Graphic Novel
ENGL 2410 Contemporary American Literature
ENGL 2440 The Modern Bestseller
ENGL $2600 \quad$ 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 Writing Studies |
| 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 |
| ENGL 3700 | Nriting |
| ENGL 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and |
| LING 2350 | Linguistics |
| 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 1120 | Trouble in Utopia |
| :--- | :--- |
| ENGL 1130 | Animals, Objects, Humans |
| ENGL 1450 | Reading and Writing in the Digital Age |
| ENGL 1500 | British Literature to 1800 |
| ENGL 1502 | American Literature to 1865 |
| ENGL 1503 | American Literature 1865 to Present |
| ENGL 2150 | Literature and Digital Diversity |
| ENGL 2370 | The Modern Short Story |
| ENGL 2380 | The Modern Novel |
| ENGL 2400 | Modern Poetry |
| ENGL 2420 | Contemporary Poetry |
| ENGL 2430 | Contemporary Fiction |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |


| ENGL 2455 | American Women Writers |  |
| :---: | :---: | :---: |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2510 | Horror Fiction |  |
| ENGL 2520 | Science Fiction |  |
| ENGL 2600 | Irish Literary Culture (Abroad) |  |
| ENGL 2620 | What Is Nature? (Abroad) |  |
| ENGL 2690 | Boston in Literature |  |
| ENGL 3427 | The Literature of Science |  |
| ENGL 3487 | Film and Text (Abroad) |  |
| ENGL 3582 | Children's Literature |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| ENGL 4070 | Topics in Genre |  |
| Writing |  |  |
| Complete one of the following: |  | 4 |
| ENGL 2700 | Creative Writing |  |
| ENGL 2710 | Style and Editing |  |
| ENGL 2730 | Digital Writing |  |
| 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 | Topics in Writing |  |
| ENGL 3382 | Publishing in the 21 st Century |  |
| ENGL 3384 | The Writer's Marketplace |  |
| Capstone |  |  |
| $\begin{aligned} & \text { ENGL } 4710 \\ & \text { or ENGL } 4720 \end{aligned}$ | Capstone Seminar Capstone Project | 4 |
| English Electives |  |  |
| Complete two add | nal ENGL electives. | 8 |

## Linguistics/English Combined-Major Requirements <br> Code Title Hours

## Experiential Learning

Complete one of the following options, or complete a study 4-8
abroad:
Junior/Senior Honors Project

| LING 4970 <br> and LING 4971 | Junior/Senior Honors Project 1 <br> and Junior/Senior Honors Project 2 |  |
| :--- | :--- | :--- |
| Directed Study |  |  |
| LING 4996 |  | 4 |
| Integrative Course |  | 4 |
| LING 3454 | History of English |  |

## Junior/Senior Seminar

| Code | Title | Hours |
| :--- | :--- | ---: |
| ENGL 4710 | Capstone Seminar | 4 |
| or ENGL 4720 | Capstone Project |  |
| or LING 4654 | Seminar in Linguistics |  |

## Linguistics and English Combined-Major Credit Requirement

Complete 84 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 |
| ENGW 1111 | 4 ENGL 1400 | 4 |  |  |
| MATH 1215 | 4 Foreign <br> language <br> core course | 4 |  |  |
| Elective | 4 Elective | 4 | 0 | 0 |

Year 2

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LING 3454 | 4 | LING 3450 | 4 Vacation | 0 Co-op | 0 |
| ENGL 1410 <br> or 1160 | 4 | Linguistics elective | 4 |  |  |
| Foreign language core course | 4 | Theories and methods course | 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 LING 3422 | 4 Elective | 4 Co-op | 0 |
|  | Pre-19th <br> century <br> literature <br> course | 4 Elective | 4 |  |
| Comparative <br> literature <br> course | 4 |  |  |  |
|  | ENGW 3315 | 4 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 LING 3412 | 4 Elective | 4 Co-op | 0 |
|  | Linguistics | 4 Elective | 4 |  |
|  | elective |  |  |  |
|  | Writing | 4 |  |  |


|  |  | 19th-, 20th-, and 21 stcentury 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 |  |  |
|  |  | Experiential learning research course or elective | 4 |  |  |
|  | 0 |  | 16 |  |  |

Total Hours: 129

## Linguistics, Minor

The minor in linguistics provides students with an opportunity to pursue coursework in linguistics while earning a major in another domain. Students earning a minor in linguistics will gain knowledge about language at the structural and socio-cultural levels.

## 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 |
| :--- | :--- | ---: |
| LING 1150 | Introduction to Language and | 4 |
|  | Linguistics | 4 |
| LING 2350 | Linguistic Analysis | 4 |
| LING 3422 | Phonology |  |

## Elective Courses

Code Title
Hours
Complete two additional courses from the following range:
LING 2000 to LING 4996

## GPA Requirement

2.000 GPA required in the minor

## Marine and Environmental Sciences

Website (http://www.northeastern.edu/mes)
Geoffrey C. Trussell, PhD
Professor and Chair
Rebeca Rosengaus, PhD

Associate Professor and Associate Chair

14 Holmes Hall
617.373 .3176
617.373.4378 (fax)

Mark R. Patterson, Professor, m.patterson@northeastern.edu Richard Bailey, Professor, r.bailey@northeastern.edu Jonathan H. Grabowski, Associate Professor, j.grabowski@northeastern.edu

The Department of Marine and Environmental Sciences' programs are designed to help students develop an in-depth understanding of the processes that affect the earth's surface and that have the greatest impacts on society. Graduates of such programs contribute to the solution of environmental problems such as soil or groundwater contamination, flooding, slope stability, shore erosion related to changing land use, or coping with the impact of sea-level rise or changing weather patterns related to global warming. Commonly, environmental professionals are expected to work effectively as part of a multidisciplinary team containing scientists, engineers, and professionals who can evaluate the legal, economic, political, and social ramifications of complex environmental problems. As part of their undergraduate program, Northeastern emphasizes experiential, off-campus learning in addition to classroom learning, which is designed to help our students to become well grounded in their field of study and to work effectively with others to study and address real problems.

Our Bachelor of Science in Environmental Science degree is organized for students who seek a comprehensive understanding of the scientific implications of environmental issues and the ways that environmental scientists from a range of disciplines can approach their solution. Every student has an opportunity to develop core knowledge in geology, biology, chemistry, and mathematics early in the program. Students then select one of three concentrations-marine science, conservation science, or geoscience-as a program focus for their upper-level course work. We also provide an independent track for students whose interests do not fall into one of these four areas. Students who elect this option work with a faculty advisor to identify a group of five mid- to upper-level science courses that are aligned with the student's career interests. (Students interested in studying environmental issues from a policybased perspective should consider the BA in environmental studies (p. 516).)

Our Bachelor of Science in Marine Biology degree is designed to provide a strong foundation in marine biology and related disciplines. This major is offered through Northeastern University's Marine Science Center in Nahant.

A number of combined-major programs are offered; these can help focus a student's course choices along avenues that faculty feel are particularly appropriate.

Fieldwork is a valued component of training in our programs, and many of our courses use field sites throughout New England to demonstrate environmental processes or problems in their full complexity. In addition to sponsoring local trips, we have taken students on one longer field excursion each year to Iceland, the Cascade Mountains of Washington, the island of San Salvador in the Bahamas, or the Grand Canyon. Students also have the option to complete undergraduate research experiences with a faculty member. Undergraduate research projects can involve fieldwork and/or lab work completed under the guidance of faculty.

Many of our recent graduates work for environmental or geotechnical firms or continue their studies in graduate school. Students who
participate in the co-op program typically work with local engineering or environmental consulting companies or with government agencies. These jobs often involve assessing building sites, evaluating land use, and studying problems concerned with groundwater contamination and remediation.

## Three Seas Program

The Three Seas Program allows advanced undergraduate and beginning graduate students in biology and related areas to spend a year of field study in three diverse marine environments.

The program begins in the spring semester at Northeastern University's Marine Science Center in Nahant, 12 miles north of the main campus. Courses the following fall are conducted at the University of Washington's Friday Harbor Laboratories on San Juan Island, which is 70 miles north of Seattle and part of an archipelago that lies between the mainland and Vancouver Island, and at the Smithsonian Tropical Research Institute in Bocas del Toro, Panama, where students engage in tropical biology research. For more information, contact Mark Patterson at 781.581.7370 (ext. 313), or visit the Three Seas Program website at www.northeastern.edu/threeseas (http:// www.northeastern.edu/threeseas).

## Massachusetts Bay Marine Studies Consortium

Northeastern University students may take classes at the Massachusetts Bay Marine Studies Consortium. The consortium's course offerings are interdisciplinary and seek to bridge academic disciplines and current concerns in the marine world. For more information, contact the marine studies program director, Professor Rebeca Rosengaus at 617.373.7032 or at r.rosengaus@northeastern.edu.

## Sea Education Association

SEA Semester is an interdisciplinary program focusing on the sea, in which students undertake course work ashore followed by a practical component at sea. The program combines intensive research in the areas of oceanography, maritime studies, and nautical science with hands-on experience aboard a traditional sailing ship. Piloting, celestial navigation, and practical seamanship are learned together with oceanographic sampling techniques and marine laboratory procedures during a sixweek voyage on a ship sailing either on the Atlantic or Pacific oceans. Critical thinking, problem solving, team building, and leadership skills are emphasized throughout the program. Some cruises focus on specialized topics including oceans and climate, Caribbean studies, or Polynesian studies. Through our affiliation with the Sea Education Association, SEA Semester courses earn Northeastern credit. The program is appropriate for students in biology, environmental and physical sciences, environmental studies, American studies, and most other areas within the liberal arts and sciences. For more information, contact the faculty advisor for marine biology, Professor Mark Patterson (Marine Science Center), at 781.581.7370, extension 313, or by email (m.patterson@northeastern.edu).

## Marine Science Center Summer Program in Marine Biology

The summer program allows students to participate in intensive courses at the Marine Science Center (MSC). Students conduct independent research at the MSC laboratory throughout the year. Graduate students from other universities are encouraged to use the laboratory and field sites for thesis research.

## Academic Progression Standards

Same as college standards.

## Programs

Bachelor of Arts (BA)

- Environmental Studies (p. 516)
- Environmental Studies and History (p. 521)
- Environmental Studies and International Affairs (p. 522)
- Environmental Studies and Philosophy (p. 526)
- Environmental Studies and Political Science (p. 527)
- Sociology and Environmental Studies (p. 530)


## Bachelor of Science (BS)

- Environmental Science (p. 530)
- Ecology and Evolutionary Biology (p. 535)
- Marine Biology (p. 538)
- Computer Science and Environmental Science (p. 318)
- Environmental Geology and Chemistry (p. 499)
- Environmental Studies and Economics (p. 549)
- Information Science and Environmental Science (p. 362)


## Minors

- Environmental Geology (p. 552)
- Environmental Science (p. 553)
- Environmental Studies (p. 553)
- Geology (p. 554)
- Marine Biology (p. 554)
- Marine Studies (p. 555)


## Environmental Studies, BA

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The Bachelor of Arts in Environmental Studies degree is designed to provide a flexible platform for students whose primary interest is in the area of environmental policy. In their first two years, all environmental studies majors complete introductory courses in the sciences (biology, chemistry, geology), as well as introductoryto intermediate-level course work in economics, political science, philosophy, and sociology. Students then work with a faculty advisor to select a cluster composed of intermediate- to upper-level courses in an area appropriate to the student's career objectives. These cluster areas include sustainability, urban environmental issues, water issues, international affairs, public policy, and marine studies. A senior thesis is required in the environmental studies major. (Students interested in studying environmental issues from a science-based perspective should consider the BS in environmental science (p. 530).)

A number of combined-major programs are offered; these can help focus a student's course choices along avenues that faculty feel are particularly appropriate.

Students in the environmental studies program are prepared to work in environmental planning, regulation, policy, or compliance. These broadbased programs also aim to prepare students to go into environmental education or law. Co-op experiences in environmental planning may include government internships or work in environmental compliance offices.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

| Environmental Studies Major Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Introduction to College |  |  |
| ENVR 1000 | Marine and Environmental Sciences at Northeastern | 1 |
| Science Courses |  |  |
| Required Science Courses |  |  |
| ENVR 1101 | Environmental Science | 4 |
| ENVR 1110 | Global Climate Change | 4 |
| Complete on | following: | 5 |


| CHEM 1101 <br> and CHEM 1102 <br> and CHEM 1103 | General Chemistry for Health Sciences and Lab for CHEM 1101 and Recitation for CHEM 1101 |
| :---: | :---: |
| CHEM 1211 <br> and CHEM 1212 <br> and CHEM 1213 | General Chemistry 1 <br> and Lab for CHEM 1211 <br> and Recitation for CHEM 1211 |
| 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 |
| 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 <br> and Lab for PHYS 1151 <br> and Interactive Learning Seminar for PHYS 1151 |
| PHYS 1161 <br> and PHYS 1162 <br> and PHYS 1163 | Physics 1 <br> and Lab for PHYS 1161 <br> and Recitation for PHYS 1161 |

PHYS 1171 Physics 1 for Bioscience and
and PHYS 1172 Bioengineering
and PHYS 1173 and Lab for PHYS 1171
and Interactive Learning Seminar for PHYS 1171

## Ethics Course



## Environmental Studies Cluster

Complete one of the following clusters:


| Dialogue of Civilizations Restricted Courses |  |  |
| :---: | :---: | :---: |
| CIVE 4540 | Resource Recovery and Waste Treatment Technologies Abroad |  |
| CIVE 4778 | Climate Adaptation and Policy Abroad |  |
| ENVR 5202 | Environmental Science Field Seminar Abroad |  |
| Marine Cluster |  |  |
| Select six of the following: |  | 17-25 |
| EEMB 2410 |  |  |
| EEMB 2420 | Fisheries Biology, Policy, and Conservation |  |
| EEMB 2616 and EEMB 2617 | Invertebrate Zoology and Lab for EEMB 2616 |  |
| EEMB 3460 | Conservation Biology |  |
| EEMB 5130 <br> and EEMB 5131 | Ecological Dynamics and Lab for EEMB 5130 |  |
| ENVR 3125 | Global Oceanic Change |  |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |  |
| ENVR 4106 |  |  |
| ENVR 4505 |  |  |
| ENVR 5242 <br> and ENVR 5243 | Ancient Marine Life and Lab for ENVR 5242 |  |
| ENVR 5244 |  |  |
| ENVR 5248 |  |  |
| Marine Studies Consortium Courses (unrestricted) |  |  |
| MARS 3210 | Marine Mammals |  |
| MARS 3305 |  |  |
| MARS 3310 | Water Resources Policy and Management |  |
| MARS 3325 | Coastal Zone Management |  |
| MARS 3430 | Biology of Whales |  |
| SEA Semester Restricted Courses |  |  |
| ENVR 2940 |  |  |
| ENVR 2941 |  |  |
| ENVR 2942 |  |  |
| ENVR 2943 |  |  |
| ENVR 3100 |  |  |
| ENVR 3101 |  |  |
| ENVR 3102 |  |  |
| ENVR 3103 |  |  |
| ENVR 3104 |  |  |
| Three Seas Restricted Courses |  |  |
| EEMB 5504 | Biology of Corals |  |
| EEMB 5506 | Biology and Ecology of Fishes |  |
| EEMB 5508 <br> and EEMB 5509 | Marine Birds and Mammals and Lab for EEMB 5508 |  |
| EEMB 5512 | Tropical Terrestrial Ecology |  |
| EEMB 5516 and EEMB 5517 | Oceanography and Lab for EEMB 5516 |  |
| EEMB 5518 | Ocean and Coastal Processes |  |
| EEMB 5520 | Coral Reef Ecology |  |
| EEMB 5522 <br> and EEMB 5523 | Experimental Design Marine Ecology and Lab for EEMB 5522 |  |
| EEMB 5528 | Marine Conservation Biology |  |


| EEMB 5532 | Physiological and Molecular Marine Ecology |  |
| :---: | :---: | :---: |
| EEMB 5534 and EEMB 5535 | Marine Invertebrate Zoology and Botany and Lab for EEMB 5534 |  |
| EEMB 5536 | Ocean and Coastal Sustainability |  |
| EEMB 5589 | Diving Research Methods |  |
| Policy Cluster |  |  |
| Select six of the following: |  | 23-24 |
| CIVE 5270 |  |  |
| ECON 3423 | Environmental Economics |  |
| ECON 3425 | Energy Economics |  |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |  |
| HIST 2342 |  |  |
| HIST 4620 |  |  |
| PPUA 5260 | Ecological Economics |  |
| PPUA 5270 | Food Systems and Public Policy |  |
| SOCL 4522 |  |  |
| Sustainability Cluster |  |  |
| Select six of the following: |  | 23-24 |
| CIVE 2334 | Environmental Engineering 1 |  |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |  |
| ENVR 4505 |  |  |
| HIST 2342 |  |  |
| HIST 3412 |  |  |
| HIST 4620 |  |  |
| HIST 5295 |  |  |
| INTL 2240 | Global Population and Development |  |
| LARC 5210 | Landscape Ecology |  |
| Marine Studies Consortium Courses (unrestricted) |  |  |
| MARS 3310 | Water Resources Policy and Management |  |
| Urban Cluster |  |  |
| Select six of the following: |  | 23-24 |
| EEMB 4001 | Landscape and Restoration Ecology |  |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |  |
| ECON 3415 |  |  |
| ECON 3420 | Urban Economic Issues |  |
| ECON 3422 | Economics of Transportation |  |
| ECON 3423 | Environmental Economics |  |
| HIST 2342 |  |  |
| HIST 4620 |  |  |
| INTL 3200 | Cities in a Global Context |  |
| LARC 5210 | Landscape Ecology |  |
| POLS 2345 | Urban Policies and Politics |  |
| PHIL 3480 |  |  |
| POLS 2357 | Growth and Decline of Cities and Suburbs |  |
| SOCL 1247 |  |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4522 |  |  |
| Water Cluster |  |  |


| Select six of the following: | 24-25 |
| :---: | :---: |
| CIVE 2334 Environmental Engineering 1 |  |
| ENVR 3300 Geographic Information Systems <br> and ENVR 3301 and Lab for ENVR 3300 |  |
| ENVR 4500 Applied Hydrogeology <br> and ENVR 4501 and Lab for ENVR 4500 |  |
| ENVR 4505 or MARS 3300 |  |
| HIST 2342 |  |
| Marine Studies Consortium Courses (unrestricted) |  |
| $\begin{array}{ll}\text { MARS } 3310 \quad \text { Water Resources Policy and } \\ & \text { Management }\end{array}$ |  |
| MARS 3325 Coastal Zone Management |  |
| Interdisciplinary Cluster |  |
| Create a plan of six courses under the guidance of the program director. | 23-27 |

## Environmental Studies Major Credit Requirement

Complete 73 semester hours in the major.

## 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 |
| :--- | :---: | :---: | :---: | ---: |
| ENVR 1000 | 1 ECON 1116 | 4 Elective | 4 Elective | 4 |
| ENVR 1101 | 4 ENGW 1111 | 4 Elective | 4 Elective | 4 |
| POLS 1150 <br> and | 4 ENVR 1112 <br> or 1200 | 4 |  |  |
| POLS 1151 |  |  |  |  |

Year 2


| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | $\begin{aligned} & \text { ENGW 3303, } \\ & 3307,3308 \text {, } \\ & \text { or } 3315 \end{aligned}$ | 4 | Cluster course | 4 | Co-op | 0 |
|  |  | ENVR 5210 | 4 | Elective | 4 |  |  |
|  |  | Cluster course | 4 |  |  |  |  |
|  |  | Foreign language course | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |


| Year 4 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| Co-op | ENVS 4997 <br> or ENVR <br> 4900 | $1-4$ |
|  | Cluster <br> course | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
|  | 0 | $13-16$ |

Total Hours: 132-135

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

Year 1


## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| EESC 2000 | 1 Co-op | 0 Co-op | 0 Elective | 4 |
| ENVR 1110 | 4 |  | Elective | 4 |
| ENVR 2900 <br> or EEMB <br> 3460 | 4 |  |  |  |
| Foreign <br> language <br> course | 4 |  |  |  |
| Science <br> course | 5 |  |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENVR 4515 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| POLS 2395 | 4 |  | Elective | 4 |
| or LPSC |  |  |  |  |
| 2301 |  |  |  |  |


| Cluster <br> course | 4 |  |  |  |
| :--- | :---: | :---: | :--- | :---: |
| Foreign <br> language <br> course | 4 |  |  |  |
| Statistics <br> course | 4 | 0 | 8 | 8 |
|  | 20 |  | 0 |  |


| Year 4 |  |
| :--- | :--- | :--- |
| Fall $\quad$ Hours Spring $\quad$ Hours Summer $1 \quad$ Hours Summer 2 Hours |  |


| Fali | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENVR 5210 <br> or 5250 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| Cluster <br> course | 4 |  |  |  |
| Cluster <br> course | 4 |  |  |  |
| Elective | 4 |  | 0 | 0 |
|  | 16 | 0 | 0 |  |

Year 5

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| ENGW 3303, 3307, 3308, or 3315 |  | ENVS 4997 <br> or ENVR <br> 4900 | 1-4 |
| Cluster course | 4 | Cluster course | 4 |
| Cluster course | 4 | Elective | 4 |
| Elective | 4 | Elective | 4 |
| 16 |  |  | 13-16 |

Total Hours: 132-135

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

| Year 1 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Fall | 1 ECON 1116 | 4 | Vacation | 0 Vacation |$\quad 0$

## Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENVR 2900 or EEMB 3460 | 4 | EESC 2000 | 1 | Vacation | 0 | Co-op | 0 |
| $\begin{aligned} & \text { POLS } 2395 \\ & \text { or LPSC } \\ & 2301 \end{aligned}$ | 4 | ENVR 1110 | 4 |  |  |  |  |
| Elective | 4 | ENVR 4515 | 4 |  |  |  |  |
| Foreign language course | 4 | Cluster course | 4 |  |  |  |  |


| Statistics course | 4 Science course |  | 5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 20 |  | 18 |  | 0 |  | 0 |
| Year 3 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | ENVR 5210 <br> or 5250 | 4 | Elective |  | Co-op | 0 |
|  |  | Cluster course | 4 | Elective | 4 |  |  |
|  |  | Cluster course | 4 |  |  |  |  |
|  |  | Foreign language course | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |


| Year 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | ENGW 3303, 3307, 3308, or 3315 | 4 | Elective | 4 | Co-op | 0 |
|  |  | Cluster course | 4 | Elective | 4 |  |  |
|  |  | Cluster course | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 5


Total Hours: 132-135

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Environmental Studies Requirements

Code Title Hours

Science Requirements

| ENVR 1101 | Environmental Science | 4 |
| :---: | :---: | :---: |
| ENVR 1202 and ENVR 1203 | History of Earth and Life and Interpreting Earth History | 5 |
| ENVR 1445 |  | 4 |
| Humanities Requirement |  |  |
| PHIL 1180 | Environmental Ethics | 4 |
| Social Science Requirements |  |  |
| 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 |
| Environmental Studies Electives |  |  |
| Complete two of the following: |  | 8 |
| ECON 3423 | Environmental Economics |  |
| PHIL 3480 |  |  |
| POLS 2395 | Environmental Politics and Policy |  |

## History Requirements

Code Title Hours

## History Requirements

| HIST 1130 | Introduction to the History of the United <br> States | 4 |
| :--- | :--- | :--- |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and <br> Their Aftermath | 4 |
| HIST 1201 | First-Year Seminar | 4 |
| HIST 2342 |  | 4 |
| History Seminar | The History Seminar |  |
| HIST 2301 | and Historical Writing |  |
| and HIST 2302 | 5 |  |
| History/Geographic-Area Electives | 8 |  |


| ASNS 1150 | East Asian Studies |
| :--- | :--- |
| HIST 1180 | African History |
| HIST 1185 | Introduction to Middle Eastern History |

## History-Area Electives

Complete four HIST courses, approved by a faculty advisor, 16
focused on an idea or geographic area. These courses must
be numbered 2000 or higher.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Integrative Course |  |  |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 | 5 |
| Integrated Elective |  |  |
| Complete one of the following: |  | 4 |
| ENVR 5210 | Environmental Planning |  |
| ENVR 5250 | Geology and Land-Use Planning |  |
| Experiential Learning and Capstone |  |  |
| Code | Title | Hours |
| Experiential Learning |  |  |
| Complete an approved activity from either department, combined with reflection in capstone. |  |  |
| Capstone Course |  |  |
| Complete one of the | following: | 1-4 |
| ENVR 4997 or ENVS 4997 | Senior Thesis 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 Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 1111 | ENVR 1202 <br> and <br> ENVR 1203 | 5 Vacation | 0 Vacation | 0 |
| ENVR 1000 | 1 HIST 1170 | 4 |  |  |
| ENVR 1101 | 4 HIST 1201 | 4 |  |  |
| HIST 1130 <br> and | 4 PHIL 1180 | 4 |  |  |
| HIST 1131 |  |  |  | 0 |
| SOCL 1246 | 4 | 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 |
| HIST 2342 | 4 ENVR 1445 | 4 |  |  |
| Foreign <br> language <br> course | 4 Elective | 4 |  |  |
| History <br> elective | 4 Foreign <br> language <br> course | 4 |  |  |


| History elective |  | HIST geographic elective | 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 20 |  | 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 |  | Co-op | 0 |
|  |  | POLS 1150 <br> and <br> POLS 1151 | 4 | Elective | 4 |  |  |
|  |  | Foreign language course | 4 |  |  |  |  |
|  |  | ENVR <br> undergraduat elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | $\begin{aligned} & \text { ENGW } 3308 \\ & \text { or } 3315 \end{aligned}$ | 4 | Elective |  | Co-op | 0 |
|  |  | HIST 2301 <br> 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 | 1-4 |  |  |  |  |
|  |  | ENVR undergraduat elective | 4 |  |  |  |  |
|  |  | HIST geographic elective | 4 |  |  |  |  |
|  |  | Integrative major requirement | 4 |  |  |  |  |
| $0 \quad 13-16$ |  |  |  |  |  |  |  |
| Total Hours: 134-137 |  |  |  |  |  |  |  |
| 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
Environmental Studies Requirements

| Code Title Social Science Component |  | Hours |  | Perspectives |
| :---: | :---: | :---: | :---: | :---: |
|  |  | COMM 2303 | Global and Intercultural Communication |
|  |  | POLS 1155 | Comparative Politics |
| Philosophy |  |  | POLS 1160 | International Relations |
| PHIL 1180 | Environmental Ethics |  | 4 | POLS 2370 | Religion and Politics |
| Sociology |  |  | POLS 2370 | Religion and Politics |
| SOCL 1246 | Environment and Society |  | 4 | POLS 3405 | International Political Economy |
| Political Science |  |  | POLS 3406 | International Law |
| POLS 2395 | Environmental Politics and Policy | 4 | POLS 3407 | International Organizations |
| Science Component |  |  | POLS 4910 | Model United Nations |
|  |  |  | POLS 4918 | Model NATO |
| $\text { BIOL } 1141$ | Microbes and Society | 4 | POLS 4938 | Dialogue of Civilizations: International Politics Abroad |
| or BIOL 1143 | Biology and Society |  | Human Rights and Social Justice |  |
| Earth and Environmental Sciences |  |  | INTL 2400 | Politics of Islam and Gender |
| Complete one of the following: |  | 4 | INTL 2480 or WMNS 2480 | Women and World Politics |
| ENVR 1200 | Dynamic Earth |  |  | Women and World Politics |
| ENVR 1110 | Global Climate Change |  |  |  |
| ENVR 1112 | Environmental Geology |  | AFAM 2600 | and Technology |
| Environment |  |  | HIST 2373 | Gender and Sexuality in World History |
| ENVR 1101 | Environmental Science | 4 | LPSC 2302 | Global Human Rights: A Social and |
| Quantitative Methods |  |  |  | Economic Perspective |
| Complete one of the following: |  | 4-5 | PHIL 1272 | Ethics in the World's Religions |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |  | PHIL 5001 | Global Justice |
| MATH 2280 | Statistics and Software |  | CRIM 4630 |  |
| Planning |  |  | HIST 1206 |  |
| ENVR 5210 | Environmental Planning | 4 |  | Security, Culture |
| or ENVR 5250 | Geology and Land-Use Planning |  | HIST 3330 | The Global Cold War |
| International Affairs Requirements |  |  | JRNL 3300 | Covering Conflicts: Peace, War, and the Media |
| Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses. |  |  | or INTL 3300 | Covering Conflicts: Peace, War, and the Media |
|  |  |  | PHIL 5001 | Global Justice |
|  |  |  | POLS 3408 | International Security |
|  |  |  | POLS 3420 | U.S. National Security Policy |
|  |  |  | POLS 3430 | Revolution, Civil War, and Insurrection |
|  |  |  | Globalization |  |
|  |  |  | INTL 2240 | Global Population and Development |


| INTL 2300 | Religion in International Affairs |
| :---: | :---: |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy. Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of Human Societies |
| Population, Migration, and Diaspora |  |
| INTL 2240 | Global Population and Development |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| Development |  |
| INTL 2240 | Global Population and Development |
| INTL 5200 | Political Economy. Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 | International Business and Global Social Responsibility |
| or INTB 1209 | International Business and Global Social Responsibility |
| PHTH 5230 | Global Health |

POLS $3487 \quad$ Politics of Developing Nations

Communication and Media

| COMM 2303 | Global and Intercultural Communication |
| :---: | :--- |
| INTB 3310 | Cultural Aspects of International <br> Business |
| JRNL 3300 | Covering Conflicts: Peace, War, and the <br> Media |
| or INTL 3300 | Covering Conflicts: Peace, War, and the Media |
| JRNL 5360 | Global Reporting |
| MSCR 2325 | Global Media |
| MUSC 1140 | Global Pop Music |

## International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

## 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.

| Africa |  |
| :---: | :---: |
| AFRS 2307 | Africa Today |
| AFRS 2465 | The Scope and Dynamics of Conflicts in Africa |
| 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 | Africa and the World in Early Times |
| Asia |  |
| ANTH 4350 or INTL 4350 | Ethnography of Southeast Asia <br> Ethnography of Southeast Asia |
| ASNS 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 |
| HIST 2360 | History of Capitalism in East Asia |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1290 | Chinese Philosophy and Religion |


| PHIL 2394 | Chinese Buddhism |
| :---: | :---: |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |
| Europe |  |
| CLTR 1501 | Introduction to French Culture |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| 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 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |
| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| SOCL 1215 | Society and Culture in Russia |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel two. Note: Completing this requirement satisfies the language requirement for the $B A$ degree.

## Integrative Courses

| Code <br> Integrative Courses | Title | Hours |
| :--- | :--- | ---: |
| ECON 3423 | Environmental Economics | 4 |
| or ECON 1290 | History of the Global Economy | 4 |
| ENVR 4515 | Sustainable Development | 4 |
| HIST 2211 | The World Since 1945 | 4 |
| INTL 4700 | Senior Capstone Seminar in <br> International Affairs |  |
| or ENVS 4997 | Senior Thesis | 4 |

## Environmental Studies and International Affairs CombinedMajor 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 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| ENGW 1111 |  | $\begin{aligned} & \text { ENVR 1200, } \\ & 1200 \text {, or } \\ & 1110 \end{aligned}$ | 4 | Vacation |  | Vacation | 0 |
| ENVR 1101 | 4 | PHIL 1180 | 4 |  |  |  |  |
| INTL 1101 |  | POLS 1160 <br> and <br> POLS 1161 | 4 |  |  |  |  |
| SOCL 1246 |  | Foreign language course | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIOL 1141 or $1143$ | 4 | EESC 2000 | 1 | Vacation | 0 | Co-op | 0 |
| HIST 2211 | 4 | POLS 2395 | 4 |  |  |  |  |
| Foreign language course |  | Foreign language course | 4 |  |  |  |  |
| INAF regional analysis course 1 |  | INAF global dynamics course 1 | 4 |  |  |  |  |
|  |  | INAF regional analysis course 2 | 4 |  |  |  |  |
|  | 16 |  | 17 |  | 0 |  | 0 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | 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 or 1290 | 4 | Elective | 4 | Co-op | 0 |
|  |  | ENGW 3308 or 3315 | 4 | Elective | 4 |  |  |
|  |  | ENVR 5210 or 5250 | 4 |  |  |  |  |
|  |  | INTL 3400 | 4 |  |  |  |  |
|  |  | INAF global dynamics course 2 | 4 |  |  |  |  |
|  | 0 |  | 20 |  | 8 |  | 0 |

## Year 5

| Fall | Hours | Spring H | Hours |
| :---: | :---: | :---: | :---: |
| Co-op | 0 | ENVR 4515 | 4 |
|  |  | INTL 4700 or ENVS 4997 | 4 |
|  |  | ENVR <br> undergraduate elective | 4 |
|  |  | INAF global dynamics course 3 | 4 |

Total Hours: 133-134

## 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.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Environmental Studies Requirements

Note: Principles of Microeconomics (ECON 1116) is a recommended prerequisite for Environmental Economics (ECON 3423), and American Government (POLS 1150) is a recommended prerequisite for Environmental Politics and Policy (POLS 2395).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Social Science Component |  |  |
| ECON 3423 | Environmental Economics | 4 |
| HIST 2342 |  | 4 |
| POLS 2395 | Environmental Politics and Policy | 4 |
| SOCL 1246 | Environment and Society | 4 |
| Science Component |  |  |
| Global Climate Change |  |  |
| ENVR 1110 | Global Climate Change | 4 |
| Earth and Environmental Sciences |  |  |
| Complete one of the following: |  | 4 |
| ENVR 1112 | Environmental Geology |  |
| ENVR 1200 | Dynamic Earth |  |
| Environment |  |  |
| ENVR 1101 | Environmental Science | 4 |
| Quantitative Methods |  |  |
| Complete one of th | ollowing: | 4-5 |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |  |
| MATH 2280 | Statistics and Software |  |

## Philosophy Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 4510 | Philosophy of Science |  |
| Restricted Electives |  |  |
| Complete two of the following with at least one course at the 4000 or 5000 level: |  | 8 |
| PHIL 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |


| PHIL 4510 | Philosophy of Science |
| :--- | :--- |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar. Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in <br> Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |

Additional Electives
Complete two additional PHIL courses.
8

## Integrative Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| ENVR 5210 | Environmental Planning | 4 |
| ENVR 5250 | Geology and Land-Use Planning | 4 |

## Environmental Studies and Philosophy Combined-Major Credit Requirement

Complete 72 semester hours in the major.
Program Requirement
128 total semester hours required

## 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.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
Environmental Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Social Science Component |  |  |
| Philosophy |  | 4 |
| PHIL 1180 | Environmental Ethics | 4 |


| Sociology |  |  |
| :---: | :---: | :---: |
| SOCL 1246 | Environment and Society | 4 |
| Economics |  |  |
| ECON 1116 | Principles of Microeconomics | 4 |
| ECON 3423 | Environmental Economics | 4 |
| Science Component |  |  |
| Complete one course in each of the following four subject areas: |  |  |
| Biology |  |  |
| ENVR 1445 |  | 4 |
| Earth and Environmental Sciences |  |  |
| Complete one of the following: |  | 4 |
| ENVR 1112 | Environmental Geology |  |
| ENVR 1200 | Dynamic Earth |  |
| Environment |  |  |
| ENVR 1101 | Environmental Science | 4 |
| Quantitative Methods |  |  |
| Complete one of the following: |  | 4-5 |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |  |
| MATH 2280 | Statistics and Software |  |

Political Science Requirements
Code Title Hours

Political Science Requirements

| POLS 1150 | American Government | 4 |
| :--- | :--- | ---: |
| and POLS 1151 | and Recitation for POLS 1150 |  |
| 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 |  | 4 |
| Complete one of the following: |  |  |
| POLS 2325 | Ancient Philosophy and Political |  |
|  | Thought |  |
| POLS 2328 | Modern Political Thought |  |
| POLS 2330 | American Political Thought |  |
| POLS 2332 | Contemporary Political Thought |  |

Political Science Restricted Electives
Complete two of the following: 8

| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 3307 | Public Policy and Administration |
| POLS 3407 | International Organizations |
| POLS 3487 | Politics of Developing Nations |

Political Science Electives
Complete two POLS courses.
8

## 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. 528).

- Comparative Politics (p. 528)
- International Relations and Diplomacy (p. 528)
- Law and Legal Studies (p. 528)
- Public Policy (p. 528)


## Integrative Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Integrative Courses |  |  |
| Complete two of the following: |  | 8 |
| ENVR 5210 | Environmental Planning |  |
| ENVR 5250 | Geology and Land-Use Planning |  |
| POLS 2395 | Environmental Politics and Policy |  |
| Capstone Requirement |  |  |
| Complete one of the | ollowing: | 1-8 |
| ENVR 4900 | Earth and Environmental Science Capstone |  |
| ENVR 4997 | Senior Thesis |  |
| POLS 4701 | Political Science Senior Capstone |  |
| POLS 4702 and POLS 4703 | Senior Thesis Preparation and Senior Thesis |  |

## Environmental Studies and Political Science Combined-Major

 Credit RequirementComplete 80 semester hours in the major.

## Program Requirement

128 total semester hours required

|  |  |
| :--- | :--- |
| Concentrations |  |
| CONCENTRATION IN COMPARATIVE POLITICS | Hours |
| Code <br> Theoretical Requirement |  |
| Complete one of the following: | 4 |
| POLS 2370 | Religion and Politics |
| POLS 3418 | Nationalism |
| POLS 3427 | Civil-Military Relations |
| POLS 3487 | Politics of Developing Nations |

Regional Requirements
Complete two of the following: 8

| POLS 3435 | Politics and Governance of Europe and <br> the European Union |
| :--- | :--- |
| POLS 3445 |  |
| POLS 3450 |  |
| POLS 3460 | Government and Politics in the Middle <br> POLS 3465 |
| EOLS 3475 |  |
| POLS 3480 |  |
| POLS 3485 |  |

Experiential/Practicum Requirement
Complete one of the following:

| POLS 4915 | Model Arab League |
| :--- | :--- |
| POLS 4918 | Model NATO |
| POLS 4937 | Dialogue of Civilizations: Government <br> and Politics Abroad |

$\begin{array}{lll}\text { CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY } \\ \text { Code } & \text { Title Hours }\end{array}$
Experiential/Practicum Requirement
Complete one of the following: 4

| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International |

Core Courses
Complete three of the following: 12

| POLS 3405 | International Political Economy |
| :--- | :--- |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> 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 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 |


| Electives | 12 |
| :--- | :--- |
| Complete three of the following: | 12 |


| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> Suburbs |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 2395 3425 | Environmental Politics and Policy |

Plan of Study
Five Years, Three Co-ops in Spring/Summer 1
Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 1111 | 4 MATH 1215 | 4 Vacation | 0 Vacation | 0 |
| ENVR 1101 | 4 PHIL 1180 | 4 |  |  |


| POLS 1150 <br> and | 4 POLS 1155 <br> and | 4 |  |  |
| :--- | :---: | :---: | :--- | :--- |
| POLS 1151 | POLS 1156 | Foreign <br> language <br> course | 4 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ECON 1116 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| ENVR 1104, | 4 |  | Elective | 4 |
| ENVR 1112, <br> or ENVR <br> 1200 |  |  |  |  |
| POLS 1160 <br> and | 4 |  |  |  |
| POLS 1161 | 4 |  |  |  |
| Foreign <br> language <br> course | 4 | 0 | 0 | 8 |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| ECON 3423 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| POLS 2400 | 4 |  | Elective | 4 |
| Foreign <br> language <br> course | 4 |  |  |  |
| Political <br> thought <br> course | 4 |  |  | 8 |
| Elective | 4 | 0 | 0 | 8 |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| ENGW 3315 <br> or 3308 | 4 Co-op | 0 | Co-op | 0 |
| ENVR 5210 <br> or 5250 | 4 |  |  |  |
| POLS <br> undergradute <br> elective | 4 |  |  |  |
| Qualitative <br> methods <br> course | $4-5$ | 0 | 0 | 0 |

## Year 5

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| ENVR 5250 <br> or POLS 2395 | 4 | ENVR 1445 | 4 |
| Capstone or elective |  | Capstone or elective | 1-4 |
| Elective | 4 | Elective | 4 |
| POLS undergraduat elective | 1 | POLS undergraduat elective | 4 |


| POLS <br> undergraduate <br> elective |
| :--- |
| $17-20$ |

Total Hours: 130-137

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGW 1111 | 4 | MATH 1215 | 4 | Vacation | 0 Vacation | 0 |
| ENVR 1101 | 4 | PHIL 1180 | 4 |  |  |  |
| POLS 1150 <br> and <br> POLS 1151 | 4 | POLS 1155 <br> and POLS 1156 | 4 |  |  |  |
| SOCL 1246 |  | Foreign language course | 4 |  |  |  |
|  | 16 |  | 16 |  | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ECON 1116 | 4 ECON 3423 | 4 Vacation | 0 Co-op | 0 |
| ENVR 1104, <br> ENVR 1112, <br> or ENVR <br> 1200 | 4 POLS 2400 | 4 |  |  |
| POLS 1160 <br> and | 4 Elective | 4 |  |  |
| POLS 1161 | Foreign <br> language <br> course | language <br> course | 4 |  |
|  | POLS <br> undergraduate <br> elective | 4 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 ENVR 1445 | 4 Elective | 4 Co-op | 0 |
|  | Political <br> thought <br> course | 4 Elective | 4 |  |
| PoLS <br> undergraduate <br> elective | 4 |  |  |  |
| Qualitative <br> methods <br> course | $4-5$ | 8 | 0 |  |

Year 4
$\left.\begin{array}{llccr}\text { Fall } & \text { Hours } \text { Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & 0 \text { ENGW 3315 } & 4 \text { Elective } & 4 \text { Co-op } & 0 \\ \hline & \text { or } 3308\end{array}\right)$

|  | POLS $4$ <br> undergraduate <br> elective |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 |  | 17-20 | 8 | 0 |
| Year 5 |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |
| Co-op | 0 | ENVR 5250 <br> or POLS <br> 2395 | 4 |  |  |
|  |  | Capstone or elective | 1-4 |  |  |
|  |  | Elective | 4 |  |  |
|  |  | POLS undergraduatı elective | 4 |  |  |
|  | 0 |  | 13-16 |  |  |

Total Hours: 130-137

## Sociology and Environmental Studies, BA

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Sociology Requirements

Code Title

Required Sociology Courses

| SOCL 1101 | Introduction to Sociology | 4 |
| :--- | :--- | :--- |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2321 | Research Methods in Sociology | 4 |
| ANTH 2305 | Global Markets and Local Culture | 4 |
| Statistics |  | 4 |
| Complete one of the following: |  |  |


| SOCL 2320 | Statistical Analysis in Sociology |
| :--- | :--- |
| ENVR 2500 | Biostatistics |

## Capstone

Complete one of the following:

| SOCL 4600 | Senior Seminar |
| :--- | :--- |
| ENVS 4997 | Senior Thesis |
| ENVR 4900 | Earth and Environmental Science |
|  | Capstone |

## Sociology Elective A

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
Sociology Elective B
Complete three additional sociology courses in the following range:

$$
\text { SOCL } 3000 \text { to SOCL } 5999
$$

Environmental Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Science Requirements |  |  |
| ENVR 1101 | Environmental Science | 4 |
| ENVR 1112 | Environmental Geology | 4 |
| or ENVR 1200 | Dynamic Earth |  |
| or ENVR 3125 | Global Oceanic Change |  |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 | 5 |
| EEMB 3460 | Conservation Biology | 4 |
| Environmental Studies Elective A |  |  |
| Complete one of th | following: | 4 |
| PHIL 1180 | Environmental Ethics |  |
| PHIL 1185 | The Ethics of Food |  |
| POLS 1150 | American Government |  |
| POLS 2395 | Environmental Politics and Policy |  |
| ENVR 1110 | Global Climate Change |  |
| ENVR 2900 | Special Topics in Environmental Studies |  |

Environmental Studies Electives B
Complete three of the following:
ENVR 3000 to ENVR 5999
EEMB 3000 to EEMB 5999
PPUA 3000 to PPUA 5999

## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| SOCL 1246 | Environment and Society | 4 |
| ENVR 4515 | Sustainable Development | 4 |

## Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Sociology and Environmental Studies Combined-Major Credit Requirement

Complete 81 semester hours in the major.

## Program Requirements

128 total semester hours required

## Environmental Science, BS

Our Bachelor of Science in Environmental Science degree is organized for students who seek a comprehensive understanding of the scientific implications of environmental issues and the ways that environmental scientists from a range of disciplines can approach their solution. Every student has an opportunity to develop core knowledge in geology, biology, chemistry, and mathematics early in the program. Students then select
one of three concentrations-marine science, conservation science, or geoscience-as a program focus for their upper-level course work. We also provide an independent track for students whose interests do not fall into one of these three areas. Students who elect this option work with a faculty advisor to identify a group of five mid- to upper-level science courses that are aligned with the student's career interests. (Students interested in studying environmental issues from a policybased perspective should consider the BA in environmental studies (p. 516).)

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Environmental Science Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| ENVR 1000 | Marine and Environmental Sciences at Northeastern | 1 |
| Geology Courses |  |  |
| ENVR 1101 | Environmental Science | 4 |
| ENVR 1200 and ENVR 1201 | Dynamic Earth and Lab for ENVR 1200 | 5 |
| Calculus 1 |  |  |
| MATH 1241 | Calculus 1 | 4 |
| or MATH 1251 | Calculus and Differential Equations for |  |
| or MATH 1341 | Calculus 1 for Science and Engineering |  |

Calculus 2 or Biostatistics

| Complete one of the following: | $4-5$ |  |
| :--- | :--- | ---: |
| ENVR 2500 | Biostatistics | 5 |
| and ENVR 2501 | and Lab for ENVR 2500 | 4 |
| MATH 1242 | Calculus 2 | 4 |
| or MATH 1252 | Calculus and Differential Equations for Biology 2 |  |
| or MATH 1342 | Calculus 2 for Science and Engineering |  |

General Chemistry 1
CHEM 1101 General Chemistry for Health Sciences 5
and CHEM 1102
and CHEM 1103 or CHEM 1211 and CHEM 1212
and CHEM 1213

## General Chemistry 2

CHEM 1214
and CHEM 1215
and CHEM 1216
and Lab for CHEM 1101
and Recitation for CHEM 1101
General Chemistry 1
and Lab for CHEM 1211
and Recitation for CHEM 1211

## Organic Chemistry

CHEM 2311
General Chemistry 2 5
and Lab for CHEM 1214
and Recitation for CHEM 1214
and CHEM 2312

Organic Chemistry 1
and Lab for CHEM 2311
Physics 1

Complete one of the following:
PHYS $1145 \quad$ Physics for Life Sciences 1
and PHYS 1146 and Lab for PHYS 1145
PHYS $1151 \quad$ Physics for Engineering 1
and PHYS 1152 and Lab for PHYS 1151
and PHYS 1153 and Interactive Learning Seminar for PHYS 1151
PHYS 1161 Physics 1
and PHYS 1162 and Lab for PHYS 1161
and PHYS 1163 and Recitation for PHYS 1161
PHYS 1171 Physics 1 for Bioscience and
and PHYS 1172 Bioengineering
and PHYS 1173 and Lab for PHYS 1171
and Interactive Learning Seminar for PHYS 1171

| Earth and Environmental Science Capstone |  |  |
| :--- | :--- | :--- |
| ENVR 4900 | Earth and Environmental Science | 1-4 |
|  | Capstone |  |
| or ENVR 4997 | Senior Thesis |  |

## Environmental Science Concentrations

Complete one of the following concentrations:
CONCENTRATION IN MARINE SCIENCE

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Marine Science Courses |  |  |
| ENVR 3125 | Global Oceanic Change | 4 |
| ENVR 4106 |  | 4 |
| Physics 2 |  |  |
| Complete one of the | following: | 5 |
| PHYS 1155 and PHYS 1156 and PHYS 1157 | Physics for Engineering 2 <br> and Lab for PHYS 1155 <br> and Interactive Learning Seminar for <br> PHYS 1155 |  |
| PHYS 1147 <br> and PHYS 1148 | Physics for Life Sciences 2 and Lab for PHYS 1147 |  |
| PHYS 1165 and PHYS 1166 and PHYS 1167 | Physics 2 <br> and Lab for PHYS 1165 <br> and Recitation for PHYS 1165 |  |
| PHYS 1175 <br> and PHYS 1176 <br> and PHYS 1177 | Physics 2 for Bioscience and <br> Bioengineering <br> and Lab for PHYS 1175 <br> and Interactive Learning Seminar for <br> PHYS 1175 |  |

## Marine Science Elective Courses

Complete six of the following: 20-25

| BIOL 1107 | Foundations of Biology |
| :--- | :--- |
| and BIOL 1108 | and Lab for BIOL 1107 |
| or BIOL 1111 |  |
| and BIOL 1112 | General Biology 1 |
| and Lab for BIOL 1111 |  |
| or BIOL 1115 |  |
| and BIOL 1116 | General Biology 1 for Engineers |
| and Lab for BIOL 1115 |  |


| EEMB 3120 | Physical Biology of Marine Organisms |
| :---: | :---: |
| ENVR 2500 and ENVR 2501 | Biostatistics and Lab for ENVR 2500 |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |
| ENVR 5242 and ENVR 5243 | Ancient Marine Life and Lab for ENVR 5242 |
| Marine Studies Consortium Courses (unrestricted) |  |
| MARS 3210 | Marine Mammals |
| MARS 3310 | Water Resources Policy and Management |
| MARS 3325 | Coastal Zone Management |
| MARS 3430 | Biology of Whales |
| Three Seas Restricted Courses |  |
| EEMB 5504 | Biology of Corals |
| EEMB 5506 | Biology and Ecology of Fishes |
| EEMB 5508 and EEMB 5509 | Marine Birds and Mammals and Lab for EEMB 5508 |
| EEMB 5512 | Tropical Terrestrial Ecology |
| EEMB 5516 and EEMB 5517 | Oceanography and Lab for EEMB 5516 |
| EEMB 5518 | Ocean and Coastal Processes |
| EEMB 5520 | Coral Reef Ecology |
| EEMB 5522 and EEMB 5523 | Experimental Design Marine Ecology and Lab for EEMB 5522 |
| EEMB 5528 | Marine Conservation Biology |
| EEMB 5532 | Physiological and Molecular Marine Ecology |
| EEMB 5534 and EEMB 5535 | Marine Invertebrate Zoology and Botany and Lab for EEMB 5534 |
| EEMB 5536 | Ocean and Coastal Sustainability |
| EEMB 5589 | Diving Research Methods |
| SEA Semester restricted courses |  |

CONCENTRATION IN CONSERVATION SCIENCE
Code Title Hours


Note: Additional upper-level electives (numbered 2000 and above) may also be acceptable with department advisor approval.
Complete three of the following: 12-15

| BIOL 3401 | Comparative Vertebrate Anatomy |
| :---: | :---: |
| BIOL 3403 | Animal Behavior |
| BIOL 5499 | Plant Biotechnology |
| CHEM 2313 <br> and CHEM 2314 | Organic Chemistry 2 and Lab for CHEM 2313 |
| CIVE 4778 | Climate Adaptation and Policy Abroad |
| CIVE 5271 | Solid and Hazardous Waste Management |
| EEMB 2290 | Ecology and Evolution of Behavior |
| EEMB 2400 | Introduction to Evolution |
| EEMB 2616 and EEMB 2617 | Invertebrate Zoology and Lab for EEMB 2616 |
| EEMB 2700 and EEMB 2701 | Marine Biology and Lab for EEMB 2700 |
| EEMB 3120 | Physical Biology of Marine Organisms |
| EEMB 3455 | Ecosystems Ecology |
| EEMB 3465 | Ecological and Conservation Genomics |
| EEMB 3475 | Wildlife Ecology |
| EEMB 4001 | Landscape and Restoration Ecology |
| ENVR 2500 and ENVR 2501 | Biostatistics and Lab for ENVR 2500 |
| ENVR 3125 | Global Oceanic Change |
| ENVR 3200 | Water Resources |
| ENVR 4504 | Environmental Pollution |
| ENVR 4515 | Sustainable Development |
| ENVR 4563 | Advanced Spatial Analysis |
| ENVR 5190 | Soil Science |
| ENVR 5210 or ENVR 5250 | Environmental Planning Geology and Land-Use Planning |

Three Seas Restricted Courses

| EEMB 5506 | Biology and Ecology of Fishes |
| :--- | :--- |
| EEMB 5508 | Marine Birds and Mammals |
| and EEMB 5509 | and Lab for EEMB 5508 |
| EEMB 5512 | Tropical Terrestrial Ecology |
| EEMB 5516 | Oceanography |
| and EEMB 5517 | and Lab for EEMB 5516 |
| EEMB 5520 | Coral Reef Ecology |

## CONCENTRATION IN GEOSCIENCE

| Code | Title |
| :--- | :--- | :--- |
| Required Geoscience Courses |  |$\quad$ Hours


| PHYS 1147 <br> and PHYS 1148 | Physics for Life Sciences 2 and Lab for PHYS 1147 |  |
| :---: | :---: | :---: |
| PHYS 1155 <br> and PHYS 1156 <br> and PHYS 1157 | Physics for Engineering 2 <br> and Lab for PHYS 1155 <br> and Interactive Learning Seminar for PHYS 1155 |  |
| PHYS 1165 <br> and PHYS 1166 <br> and PHYS 1167 | Physics 2 <br> and Lab for PHYS 1165 <br> and Recitation for PHYS 1165 |  |
| PHYS 1175 <br> and PHYS 1176 <br> and PHYS 1177 | Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175 |  |
| Geoscience Concentration Electives |  |  |
| Complete four of the following: |  | 16-20 |
| ENVR 3125 | Global Oceanic Change |  |
| ENVR 3418 | Geophysics |  |
| ENVR 4504 | Environmental Pollution |  |
| ENVR 4500 and ENVR 4501 | Applied Hydrogeology and Lab for ENVR 4500 |  |
| ENVR 4563 | Advanced Spatial Analysis |  |
| ENVR 5190 | Soil Science |  |
| ENVR 5201 | Geologic Field Seminar |  |
| ENVR 5230 and ENVR 5231 | Structural Geology and Lab for ENVR 5230 |  |
| ENVR 5240 <br> 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 |  |
| Dialogue of Civilizations restricted courses |  |  |
| ENVR 5202 | Environmental Science Field Seminar Abroad |  |

## Environmental Science Major Credit Requirement

Complete 77 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

Four Years, Two Co-ops in Spring/Summer 1
Year 1


Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EESC 2000 | 1 | Co-op | 0 | Co-op | 0 | Elective | 4 |
| PHYS 1161 <br> and <br> PHYS 1162 <br> and <br> PHYS 1163 | 5 |  |  |  |  | Elective | 4 |
| Concentration course | 4 |  |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 18 |  | 0 |  | 0 |  | 8 |

Year 3


Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ENGW 3303, | 4 ENVR 4900 | $1-4$ |
| 3307, or <br> 3315 | or 4997 |  |
| Concentratior <br> course | 4 <br> Concentratior <br> course | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | $13-16$ |

Total Hours: 132-135

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

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: | ---: |
| ENVR 1000 | CHEM 1211 <br> and <br> CHEM 1212 <br> and <br> CHEM 1213 | 5 Elective | 4 Elective |  |



| PHYS 1161 <br> and <br> PHYS 1162 <br> and <br> PHYS 1163 | 5 | MATH 1242 | 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Elective | 4 |  |  |  |  |  |  |
|  | 18 |  | 18 |  | 0 |  | 0 |
| Year 2 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CHEM 1214 and | 5 | CHEM 2311 and | 5 | Vacation |  | Co-op | 0 |
| CHEM 1215 and |  | CHEM 2312 |  |  |  |  |  |
| CHEM 1216 |  |  |  |  |  |  |  |
| Concentratior course | 4 | EESC 2000 | 1 |  |  |  |  |
| Elective | 4 | Concentration course | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 17 |  | 18 |  | 0 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 Concentration | 4 Elective | 4 Co-op | 0 |
|  | course |  |  |  |
|  | Elective | 4 Elective | 4 |  |
| Elective | 4 |  | 0 |  |

Year 4

| Fall | HoursSpring <br> Co-op | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | ---: |
|  | 0 ENGW 3303, | 4 Elective | 4 Co-op | 0 |
|  | 3307, or <br> 3315 |  |  |  |
|  | Concentratior <br> course | 4 Elective | 4 |  |
|  | Elective | 4 | 8 | 0 |

Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: |
| Co-op | 0 ENVR 4900 | Hours |
|  | or 4997 | $1-4$ |
|  | Concentratior <br> course | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
| 0 | $13-16$ |  |

Total Hours: 132-135

## 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.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).
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.

## Ecology and Evolutionary Biology Major Requirements

Code Title Hours
Ecology and Evolutionary Biology
EEMB $1101 \quad$ Foundations in Ecology and 5
and EEMB 1102 Evolutionary Biology
and Lab for EEMB 1101

## Ecology and Evolutionary Genomics

| EEMB 1105 <br> and EEMB 1106 | Foundations in Ecological and <br> Evolutionary Genomics <br> and Lab for EEMB 1105 | 5 |
| :--- | :--- | ---: |
| Genetics | Genetics and Molecular Biology <br> BIOL 2301 <br> and BIOL 2302 <br> and Lab for BIOL 2301 | 5 |
| Evolution | Introduction to Evolution |  |
| EEMB 2400 | Ecology |  |
| Ecology | and Lab for EEMB 2302 |  |

## Supporting Courses

| Code <br> Math | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | 4 |  |
| MATH 1241 | Calculus 1 |  |
| MATH 1251 | Calculus and Differential <br> Biology 1 | Equations for |


| PHYS 1145 | Physics for Life Sciences 1 |
| :--- | :--- |
| and PHYS 1146 | and Lab for PHYS 1145 |$|$| PHYS 1151 | Physics for Engineering 1 |
| :--- | :--- |
| and PHYS 1152 | and Lab for PHYS 1151 |
| and PHYS 1153 | and Interactive Learning Seminar for <br> PHYS 1151 |
| PHYS 1161 Physics 1 <br> and PHYS 1162 and Lab for PHYS 1161 |  |

Physics 2
Complete one of the following: 5

| PHYS 1147 | Physics for Life Sciences 2 |
| :--- | :--- |
| and PHYS 1148 | and Lab for PHYS 1147 |

## Ecology and Evolutionary Biology Topical Requirement <br> Code Title Hours

Complete seven of the following. At least one course must be 28
taken from each list:
Evolution of Organisms

| EEMB 2290 | Ecology and Evolution of Behavior |
| :--- | :--- |
| EEMB 2616 | Invertebrate Zoology |
| and EEMB 2617 | and Lab for EEMB 2616 |


| EEMB 2700 and EEMB 2701 | Marine Biology and Lab for EEMB 2700 |
| :---: | :---: |
| EEMB 3450 | Physiological Adaptations to the Environment |
| EEMB 5504 | Biology of Corals |
| EEMB 5506 | Biology and Ecology of Fishes |
| EEMB 5534 and EEMB 5535 | Marine Invertebrate Zoology and Botany and Lab for EEMB 5534 |
| EEMB 5548 | Sociobiology |
| MARS 3210 | Marine Mammals |
| MARS 3430 | Biology of Whales |
| Ecology and Conservation Biology |  |
| EEMB 3460 | Conservation Biology |
| EEMB 3475 | Wildlife Ecology |
| EEMB 3465 | Ecological and Conservation Genomics |
| EEMB 3470 <br> and EEMB 3471 | Coastal Ecology and Sustainability and Lab for EEMB 3470 |
| EEMB 4001 | Landscape and Restoration Ecology |
| EEMB 5536 | Ocean and Coastal Sustainability |
| EEMB 5512 | Tropical Terrestrial Ecology |
| EEMB 5518 | Ocean and Coastal Processes |
| EEMB 5520 | Coral Reef Ecology |
| EEMB 5528 | Marine Conservation Biology |
| EEMB 5532 | Physiological and Molecular Marine Ecology |
| ENVR 3125 | Global Oceanic Change |
| ENVR 3150 | Food Security and Sustainability |
| MARS 3315 | Wetlands: Ecology and Hydrology |
| Analytical Skills |  |
| ENVR 3300 | Geographic Information Systems |
| ENVR 4563 | Advanced Spatial Analysis |
| EEMB 3465 | Ecological and Conservation Genomics |
| EEMB 5522 | Experimental Design Marine Ecology |
| 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 5130 | Ecological Dynamics |

## Ecology and Evolutionary Biology Credit Requirement

Complete 81 semester hours in the major.

## Ecology and Evolutionary Biology GPA Requirement

Complete all major courses with a cumulative GPA of 2.000.

## Program Requirement

128 total semester hours required

## Plan of Study Five Year, Three Spring Co-ops

Year 1

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| EEMB 1101 | 5 EEMB 1105 | 5 |
| and | and |  |
| EEMB 1102 | EEMB 1106 |  |




Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | ---: | ---: | ---: |
| Ecology and | 4 COOP 3945 | 0 COOP 3945 | 0 |
| Conservation <br> Biology <br> Distribution |  |  |  |
| Requirement |  |  |  |
| EEMB <br> Elective 2 | 4 |  |  |
| Analytical <br> Skills | 4 |  |  |
| Requirement | 4 |  |  |
| Elective | 16 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| EEMB | 4 Elective | 4 |
| Elective 3 |  |  |
| EEMB | 4 Elective | 4 |
| Elective 4 |  |  |


| Elective | 4 Elective | 4 |
| :--- | :--- | :--- |
| Experiential | 4 Elective | 4 |
| Credit <br> (Capstone/ |  |  |
| Thesis) |  |  |
|  | 16 | 16 |
| Total Hours: 131 |  |  |

## Five Year, Three Fall Co-ops

MATH $1241 \quad 4$ Elective 4
or 1251

| Elective | 4 |  |
| :--- | ---: | :--- |
|  | 19 | 19 |

Year 2

| Fall | Hours Spring | Hours | Summer 2 | Hours |
| :--- | :---: | ---: | ---: | ---: |
| EEMB 2302 | 5 BIOL 2301 | 5 | COOP 3945 |  |$\quad 0$

## Year 3

| Fall | Hours | Spring | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COOP 3945 |  | Ecology and Conservation Biology Distribution Requirement | 4 | COOP 3945 | 0 |
|  |  | EEMB <br> Elective 2 | 4 |  |  |
|  |  | Analytical <br> Skills <br> Requirement | 4 |  |  |
|  |  | Elective | 4 |  |  |
|  | 0 |  | 16 |  | 0 |

Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COOP 3945 | 0 | EEMB | 4 | Elective | 4 | COOP 3945 | 0 |
|  |  | Elective 3 |  |  |  |  |  |
|  |  | EEMB | 4 | Elective | 4 |  |  |
|  |  | Elective 4 |  |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  |  | Experiential | 4 |  |  |  |  |
|  |  | Credit |  |  |  |  |  |
|  |  | (Capstone/ |  |  |  |  |  |
|  |  | Thesis) |  |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| COOP 3945 | 0 Elective | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
|  | 0 | 16 |

Total Hours: 131

## Marine Biology, BS

Our Bachelor of Science in Marine Biology degree is designed to provide a strong foundation in marine biology and related disciplines. This major is offered through Northeastern University's Marine Science Center in Nahant.

A number of combined-major programs are offered; these can help focus a student's course choices along avenues that faculty feel are particularly appropriate.

Fieldwork is a valued component of training in our programs, and many of our courses use field sites throughout New England to demonstrate environmental processes or problems in their full complexity. In addition to sponsoring local trips, we have taken students on one longer field excursion each year to Iceland, the Cascade Mountains of Washington, the island of San Salvador in the Bahamas, or the Grand Canyon. Students also have the option to complete undergraduate research experiences with a faculty member. Undergraduate research projects can involve fieldwork and/or lab work completed under the guidance of faculty.

Many of our recent graduates work for environmental or geotechnical firms or continue their studies in graduate school. Students who participate in the co-op program typically work with local engineering or environmental consulting companies or with government agencies. These jobs often involve assessing building sites, evaluating land use, and studying problems concerned with groundwater contamination and remediation.

## Three Seas Program

The Three Seas Program allows advanced undergraduate and beginning graduate students in biology and related areas to spend a year of field study in three diverse marine environments.

The program begins in the spring semester at Northeastern University's Marine Science Center in Nahant, 12 miles north of the main campus. Courses the following fall are conducted at the University of Washington's Friday Harbor Laboratories on San Juan Island, which is 70 miles north of Seattle and part of an archipelago that lies
between the mainland and Vancouver Island, and at the Smithsonian Tropical Research Institute in Bocas del Toro, Panama, where students engage in tropical biology research. For more information, contact Mark Patterson at 781.581.7370 (ext. 313), or visit the Three Seas Program website at www.northeastern.edu/threeseas (http:// www.northeastern.edu/threeseas).

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Marine Biology Major Requirements

Code Title Hours

## Introduction to College

| ENVR 1000 | Marine and Environmental Sciences at | 1 |
| :--- | :--- | :--- |
|  | Northeastern |  |

## Required Biology

Complete one of the following: 5
BIOL 1107 Foundations of Biology
and BIOL 1108 and Lab for BIOL 1107
BIOL 1111 General Biology 1
and BIOL 1112 and Lab for BIOL 1111
BIOL 1115 General Biology 1 for Engineers
and BIOL 1116 and Lab for BIOL 1115

| Genetics |  | 5 |
| :--- | :--- | :--- |
| BIOL 2301 | Genetics and Molecular Biology |  |
| and BIOL 2302 | and Lab for BIOL 2301 |  |


| Organismal and Population Biology |  |  |
| :---: | :---: | :---: |
| EEMB 2302 and EEMB 2303 | Ecology and Lab for EEMB 2302 | 5 |
| Introduction to Evolution |  |  |
| EEMB 2400 | Introduction to Evolution | 4 |
| Marine Biology |  |  |
| EEMB 2700 and EEMB 2701 | Marine Biology and Lab for EEMB 2700 | 5 |


| Marine Biology Electives |  |
| :--- | :--- |
| Complete four of the following: | $16-20$ |
| BIOL 5587 | Comparative Neurobiology |
| EEMB 2290 | Ecology and Evolution of Behavior |
| EEMB 2420 | Fisheries Biology, Policy, and <br> Conservation |
| EEMB 2616 | Invertebrate Zoology <br> and EEMB 2617 |
| EEMB 3120 | Physical Biology of Marine Organisms |
| EEMB 3450 | Physiological Adaptations to the <br> Environment |
| EEMB 3460 | Conservation Biology |
| EEMB 3465 | Ecological and Conservation Genomics |


| EEMB 5130 and EEMB 5131 | Ecological Dynamics and Lab for EEMB 5130 |
| :---: | :---: |
| ENVR 1101 | Environmental Science |
| ENVR 2900 | Special Topics in Environmental Studies |
| ENVR 3125 | Global Oceanic Change |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |
| ENVR 4504 | Environmental Pollution |
| ENVR 5242 and ENVR 5243 | Ancient Marine Life and Lab for ENVR 5242 |
| Three Seas Restricted Courses |  |
| EEMB 5504 | Biology of Corals |
| EEMB 5506 | Biology and Ecology of Fishes |
| EEMB 5508 <br> and EEMB 5509 | Marine Birds and Mammals and Lab for EEMB 5508 |
| EEMB 5512 | Tropical Terrestrial Ecology |
| EEMB 5516 and EEMB 5517 | Oceanography and Lab for EEMB 5516 |
| EEMB 5518 | Ocean and Coastal Processes |
| EEMB 5520 | Coral Reef Ecology |
| EEMB 5522 <br> and EEMB 5523 | Experimental Design Marine Ecology and Lab for EEMB 5522 |
| EEMB 5528 | Marine Conservation Biology |
| EEMB 5532 | Physiological and Molecular Marine Ecology |
| EEMB 5534 <br> and EEMB 5535 | Marine Invertebrate Zoology and Botany and Lab for EEMB 5534 |
| EEMB 5536 | Ocean and Coastal Sustainability |
| EEMB 5589 | Diving Research Methods |
| Marine Studies Consortium Courses (Unrestricted) |  |
| MARS 3210 | Marine Mammals |
| MARS 3430 | Biology of Whales |

## Experiential Learning

An activity related to marine biology and approved by the experiential learning advisor must be completed before the capstone. Among the possibilities are co-op experience, junior/senior honors thesis, research project in a faculty lab, volunteer work in a biology-related area, participation in the Three Seas Program with submission of a project paper, or other approved experiences.

| Advanced Writing in the Disciplines |  |  |
| :---: | :---: | :---: |
| ENGW 3307 <br> or ENGW 3303 <br> or ENGW 3315 | Advanced Writing in the Sciences <br> Advanced Writing in the Environmental Professions <br> Interdisciplinary Advanced Writing in the Disciplines | 4 |
| Biology Capstone |  |  |
| Complete one of the following: |  | 1-4 |
| BIOL 4701 | Biology Capstone |  |
| ENVR 4900 | Earth and Environmental Science Capstone |  |
| ENVR 4997 | Senior Thesis |  |

## Breadth Courses for Marine Biology

$\left.\begin{array}{llr}\begin{array}{l}\text { Code } \\ \text { Mathematics }\end{array} & \text { Title } & \text { Hours } \\ \text { MATH 1251 } & \begin{array}{l}\text { Calculus and Differential Equations for } \\ \text { Biology 1 }\end{array} & 4 \\ \text { or MATH 1241 } \\ \text { or MATH 1341 }\end{array} \quad \begin{array}{l}\text { Calculus 1 } \\ \text { Calculus 1 for Science and Engineering }\end{array}\right]$

## General Chemistry 2

CHEM 1214 General Chemistry $2 \quad 5$
and CHEM 1215 and Lab for CHEM 1214
and CHEM 1216 and Recitation for CHEM 1214
Organic Chemistry 1
CHEM 2311 Organic Chemistry $1 \quad 5$
and CHEM 2312 and Lab for CHEM 2311
Physics
Complete a lecture/lab set for Physics 1 and for Physics 2: 10
Physics 1
PHYS $1145 \quad$ Physics for Life Sciences 1
and PHYS 1146
PHYS 1151
and PHYS 1152
and PHYS 1153
and Lab for PHYS 11
and Interactive Learning Seminar for PHYS 1151
PHYS 1161 Physics 1
and PHYS 1162 and Lab for PHYS 1161
and PHYS 1163 and Recitation for PHYS 1161
PHYS 1171
and PHYS 1172
Physics 1 for Bioscience and
and PHYS 1173 and Lab for PHYS 1171
and Interactive Learning Seminar for
PHYS 1171
Physics 2
PHYS 1147
and PHYS 1148
PHYS 1155
and PHYS 1156
and PHYS 1157
Physics for Life Sciences 2
and Lab for PHYS 1147 (recommended)
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

## Marine Biology Major Credit/GPA Requirements

Complete 74 semester hours in the major with a cumulative GPA of 2.000 .
Due to overlap in course content, double majoring in biology and biochemistry or biology and behavioral neuroscience is not permitted.

## Program Requirement

136 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIOL 1107 and | 5 | CHEM 1214 and | 5 | Elective |  | Elective | 4 |
| BIOL 1108 |  | CHEM 1215 and CHEM 1216 |  |  |  |  |  |
| CHEM 1211 and CHEM 1212 and CHEM 1213 | 5 | EEMB 2400 | 4 | Elective | 4 | Elective | 4 |
| ENVR 1000 | 1 | ENGW 1111 | 4 |  |  |  |  |
| MATH 1251 | 4 | Elective | 4 |  |  |  |  |
|  | 15 |  | 17 |  | 8 |  | 8 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| BIOL 2301 <br> and <br> BIOL 2302 | 5 Co-op | 0 Co-op | 0 Elective | 4 |
| EEMB 2302 <br> and <br> EEMB 2303 | 5 |  | Elective | 4 |
| EEMB 2700 <br> and <br> EEMB 2701 | 5 |  |  |  |
| EESC 2000 | 1 |  |  |  |
|  | 16 | 0 | 0 | 8 |

Year 3

Fall $\quad$ Hours Spring $\quad$ Hours Summer 1 | Hours Summer 2 |
| :---: | Hours



| Marine <br> biology <br> elective | 5 Marine <br> biology <br> elective | 5 |
| :--- | :---: | :---: |
|  | 19 | $14-17$ |

Total Hours: 133-136

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

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| BIOL 1107 | 5 CHEM 1214 | 5 Elective | 4 PHYS 1147 | 5 |
| and | and |  | and |  |


| BIOL 1108 | CHEM 1215 <br> and | PHYS 1148 |
| :--- | :--- | :--- |


| CHEM 1211 <br> and <br> CHEM 1212 <br> and <br> CHEM 1213 | 5 EEMB 2400 | 4 Elective | 4 Elective | 4 |
| :---: | :---: | :---: | :---: | :---: |
| ENVR 1000 | 1 ENGW 1111 | 4 |  |  |
| MATH 1251 | 4 PHYS 1145 and PHYS 1146 | 5 |  |  |
|  | 15 | 18 | 8 | 9 |


| Year 2 |  |
| :--- | :--- | :--- |
| Fall | Hours Spring $\quad$ Hours Summer 1 Hours Summer 2 Hours |


| EEMB 2302 | 5 BIOL 2301 | 5 Elective | 4 Co-op |
| :--- | :--- | :--- | :--- |
| and | and | 0 |  |
| EEMB 2303 | BIOL 2302 |  |  |

EEMB $2700 \quad 5$ EESC $2000 \quad 1$ Elective
and
EEMB 2701

| Elective | 4 ENVR 2500 <br> and <br> ENVR 2501 | 5 |  |
| :--- | :---: | :---: | :---: |
|  | 5 Elective | 4 |  |
| Marine <br> biology <br> elective | 19 | 15 | 8 |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | O CHEM 2311 <br> and <br> CHEM 2312 | 5 Elective | 4 Co-op | 0 |

Year 4

| Fall | Hours | Spring |
| :--- | :---: | ---: |
| Co-op | 0 | BIOL 4701, |
|  |  | $1-4$ |
|  |  | ENVR 4900, |
|  | or ENVR |  |
|  | 4997 |  |
|  |  |  |


| Elective | 4 |
| :---: | :---: |
| Elective | 4 |
| Marine <br> biology <br> elective | 5 |
| 0 | $14-17$ |

Total Hours: 133-136

## Marine Biology-Three Seas Program, Four Years, One Co-op in Spring/Summer 1

Year 1


| Year 2 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| BIOL 2301 <br> and <br> BIOL 2302 | 5 | Co-op | 0 | Co-op | 0 | Vacation | 0 |
| EEMB 2302 <br> and <br> EEMB 2303 | 5 |  |  |  |  |  |  |
| EEMB 2700 <br> and <br> EEMB 2701 | 5 |  |  |  |  |  |  |
| EESC 2000 | 1 |  |  |  |  |  |  |
|  | 16 |  | 0 |  | 0 |  | 0 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CHEM 2311 <br> and <br> CHEM 2312 | 5 | EEMB 5516 <br> and <br> EEMB 5517 | 5 | Vacation | 0 | Vacation | 0 |
| ENVR 2500 <br> and <br> ENVR 2501 | 5 | EEMB 5522 <br> and <br> EEMB 5523 | 5 |  |  |  |  |
| Elective |  | EEMB 5534 <br> and <br> EEMB 5535 | 5 |  |  |  |  |
| Elective | 4 | EEMB 5536 | 3 |  |  |  |  |
|  |  | EEMB 5589 | 2 |  |  |  |  |
|  | 18 |  | 20 |  | 0 |  | 0 |

Year 4

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| EEMB 5504 |  | BIOL 4701, <br> ENVR 4900, <br> or ENVR <br> 4997 | 1-4 |
| EEMB 5506 |  | ENGW 3303, 3307, or 3315 | 4 |
| EEMB 5508 <br> and <br> EEMB 5509 | 3 | Elective | 4 |
| EEMB 5512 | 1 | Elective | 4 |
| EEMB 5518 | 2 |  |  |
| EEMB 5520 | 2 |  |  |
| EEMB 5528 | 3 |  |  |
| EEMB 5532 | 3 |  |  |
| 20 |  |  | 13-16 |

## Marine Biology-Three Seas Program, Four Years, One Co-op in Summer 2/Fall

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIOL 1107 <br> and <br> BIOL 1108 | 5 | CHEM 1214 <br> and <br> CHEM 1215 <br> and <br> CHEM 1216 | 5 | Vacation | 0 | PHYS 1147 <br> and <br> PHYS 1148 | 5 |
| CHEM 1211 <br> and <br> CHEM 1212 <br> and <br> CHEM 1213 | 5 | EEMB 2400 | 4 |  |  | Elective | 4 |
| ENVR 1000 | 1 | ENGW 1111 | 4 |  |  |  |  |
| MATH 1251 |  | PHYS 1145 <br> and PHYS 1146 | 5 |  |  |  |  |
|  | 15 |  | 18 |  | 0 |  | 9 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIOL 2301 and BIOL 2302 | 5 | CHEM 2311 <br> and <br> CHEM 2312 | 5 | Vacation | 0 | Co-op | 0 |
| EEMB 2302 <br> and <br> EEMB 2303 | 5 | EESC 2000 | 1 |  |  |  |  |
| EEMB 2700 <br> and <br> EEMB 2701 | 5 | ENVR 2500 and ENVR 2501 | 5 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 19 |  | 19 |  | 0 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 EEMB 5516 | 5 Vacation | 0 Vacation | 0 |
|  | and |  |  |  |
|  |  | EEMB 5517 |  |  |


| EEMB 5522 <br> and <br> EEMB 5523 | 5 |  |  |
| :--- | :--- | :---: | :--- |
| EEMB 5534 <br> and <br> EEMB 5535 | 5 |  |  |
| EEMB 5536 | 3 |  | 0 |
| EEMB 5589 | 2 | 0 |  |
| 0 | 20 |  | 0 |

## Year 4

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| EEMB 5504 |  | BIOL 4701, <br> ENVR 4900, <br> or ENVR <br> 4997 | 1-4 |
| EEMB 5506 |  | ENGW 3303, 3307, or 3315 | 4 |
| EEMB 5508 <br> and <br> EEMB 5509 | 3 | Elective | 4 |
| EEMB 5512 | 1 | Elective | 4 |
| EEMB 5518 | 2 |  |  |
| EEMB 5520 | 2 |  |  |
| EEMB 5528 | 3 |  |  |
| EEMB 5532 | 3 |  |  |
|  | 20 |  | 13-16 |

Total Hours: 133-136

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

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| BIOL 1107 <br> and <br> BIOL 1108 | CHEM 1214 <br> and <br> CHEM 1215 <br> and <br> CHEM 1216 | 5 Vacation | 0 Vacation | 0 |



Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| ENVR 2500 <br> and <br> ENVR 2501 | 5 Co-op | 0 Co-op | 0 PHYS 1147 <br> and PHYS 1148 | 5 |
| PHYS 1145 <br> and <br> PHYS 1146 | 5 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 18 | 0 | 0 | 9 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CHEM 2311 | 5 Co-op | 0 Co-op | 0 Vacation | 0 |
| and <br> CHEM 2312 |  |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
| Marine <br> biology <br> elective | 5 |  | 0 |  |
|  | 18 | 0 | 0 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :--- | ---: |
| ENGW 3303, | 4 BIOL 4701, | $1-4$ |
| 3307, or | ENVR 4900, |  |
| 3315 | or ENVR |  |
|  | 4997 |  |


| Elective | 4 Elective | 4 |
| :--- | :---: | :---: |
| Marine <br> biology <br> elective | 5 Elective | 4 |
| Marine <br> biology <br> elective | 5 Marine <br> biology <br> elective | 5 |
|  | 18 | $14-17$ |

Total Hours: 133-136

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

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIOL 1107 <br> and <br> BIOL 1108 | 5 | CHEM 1214 and CHEM 1215 and CHEM 1216 | 5 | Vacation | 0 | PHYS 1147 <br> and <br> PHYS 1148 | 5 |
| CHEM 1211 <br> and <br> CHEM 1212 <br> and <br> CHEM 1213 | 5 | EEMB 2400 | 4 |  |  | Elective | 4 |
| ENVR 1000 | 1 | ENGW 1111 | 4 |  |  |  |  |
| MATH 1251 | 4 | PHYS 1145 <br> and PHYS 1146 | 5 |  |  |  |  |
|  | 15 |  | 18 |  | 0 |  | 9 |


| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BIOL 2301 <br> and <br> BIOL 2302 | 5 | ENVR 2500 and ENVR 2501 | 5 Vacation | 0 Co-op | 0 |
| EEMB 2302 <br> and <br> EEMB 2303 | 5 | EEMB 2700 <br> and <br> EEMB 2701 | 5 |  |  |
| EESC 2000 | 1 | Elective | 4 |  |  |
| Elective | 4 | Elective | 4 |  |  |
|  | 15 |  | 18 | 0 | 0 |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall |  |  |  |  |
| Co-op | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
|  | 0 <br> CHEM 2311 <br> and <br> CHEM 2312 | 5 Elective | 4 Co-op | 0 |
|  | Elective | 4 Elective | 4 |  |
|  | Elective <br> Marine <br> biology <br> elective | 4 |  |  |
| 0 | 18 | 8 | 0 |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 ENGW 3303, <br>  <br> 3307, or <br> 3315 | 4 Vacation | 0 Co-op | 0 |
|  | Elective | 4 |  |  |
| Marine <br> biology <br> elective | 5 |  |  |  |
|  | Marine <br> biology <br> elective | 5 | 0 | 0 |

## Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: |
| Co-op | 0 BIOL 4701, | Hours |
|  | ENVR 4900,  <br> or ENVR  <br>  4997 |  |
|  | Elective | 4 |
|  | Elective | 4 |
|  | Marine <br> biology <br> elective | 5 |
| 0 | $14-17$ |  |

Total Hours: 133-136

## Marine Biology-Three Seas Program,

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


Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| BIOL 2301 <br> and | 5 Co -op | 0 Co-op | 0 Vacation | 0 |
| BIOL 2302 |  |  |  |  |
| EEMB 2302 <br> and <br> EEMB 2303 | 5 |  |  |  |
| EEMB 2700 <br> and <br> EEMB 2701 | 5 |  |  |  |
| EESC 2000 | 1 |  |  |  |
|  | 16 | 0 | 0 | 0 |

Year 3

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CHEM 2311 and CHEM 2312 | 5 | EEMB 5516 and EEMB 5517 | 5 Vacation | 0 Vacation | 0 |
| ENVR 2500 and <br> ENVR 2501 |  | EEMB 5522 <br> and <br> EEMB 5523 | 5 |  |  |
| PHYS 1147 <br> and <br> PHYS 1148 | 5 | EEMB 5534 <br> and <br> EEMB 5535 | 5 |  |  |
|  |  | EEMB 5536 | 3 |  |  |
|  |  | EEMB 5589 | 2 |  |  |
|  | 15 |  | 20 | 0 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| EEMB 5504 | 3 Co-op | 0 Co-op | 0 Vacation | 0 |
| EEMB 5506 | 3 |  |  |  |
| EEMB 5508 <br> and | 3 |  |  |  |
| EEMB 5509 |  |  |  |  |

Year 5

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| ENGW 3303, | 4 | BIOL 4701, | 1-4 |
| 3307, or |  | ENVR 4900, |  |
| 3315 |  | or ENVR |  |
|  |  | 4997 |  |
| Elective | 4 | Elective | 4 |


| Elective | 4 Elective | 4 |
| :--- | :---: | ---: |
| Elective | 4 Elective | 4 |
|  | 16 | $13-16$ |

Total Hours: 133-136

## Marine Biology-Three Seas Program, Five Years, Two Co-ops in Summer 2/Fall



Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| BIOL 2301 <br> and <br> BIOL 2302 | E EEMB 2700 <br> and <br> EEMB 2302 | 5 Vacation | 0 Co-op | 0 |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 EEMB 5516 <br> and EEMB 5517 | 5 Vacation | 0 Vacation | 0 |
|  | EEMB 5522 <br> and EEMB 5523 | 5 |  |  |
|  | EEMB 5534 <br> and EEMB 5535 | 5 |  |  |
|  | EEMB 5536 | 3 |  |  |
|  | EEMB 5589 | 2 |  |  |
|  | 0 | 20 | 0 | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| EEMB 5504 | 3 <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> and <br> CHEM 2311 | 5 Vacation | 0 Co-op | 0 |


| EEMB 5506 |  | ENGW 3303, <br> 3307, or 3315 | 4 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EEMB 5508 <br> and <br> EEMB 5509 |  | Elective | 4 |  |  |
| EEMB 5512 | 1 | Elective | 4 |  |  |
| EEMB 5518 | 2 |  |  |  |  |
| EEMB 5520 | 2 |  |  |  |  |
| EEMB 5528 | 3 |  |  |  |  |
| EEMB 5532 | 3 |  |  |  |  |
|  | 20 |  | 17 | 0 | 0 |
| Year 5 |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |
| Co-op | $0$ | BIOL 4701, ENVR 4900, or ENVR 4997 | 1-4 |  |  |
|  |  | Elective | 4 |  |  |
|  |  | Elective | 4 |  |  |
|  |  | Elective | 4 |  |  |
|  | 0 |  | 13-16 |  |  |

Total Hours: 133-136

Computer Science and Environmental Science, BS
The computer science and environmental science combined major focuses on geological processes that greatly impact the earth, atmosphere, and water in oceans, lakes, and rivers. Understanding these processes requires acquisition and computational analysis of large amounts of data-underscoring the natural relationship between computer science and environmental 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p.37).

## Computer Science Courses

Code Title Hours

## Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |
| Computer Science Fundamental Courses |  |  |
| A grade of C- or higher is required in computer science |  |  |
| fundamental courses: |  |  |


| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 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 | Object-Oriented Design | 4 |
| CS 3800 | Theory of Computation | 4 |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | Software Development and Recitation for CS 4500 | 4 |
| Presentation Requirement |  |  |
| THTR 1170 | The Eloquent Presenter | 1 |
| Computer Science 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, IS, or DS classes that are not already required. Choose courses within the following ranges: |  |  |
| CS 2500 or higher, except CS 5010 |  |  |
| IS 2000 or higher, except IS 4900 |  |  |
| DS 2000 or higher, except DS 4900 |  |  |
| Environmental Science Courses |  |  |
| Code | Title | Hours |
| Environmental Science Required Courses |  |  |
| ENVR 1200 and ENVR 1201 | Dynamic Earth and Lab for ENVR 1200 | 5 |
| ENVR 5210 <br> or ENVR 5250 | Environmental Planning <br> Geology and Land-Use Planning | 4 |
| ENVR 4900 | Earth and Environmental Science Capstone | 1 |
| or ENVR 4997 | Senior Thesis |  |
| Complete one of the following sequences: |  | 5 |
| ENVR 1202 <br> and ENVR 1203 | History of Earth and Life and Interpreting Earth History |  |
| ENVR 2310 and ENVR 2311 | Earth Materials <br> and Lab for ENVR 2310 |  |
| Environmental Science Integrative Courses |  |  |
| Complete at least two of the following: |  | 8-10 |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |  |
| ENVR 3418 | Geophysics |  |
| ENVR 4500 <br> and ENVR 4501 | Applied Hydrogeology and Lab for ENVR 4500 |  |
| Environmental Science Electives |  |  |
| If you complete more than two environmental science integrative courses (above), they will count as environmental science electives. |  |  |
| Complete four of the following: |  | 16-20 |
| ENVR 1101 | Environmental Science |  |
| ENVR 2340 and ENVR 2341 | Earth Landforms and Processes and Lab for ENVR 2340 |  |
| ENVR 4504 | Environmental Pollution |  |


| ENVR 4563 | Advanced Spatial Analysis |
| :--- | :--- |
| ENVR 5190 | Soil Science |
| ENVR 5201 | Geologic Field Seminar |
| ENVR 5230 | Structural Geology |
| and ENVR 5231 | and Lab for ENVR 5230 |
| ENVR 5240 | Sedimentary Basin Analysis |
| and ENVR 5241 | and Lab for ENVR 5240 |
| ENVR 5242 | Ancient Marine Life |
| and ENVR 5243 | and Lab for ENVR 5242 |
| ENVR 5270 | Glacial and Quaternary History <br> and ENVR 5271 <br> and Lab for ENVR 5270 |

## Supporting Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Calculus |  |  |
| MATH 1251 or MATH 1341 | Calculus and Differential Equations for Biology 1 <br> Calculus 1 for Science and Engineering | 4 |
| MATH 1252 or MATH 1342 | Calculus and Differential Equations for Biology 2 <br> Calculus 2 for Science and Engineering | 4 |
| 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 <br> and Lab for CHEM 1214 <br> and Recitation for CHEM 1214 | 5 |
| Computing and Social Issues |  |  |
| Complete one of th | following: | 4 |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| IA 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 21 st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |

## Computer Science English Requirement

Code Title Hours

## 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 $3302 \quad$ Advanced Writing in the Technical
Professions

ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

## Required General Electives

## Code Title

Complete six general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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

138 total semester hours required

## Plan of Study

## Sample Patterns:

Four Years, Two Co-ops in Summer 2/Fall
$\begin{array}{lcccc}\text { Year } 1 & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 }\end{array}$ Hours

## Year 2

$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \hline \begin{array}{l}\text { ENVR 5210 } \\ \text { or 5250 }\end{array} & \begin{array}{l}\text { CHEM 1214 } \\ \text { and } \\ \text { CHEM 1215 } \\ \text { and } \\ \text { CHEM 1216 }\end{array} & \begin{array}{c}5 \text { MATH 1252 } \\ \text { or 1342 }\end{array} & 4 \text { Co-op }\end{array}\right]$

Year 3

| Hours |  | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 24 | Co-op |  | CS 3800 | 4 | MATH 3081 | 4 | Co-op |  |
|  |  |  | ENVR elective | 4 | ENGW 3302 | 4 |  |  |
|  |  |  | ENVR elective | 4 |  |  |  |  |
|  |  |  | ENVR integrative (take lab if offered) | 4 |  |  |  |  |
|  |  |  | THTR 1170 | 1 |  |  |  |  |
|  |  | 0 |  | 17 |  | 8 |  | 0 |
|  | Year 4 |  |  |  |  |  |  |  |
|  | Fall | Hours | Spring | Hours | Summer 1 | Hours |  |  |
| hrough | Co-op |  | CS 4500 and CS 4501 | 4 | Elective | 4 |  |  |
|  |  |  | ENVR 4900 <br> (or ENVR <br> 4997 (if <br> short of <br> credit <br> hours)) | 1 | Elective | 4 |  |  |
|  |  |  | ENVR integrative | 4 |  |  |  |  |
| Hours |  |  | ENVR elective | 4 |  |  |  |  |
|  |  |  | Computing and social issues | 4 |  |  |  |  |
|  |  | 0 |  | 17 |  | 8 |  |  |

Total Hours: 138

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



## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CS 3500 | 4 | CHEM 1214 | 5 Vacation | 0 Co-op |


| CHEM 1211 <br> and <br> CHEM 1212 <br> and <br> CHEM 1213 | 5 CS 3000 | 4 |  |
| :--- | :---: | :---: | :---: |
| ENVR 5210 <br> or 5250 | ENVR <br> elective | 4 |  |
| Elective | 4 CS 1210 | 1 | 0 |

Year 3

| Fall | HoursSpring <br> Co-op | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
|  | MATH 1251 <br> or 1341 | 4 MATH 3081 | 4 Co-op | 0 |
|  | ENVR <br> integrative <br> (take lab if <br> offered) | 4 Elective | 4 |  |
| ENVR <br> elective | 4 |  |  |  |
| THTR 1170 | 1 | 8 | 0 |  |
|  | Elective | 4 | 17 |  |

Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | CS 3800 | 4 | Elective | 4 | Co-op | 0 |
|  |  | MATH 1252 or 1342 | 4 | Elective | 4 |  |  |
|  |  | ENGW 3302 | 4 |  |  |  |  |
|  |  | ENVR integrative | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 5

| Fall | HoursSpring <br> Co-op | Hours |
| :--- | :--- | ---: | :--- |
|  | CS 4500 <br> and CS 4501 | 4 |
|  | ENVR 4900 <br> ( ENVR 4997 <br> (if short <br> of credit <br> hours)) | 1 |
|  | ENVR <br> elective | 4 |
| ENVR <br> elective | 4 |  |
| Computing <br> and social <br> issues | 4 |  |
| 0 | 17 |  |

Total Hours: 138

## Environmental Geology and Chemistry, BS

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The Departments of Marine and Environmental Sciences and Chemistry provide education in basic environmental science and chemistryrelated 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, bio-remediation, 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 warming.

Key general objectives are the development of qualitative and quantitative problem-solving skills and effective communication skills. Specific learning objectives for this combined major include 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 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.

Most of our combined majors will 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.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Environmental Geology Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Earth Foundations |  | 5 |
| ENVR 1200 | Dynamic Earth |  |
| and ENVR 1201 | and Lab for ENVR 1200 | 5 |
| ENVR 1202 | History of Earth and Life <br> and ENVR 1203 | and Interpreting Earth History |


| ENVR 2310 and ENVR 2311 | Earth Materials and Lab for ENVR 2310 | 5 |
| :---: | :---: | :---: |
| Geomorphology |  |  |
| ENVR 2340 and ENVR 2341 | Earth Landforms and Processes and Lab for ENVR 2340 | 5 |
| Environmental Geology Intermediate/Advanced Electives |  |  |
| Complete two in 2300 to ENVR 59 | ediate or advanced electives from ENVR | 8-10 |


| Supporting Courses for Environmental Geology |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Mathematics |  |  |
| MATH 1241 | Calculus 1 | 4 |
| MATH 1242 | Calculus 2 | 4 |


| Science Requirement |
| :--- | :--- |
| Complete one of the following options: |

## Biology Option

| BIOL 1111 <br> and BIOL 1112 | General Biology 1 <br> and Lab for BIOL 1111 |
| :--- | :--- |
| BIOL 1113 <br> and BIOL 1114 | General Biology 2 <br> and Lab for BIOL 1113 |
| Physics Option |  |
| PHYS 1161 <br> and PHYS 1162 | Physics 1 |
| PHYS Lab for PHYS 1165 <br> and PHYS 1166 | Physics 2 <br> and Lab for PHYS 1165 |


| Chemistry Major Requirements |  |
| :--- | :--- |
| Code <br> General Chemistry | Hours |


| General Chemistry |  | 5 |
| :--- | :--- | :--- |
| CHEM 1211 | General Chemistry 1 |  |
| and CHEM 1212 | and Lab for CHEM 1211 |  |


| CHEM 1214 | General Chemistry 2 | 5 |
| :--- | :--- | :--- |
| and CHEM 1215 | and Lab for CHEM 1214 |  |


| Intermediate-Level Chemistry |  |
| :--- | :--- |
| CHEM 2311 | Organic Chemistry 1 |
| and CHEM 2312 | and Lab for CHEM 2311 |


| CHEM 2313  <br> and CHEM 2314 Organic Chemistry 2 <br> and Lab for CHEM 2313  | 5 |
| :--- | :--- | :--- |

CHEM 2331 Bioanalytical Chemistry 5

| and CHEM 2332 | and Lab for CHEM 2331 |
| :--- | :--- |
| CHEM 3403 | Quantum Chemistry and Spectroscopy |


| and CHEM 3404 | and Lab for CHEM 3403 |
| :--- | :--- |
| CHEM 3431 | Physical Chemistry |

and CHEM 3432 and Lab for CHEM 3431

| Advanced-Level Chemistry |  |  |
| :--- | :--- | :--- |
| CHEM 3521 | Instrumental Methods of Analysis | 5 |
| and CHEM 3522 | and Instrumental Methods of Analysis |  |
|  | Lab |  |

## Environmental Geology/Chemistry Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | :--- |
| Choose two courses from the following: |  |  |
| ENVR 3410 | Environmental Geochemistry |  |
| ENVR 5190 | Soil Science |  |

## Environmental Geology/Chemistry Major Credit Requirement <br> Complete 94 semester hours in the major.

## Program Requirement

128 total semester hours required.

## Plan of Study <br> Five Years, Three Co-ops in Summer 2/Fall

Year 1


Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CHEM 2311 <br> and | 5 CHEM 2313 <br> CHEM 2312 | and <br> CHEM 2314 |  | 0 Cocation |$\quad 0$


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | CHEM 2331 <br> and <br> CHEM 2332 |  | Elective |  | Co-op | 0 |
|  |  | ENVR 2340 <br> and <br> ENVR 2341 | 5 | Elective | 4 |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  |  | Integrative course | 5 |  |  |  |  |
|  | 0 |  | 19 |  | 8 | - | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 CHEM 3431 | 4 CHEM 3521 <br> and | 5 Co-op | 0 |



Year 5


Total Hours: 136

## Environmental Studies and Economics, BS

Through this combined major, successful undergraduates will develop an awareness of the scientific, cultural, political, and economic aspects of the world's environmental problems and potential 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Introduction to College |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| ECON 1000 | Economics at Northeastern | 1 |
| or ENVR 1000 | Marine and Environmental Sciences at Northeastern |  |
| Economics Requirements |  |  |
| Code | Title | Hours |
| Calculus |  |  |
| MATH 1231 | Calculus for Business and Economics | 4 |
| Computer Science |  |  |
| CS 1100 | Computer Science and Its Applications | 4 |

Required Economics Courses

A minimum GPA of 2.000 is required:

| 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 |

Economics Electives
No more than one course may be at the introductory level
(course number 1000-1999).
Complete two of the following: 7-8

| ECON 1290 | History of the Global Economy |
| :--- | :--- |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and <br> Policy |
| ECON 3420 | Urban Economic Issues |
| ECON 3422 | Economics of Transportation |
| ECON 3424 | Law and Economics |
| ECON 3425 | Energy Economics |
| ECON 3440 | Public Finance |
| ECON 4635 | International Economics |
| PPUA 5260 | Ecological Economics |

Environmental Studies Requirements
Code Title Hours

Social Science Component

| PHIL 1180 | Environmental Ethics | 4 |
| :--- | :--- | ---: |
| POLS 1150 | American Government | 4 |
| and POLS 1151 | and Recitation for POLS 1150 |  |
| POLS 2395 | Environmental Politics and Policy | 4 |
| SOCL 1246 | Environment and Society | 4 |
| Science Component |  | 4 |
| ENVR 1101 | Environmental Science | 4 |
| ENVR 1112 | Environmental Geology | 4 |
| or ENVR 1200 Dynamic Earth |  |  |
| ENVR 1445 |  | 4 |
| ENVR 3300 | Geographic Information Systems | 5 |

and ENVR 3301 and Lab for ENVR 3300
GPA Requirement
Students are required to earn a GPA of 2.000 in either
PHIL 1180 or PHIL 3480 and in ENVR 1101.

## Enivronmental Science Elective

Complete one environmental science elective in consultation
with the environmental studies head advisor.

## Integrative Requirements

| Code <br> Advanced Writing in the Disciplines | Hours |
| :--- | ---: |
| ENGW 3308 <br> Advanced Writing in the Social <br> Sciences | 4 |
| Integrative Course |  |
| Note: Your integrative course and your capstone course <br> (below) must be from different departments. |  |
| Complete one of the following: | 4 |


| ECON 4692 | Senior Economics Seminar |
| :--- | :--- |
| ENVR 5210 | Environmental Planning |
| ENVR 5250 | Geology and Land-Use Planning |

## Capstone

Note: Your integrative course (above) and your capstone course must be from different departments.

| ECON 4692 | Senior Economics Seminar |
| :---: | :--- |
| or ENVR 4997 | Senior Thesis |
| or ENVS 4997 | Senior Thesis |

Experiential Learning Requirement
Code $\quad$ Title Hours
Complete one of the following: 4

| COOP 3945 | Co-op Work Experience |
| :--- | :--- |
| ECON 4992 | Directed Study |
| ENVR 4992 | Directed Study |
| ECON 4970 | Junior/Senior Honors Project 1 |
| ENVR 4970 | Junior/Senior Honors Project 1 |

## Major Credit Requirement

Complete 84 semester hours in the major.

## Program Requirement

128 total semester hours required

## Information Science and Environmental Science, BS

The information science and environmental science combined major provides a foundational study of geological processes before focusing on environmental planning, environmental ethics, and sustainability. Since it examines the relationship between human decisions and actions to the environment, the program aligns with the orientation of information science, which utilizes an integrated, people-centered curriculum combining concepts and skills from computer science, behavioral and social science, and system 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Information Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science | Overview |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | :--- |
| and CS 1802 | and Seminar for CS 1800 |  |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |

Information Science Required Courses

| IS 2000 | Principles of Information Science | 4 |
| :--- | :--- | ---: |
| IS 3500 | Information System Design and <br> Development | 4 |
| IS 4800 | Empirical Research Methods <br> (Integrative course) | 4 |

## Computer Science 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, IS, or DS classes that are not
already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Environmental Science Courses

Code Title Hours
Required Environmental Science Courses
ENVR $1101 \quad$ Environmental Science
ENVR 1200 Dynamic Earth 5

| and ENVR 1201 | and Lab for ENVR 1200 |  |
| :--- | :--- | :--- |
| ENVR 5210 | Environmental Planning | 4 |

or ENVR $5250 \quad$ Geology and Land-Use Planning
or ENVR 4997 Senior Thesis
Sustainability Focus Courses
PHIL 1180 Environmental Ethics 4
Complete two of the following: 8

| ECON 3423 | Environmental Economics |
| :--- | :--- |
| ENVR 4515 | Sustainable Development |
| ENVR 5202 | Environmental Science Field Seminar |
|  | Abroad |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 2395 | Environmental Politics and Policy |
| SOCL 1246 | Environment and Society |

Environmental Science Electives
Complete three of the following:
ENVR 1202 History of Earth and Life
and ENVR 1203 and Interpreting Earth History
ENVR 3418 Geophysics
ENVR 4500 Applied Hydrogeology
and ENVR 4501 and Lab for ENVR 4500

| ENVR 4504 | Environmental Pollution |
| :--- | :--- |
| ENVR 5201 | Geologic Field Seminar |
| ENVR 5242 | Ancient Marine Life |
| and ENVR 5243 | and Lab for ENVR 5242 |

## Integrative Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| ENVR 3300 | Geographic Information Systems | 5 |
| and ENVR 3301 | and Lab for ENVR 3300 |  |

## Supporting Courses

Code Title

Hours
Mathematics and Statistics

| ECON 2350 | Statistics | 4 |
| :--- | :--- | ---: |
| MATH 1251 | Calculus and Differential Equations for <br> Biology 1 | 4 |
| or MATH 1341 | Calculus 1 for Science and Engineering |  |
| Chemistry |  |  |
| Complete one of the following: | 5 |  |


| CHEM 1211 <br> and CHEM 1212 <br> and CHEM 1213 | General Chemistry 1 <br> and Lab for CHEM 1211 <br> and Recitation for CHEM 1211 |
| :--- | :--- |
| CHEM 1151 <br> and CHEM 1152 <br> and CHEM 1153 <br> Economics | General Chemistry for Engineers <br> and Lab for CHEM 1151 <br> and Recitation for CHEM 1151 |
| ECON 1116 | Principles of Microeconomics |
| Computing and Social Issues |  |
| Complete one of the following: |  |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values <br> The 21st-Century Workplace |
| SOCL 1280 | Environment, Technology, and Society |
| SOCL 3485 | Computers and Society |
| SOCL 4528 |  |

## Computer Science Writing Requirement

| Code <br> College Writing | Title | Hours |
| :--- | :--- | ---: |
| ENGW 1111 | First-Year Writing |  |$\quad 4$

## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Exploring Creative Expression and Innovation
- Understanding Societies and Institutions
- Analyzing and Using Data
- 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.

## 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | IS 2000 | 4 | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ |  | ENVR 1200 (ENVR 1201 (Lab if Offered)) | 4 | Elective | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | CS 3200 | 4 |  |  |  |  |
| ENVR 1101 | 4 | ECON 1116 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| CS 3500 | 4 IS 3500 | 4 Elective | 4 Co-op |  |
| PHIL 1180 | 4 CS elective | 4 CS 3000 | 4 |  |
| ENVR <br> elective | ENVR 3300 <br> and <br> ENVR 3301 | 5 |  |  |
| CHEM 1211 <br> and <br> CHEM 1212 <br> and <br> CHEM 1213 | 5 ECON 2350 | 4 |  |  |


| CS 1210 | 1 |  |  |
| ---: | ---: | ---: | ---: | ---: |
| 17 | 18 | 8 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | IS 4800 | 4 Elective | 4 Co-op |  |
|  | ENVR | 4 MATH 1251 | 4 |  |
|  | elective | or 1341 |  |  |
|  | ENVR | 4 |  |  |
|  | sustainability |  |  |  |



Total Hours: 136

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

Year 1


Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| IS 2000 | 4 ENVR 3300 <br> and <br> ENVR 3301 | 5 Elective | 4 Co-op | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 | IS 3500 | 4 Elective | 4 Co-op |


| ENVR <br> elective | 4 |  |  |
| :--- | :--- | :--- | :--- |
| 0 | 16 | 8 | 0 |

Year 4

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | :---: | :---: | Hours

Year 5

| Fall | HoursSpring <br> Co-op | Hours |
| :--- | :---: | :---: |
|  | ENVR 4900 <br> (or ENVR <br> 4997 (if <br> short of <br> credit <br> hours)) | 1 |
|  | ENVR <br> sustainability | 4 |
|  | ENVR 5210 <br> or 5250 | 4 |
| Elective | 4 |  |
| Computing <br> and social <br> issues | 4 |  |
| 0 | 17 |  |

Total Hours: 136

## Environmental Geology, Minor

The environmental geology minor provides an understanding of earth surface processes, such as rivers and flooding, groundwater and water supply, landform development, coastline evolution, and geological hazards. The impacts of man on the environment and various means of managing these impacts are among the central themes. The environmental geology program places strong emphasis on field studies.

## 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 | Dynamic Earth | 5 |
| and ENVR 1201 | and Lab for ENVR 1200 | 5 |
| ENVR 1202 | History of Earth and Life |  |
| and ENVR 1203 | and Interpreting Earth History | 5 |
| ENVR 2310 | Earth Materials |  |
| and ENVR 2311 | and Lab for ENVR 2310 |  |
| ENVR 5210 | Environmental Planning |  |
| or ENVR 5250 | Geology and Land-Use Planning | 4 |

## Geology Elective

Code Title

Complete one ENVR course.

## GPA Requirement

2.000 GPA required in the minor

## Environmental Science, Minor

The environmental science minor provides undergraduates with a strong foundation on a variety of scientific, technical, institutional, economic, behavioral, and conservation-oriented solutions to environmental problems caused by either natural phenomena and/or human activity.

## Minor Requirements

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

## Course Work

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introductory Course Work |  |  |
| Complete one of the following: |  | 4-5 |
| BIOL 1121 <br> and BIOL 1122 | Basic Microbiology and Lab for BIOL 1121 |  |
| ENVR 1101 | Environmental Science |  |
| Science or Engineering |  |  |
| Complete one of the following courses based on your major. |  | 4-5 |
| Engineering Majors |  |  |
| CHEM 1214 and CHEM 1215 | General Chemistry 2 and Lab for CHEM 1214 |  |
| Other Majors |  |  |
| CHEM 2311 and CHEM 2312 | Organic Chemistry 1 and Lab for CHEM 2311 |  |
| CIVE 2334 | Environmental Engineering 1 |  |
| Social Sciences |  |  |
| Complete one of the following: |  | 4 |
| ECON 3423 | Environmental Economics |  |
| PHIL 1180 | Environmental Ethics |  |
| POLS 2395 | Environmental Politics and Policy |  |
| SOCL 1246 | Environment and Society |  |
| SOCL 3485 | Environment, Technology, and Society |  |

## Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete any two courses from the following. Only one of the courses may be in the 1000-1999 range. Only one course may be selected from a group: |  | 8-10 |
| Physics Group |  |  |
| For nonengineering/nonscience majors only: |  |  |
| PHYS 1132 | Energy, Environment, and Society |  |
| Biology Group |  |  |
| EEMB 2302 | Ecology |  |
| Environmental Planning Group |  |  |
| ENVR 5210 | Environmental Planning |  |
| ENVR 5250 | Geology and Land-Use Planning |  |
| Geology Group |  |  |


| ENVR 2340 and ENVR 2341 | Earth Landforms and Processes and Lab for ENVR 2340 |
| :---: | :---: |
| ENVR 4504 | Environmental Pollution |
| ENVR 5190 | Soil Science |
| Hydrogeology Group |  |
| ENVR 4500 and ENVR 4501 | Applied Hydrogeology and Lab for ENVR 4500 |
| Geographic Information Systems Group |  |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |
| Civil Engineering Group |  |
| CIVE 4534 | Environmental Engineering 2 |
| CIVE 5536 | Hydrologic Engineering |

## Interdisciplinary Work

Code Title
Hours
Complete the independent project, the applied experience, or the environmental safety program:
Independent Project
See program advisor for approval before embarking on the project.

## Applied Experience

See program advisor for details.
Environmental Safety Program
See program advisor for details.

## GPA Requirement

2.000 GPA required in the minor

## Environmental Studies, Minor

Students may choose to pursue a minor in environmental studies by completing a blend of science, social science, and interdisciplinary courses. A student may broaden his or her understanding of the science and policy of the Earth's environmental challenges through this program, which is designed to complement 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. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| ENVR 1101 | Environmental Science | 4 |

## Science Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | $4-5$ |  |
| CHEM 1211 General Chemistry 1 <br> and CHEM 1212 and Lab for CHEM 1211 |  |  |
| ENVR 1112 | Environmental Geology |  |
| ENVR 1200 Dynamic Earth <br> and ENVR 1201 and Lab for ENVR 1200 |  |  |

## Social Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete two of the following: | 8 |  |
| ECON 1116 | Principles of Microeconomics |  |
| PHIL 1180 | Environmental Ethics |  |
| POLS 1150 | American Government |  |
| SOCL 1246 | Environment and Society |  |


| Interdisciplinary Courses |  |  |
| :--- | :--- | ---: |
| Code | Title | Hours |
| Complete two of the following: | 8 |  |
| ENVR 4504 | Environmental Pollution |  |
| ENVR 5210 | Environmental Planning |  |
| ENVR 5250 | Geology and Land-Use Planning |  |
| POLS 2395 | Environmental Politics and Policy |  |

## GPA Requirement

2.000 GPA required in the minor

## Geology, Minor

The geology minor focuses on the history and development of the earth. The program places a strong emphasis on field studies as a means of appreciating the materials, landforms, and forces interacting throughout geological time.

## 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 | Dynamic Earth | 5 |
| and ENVR 1201 | and Lab for ENVR 1200 | 5 |
| ENVR 1202 | History of Earth and Life |  |
| and ENVR 1203 | and Interpreting Earth History | 5 |
| ENVR 2310 | Earth Materials |  |
| and ENVR 2311 | and Lab for ENVR 2310 | 5 |
| ENVR 3000 <br> and ENVR 3001 | and | 5 |

## Geology Elective

## Code Title

## Hours

Complete one ENVR course

## GPA Requirement

2.000 GPA required in the minor

## Marine Biology, Minor

The marine biology minor is designed to provide Northeastern undergraduates with a strong foundation in marine biology and related disciplines. The minor has a strong hands-on component involving course work, marine biology research projects, and marine-related co-ops.

## 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 or any combined major that involves biology. Biology majors interested in marine biology should consider the major in marine biology.

## Required Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| BIOL 1111 | General Biology 1 | 5 |
| and BIOL 1112 | and Lab for BIOL 1111 |  |
| or BIOL 1107 <br> and BIOL 1108 | Foundations of Biology <br> and Lab for BIOL 1107 |  |
| BIOL 1113 <br> and BIOL 1114 | General Biology 2 <br> and Lab for BIOL 1113 | 5 |

## Elective Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete three of the following: |  | 7-15 |
| EEMB 2616 and EEMB 2617 | Invertebrate Zoology and Lab for EEMB 2616 |  |
| EEMB 2700 <br> and EEMB 2701 | Marine Biology <br> and Lab for EEMB 2700 |  |
| EEMB 5504 | Biology of Corals |  |
| EEMB 5506 | Biology and Ecology of Fishes |  |
| EEMB 5508 and EEMB 5509 | Marine Birds and Mammals and Lab for EEMB 5508 |  |
| EEMB 5512 | Tropical Terrestrial Ecology |  |
| EEMB 5516 and EEMB 5517 | Oceanography <br> and Lab for EEMB 5516 |  |
| EEMB 5518 | Ocean and Coastal Processes |  |
| EEMB 5520 | Coral Reef Ecology |  |
| EEMB 5522 and EEMB 5523 | Experimental Design Marine Ecology and Lab for EEMB 5522 |  |
| EEMB 5528 | Marine Conservation Biology |  |
| EEMB 5532 | Physiological and Molecular Marine Ecology |  |
| EEMB 5534 and EEMB 5535 | Marine Invertebrate Zoology and Botany and Lab for EEMB 5534 |  |
| EEMB 5536 | Ocean and Coastal Sustainability |  |
| EEMB 5589 | Diving Research Methods |  |

## Supporting Courses

Code Title Hours
To provide breadth of knowledge, complete one additional 4 science course in the BIOL, CHEM, ENVR, or PHYS subject areas or from the following:

| PSYC 3458 | Biological Psychology |
| :--- | :--- |
| PSYC 4510 | Psychopharmacology |

## GPA Requirement

2.000 GPA required in the minor

## Marine Studies, Minor

The marine studies minor is designed to provide a structured program on the Boston campus for students with an interest in the marine environment. The program allows a primary, but not exclusive, emphasis in either the scientific or the social science/humanistic study of the oceans. Some physical interaction with the sea through achievement in a specific marine-related skill and a project involving a degree of independent study is required. Students enrolled in any program at the university may complete the marine studies minor.

The program draws on courses throughout the university and is affiliated with several outstanding, specialized marine programs. These include the SEA Semester Program run by the Sea Education Association, which provides a rigorous program in marine sciences at Woods Hole, Massachusetts, and aboard one of its tall ships for training cruises in the Caribbean, Pacific, or Labrador Sea. In addition to the cruises designed to explore the broad range of aspects of marine science and culture, there are specialized cruises that add a focus on Caribbean studies, Pacific island culture, and marine environmental issues. Students may also take specialized courses in marine topics through the Marine Studies Consortium.

For more information, contact the director of marine studies, Professor Rebeca Rosengaus at 617.373.7032 or at r.rosengaus@northeastern.edu.

## COURSE REQUIREMENTS

At least four marine-related courses totaling 16 semester hours are required, along with mastery of a marine skill and an independent study. Two courses must be beyond the introductory level. At least one course must be from the natural sciences and one from the social sciences/ humanities. Other courses at the university may fulfill these requirements with the permission of the department.

Mastery of a marine-related skill can be achieved through satisfactory completion of course work or evidence of achievement through some form of approved outside certification. Course work in marine skills normally is limited to one of the six required courses

The project requirement can be met by completion of an approved directed studies course in marine studies or in any department of the university. The project normally is limited to one of the six required courses. The project requirement can also be met, with prior approval, by completion of a major course-related project or other outside project in which a significant amount of independent study is involved.

## 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 lists. Two courses | 16 |
| must be above the introductory level. |  |

## Humanities

| MARS 3310 | Water Resources Policy and <br> Management |
| :--- | :--- |
| Sciences |  |
| EEMB 1450 | Introduction to Marine Biology |
| EEMB 2616 | Invertebrate Zoology |
| EEMB 5504 | Biology of Corals |
| EEMB 5506 | Biology and Ecology of Fishes |
| EEMB 5508 | Marine Birds and Mammals |
| and EEMB 5509 | and Lab for EEMB 5508 |
| EEMB 5512 | Tropical Terrestrial Ecology |
| EEMB 5516 | Oceanography |
| and EEMB 5517 | and Lab for EEMB 5516 |
| EEMB 5518 | Ocean and Coastal Processes |
| EEMB 5520 | Coral Reef Ecology |
| EEMB 5522 | Experimental Design Marine Ecology |
| and EEMB 5523 | and Lab for EEMB 5522 |
| EEMB 5528 | Marine Conservation Biology |
| EEMB 5532 | Physiological and Molecular Marine |
| EEMB 5534 | Ecology |
| and EEMB 5535 | Borine Invertebrate Zoology and |
| and Lab for EEMB 5534 |  |
| EEMB 5536 | Ocean and Coastal Sustainability |
| EEMB 5589 | Diving Research Methods |
| ENVR 1120 | Oceans and Coasts |
| ENVR 5210 | Environmental Planning |
| ENVR 5242 | Ancient Marine Life |
| and ENVR 5243 | and Lab for ENVR 5242 |
| MARS 3210 | Marine Mammals |
| MARS 3325 | Coastal Zone Management |
| MARS 3430 | Biology of Whales |

## Marine-Related Skill

| Code Title | Hours |
| :--- | ---: |
| Complete one of the following: | 3 |
| ENVR 3101 |  |
| Certification in a skill such as scuba, by a Merchant |  |
| Marine license, or by a comparable level of achievement |  |
| determined by the marine studies advisor. |  |

## Marine-Related Independent Study

Code Title Hours

This requirement may be satisfied by producing a research project on a marine-related topic, either as part of another course or independently. Acceptance of the project is at the discretion of the marine studies advisor.

## GPA Requirement

2.000 GPA required in the minor

## Mathematics

Website (https://cos.northeastern.edu/mathematics)

## Alexandru Suciu, PhD

Professor and Chair
567 Lake Hall
617.373.2450
617.373 .5658 (fax)

Solomon M. Jekel, Associate Professor and Head Advisor, s.jekel@northeastern.edu

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 course work 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. 556)


## Bachelor of Science (BS)

- Mathematics (p. 558)
- Biology and Mathematics (p. 490)
- Computer Science and Mathematics (p. 330)
- Economics and Mathematics (p. 563)
- Graphic and Information Design and Mathematics (p. 95)
- Mathematics and Business Administration (p. 253)
- Mathematics and Physics (p. 568)
- Mathematics and Political Science (p. 569)


## Minor

- Mathematics (p. 571)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 621)

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## 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 |
| :---: | :---: | :---: |
| Problem Solving |  |  |
| MATH 1365 | Introduction to Mathematical Reasoning | 4 |
| History of Mathematics |  |  |
| MATH 2201 | History of Mathematics | 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 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 |  |
| Co-op Reflections |  |  |
| MATH 3000 | Co-op and Experiential Learning Reflection Seminar 1 | 1 |
| Mathematics Elective |  |  |
| Complete one course in the following range: |  | 4 |
| MATH 3001 to MATH 4899 |  |  |
| Required Physics |  |  |
| Physics 1 |  |  |
| Complete one of the | following: | 5 |


| PHYS 1161 and PHYS 1162 | Physics 1 and Lab for PHYS 1161 |  |
| :---: | :---: | :---: |
| PHYS 1151 <br> and PHYS 1152 <br> and PHYS 1153 | Physics for Engineering 1 <br> and Lab for PHYS 1151 <br> and Interactive Learning Seminar for PHYS 1151 |  |
| Physics 2 |  |  |
| Complete one of the following: |  | 5 |
| PHYS 1165 and PHYS 1166 | Physics 2 and Lab for PHYS 1165 |  |
| PHYS 1155 <br> and PHYS 1156 <br> and PHYS 1157 | Physics for Engineering 2 <br> and Lab for PHYS 1155 <br> and Interactive Learning Seminar for PHYS 1155 |  |
| Capstone |  |  |
| 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 54 semester hours in the major. |  |  |
| Upper-Division E | ctives |  |

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.
Program Requirement
128 total semester hours required

## Plan of Study

Five Years, Three Co-ops in Summer 2/Fall


Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 MATH 3560 or 3527 | 4 MATH elective | 4 Co-op | 0 |
|  | ENGW 3315 | 4 Elective | 4 |  |
|  | Foreign language core course | 4 |  |  |
|  | 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 <br> Upper- <br> division <br> elective | 4 Co-op | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 MATH 3175 | 4 |
|  | MATH | 4 |
|  | elective |  |
|  | MATH 4025 | 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 |
| 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 |  |  |  |  |  |  |
|  | 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 |  |  |  |  |  |  |
| language core course |  |  |  |  |  |  |  |
| EESC 2000 | 1 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 0 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| MATH 2201 | 4 | Co-op | 0 | Co-op | 0 | MATH elective | 4 |
| Elective | 4 |  |  |  |  | Elective | 4 |
| Elective | 4 |  |  |  |  |  |  |
| language core course |  |  |  |  |  |  |  |
| MATH 3000 | 1 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 8 |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| ENGW 3315 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| MATH 3560 <br> or 3527 | 4 |  | Elective | 4 |
| MATH 4000 | 1 |  |  |  |
| Foreign <br> language <br> core course | 4 |  |  |  |
| Elective | 4 |  |  | 8 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| MATH 3150 | 4 MATH 3175 | 4 |
| MATH <br> elective | 4 MATH 4025 | 4 |
| Elective | 4Upper- <br> division <br> elective <br> Upper- <br> division <br> elective4Upper- <br> division <br> elective$\quad 46$ |  |

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## 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 |
| :---: | :---: | :---: |
| Problem Solving |  |  |
| MATH 1365 | Introduction to Mathematical Reasoning | 4 |
| Calculus |  |  |
| 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 |
| Intermediate and Advanced Mathematics |  |  |
| 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 |
| Co-op Reflections |  |  |
| MATH 3000 | Co-op and Experiential Learning Reflection Seminar 1 | 1 |
| Mathematics Electives |  |  |
| Complete four | s in the following range: | 16 |

MATH 3101 to MATH 4899
Required Physics
Physics 1
Complete one of the following: 5
PHYS $1161 \quad$ Physics 1
and PHYS 1162 and Lab for PHYS 1161
PHYS 1151 Physics for Engineering 1
and PHYS 1152 and Lab for PHYS 1151
and PHYS 1153 and Interactive Learning Seminar for PHYS 1151

Physics 2
Complete one of the following: 5
PHYS 1165 Physics 2
and PHYS 1166 and Lab for PHYS 1165
PHYS $1155 \quad$ Physics for Engineering 2
and PHYS 1156 and Lab for PHYS 1155
and PHYS 1157 and Interactive Learning Seminar for PHYS 1155

## Capstone

Complete one of the following: 4

| MATH 4025 | Applied Mathematics Capstone |
| :--- | :--- |
| MATH 5131 | Introduction to Mathematical Methods <br> 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

Complete three general electives numbered 3000 or above.
Hours

## 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 | 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 | 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 |  |  |  |  |
|  |  | Upperdivision 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 |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  |  | Upperdivision elective | 4 |  |  |  |  |
|  |  | MATH 4000 | 1 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | 0 MATH 3175 | 4 |



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 |  | 0 |  |
| Elective | 4 |  | 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 |  |  | 0 |
| EESC 2000 | 1 |  |  |  |
|  | 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 |  |  |  |
|  | 17 | 0 | 0 | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 3315 | 4 Co-op | 0 Co-op | O MATH <br> elective | 4 |
| MATH 3081 | 4 |  | Elective | 4 |
| MATH 4000 | 1 |  |  |  |
| MATH 3150 | 4 |  |  |  |
| Upper- <br> division <br> elective | 4 |  |  | 8 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| MATH | 4 Elective | 4 |
| elective | 4 MATH 4025 | 4 |
| MATH <br> elective |  |  |


| Upper- <br> division <br> elective | 4 Upper- <br> division <br> elective | 4 |
| :--- | :---: | :---: |
| Elective | 4 MATH <br> 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).



Organic Chemistry

| MATH 5131 | Introduction to Mathematical Methods <br> and Modeling |
| :--- | :--- | ---: |
| Biology/Mathematics Integrative Courses |  |$\quad 8$ 8-10

```
    BIOL 2301 to BIOL 5999
    CHEM 2311 to CHEM 5999
    EEMB 2290 to EEMB 5999
    ENVR 2310 to ENVR }599
    MATH 2280 to MATH 5999
    PHYS 2303 to PHYS }599
    PSYC 2290 to PSYC }599
```


## Writing Requirement

```
ENGW 3307 Advanced Writing in the Sciences 4
```


## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- <br> op | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | Discrete Structures and Seminar for CS 1800 (Integrative course) | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| CS 2510 <br> and CS 2511 | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | Logic and Computation and Lab for CS 2800 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3800 | Theory of Computation | 4 |
| CS 4300 | Computer Graphics (Integrative course) 1 | 4 |
| CS 4500 and CS 4501 | Software Development and Recitation for CS 4500 | 4 |

## Presentation Requirement

THTR $1170 \quad$ The Eloquent Presenter 1

## Computer Science 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 eight credits of CS, IS or DS classes that are not 8 already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900
1
CS 4300 satisfies the capstone requirement.

## Mathematics Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Calculus Courses |  | 4 |
| MATH 1341 | Calculus 1 for Science and Engineering <br> (a grade of C- or higher is required) | 4 |
| MATH 1342 | Calculus 2 for Science and Engineering <br> (a grade of C- or higher is required) | 4 |
| MATH 2321 | Calculus 3 for Science and Engineering | 4 |
| Mathematics Courses | 4 |  |
| MATH 2331 | Linear Algebra | 4 |
| MATH 2341 | Differential Equations and Linear <br> MATH 3lgebra for Engineering | 4 |


| MATH 3175 | Group Theory | 4 |
| :---: | :---: | :---: |
| MATH 3527 | Number Theory 1 | 4 |
| Mathematics Electives |  |  |
| Complete three | es in the following range: | 12 |
| MATH 3001 to MATH 4999 but not MATH 4000 |  |  |
| Supporting Course |  |  |
| Code | Title | Hours |
| Complete one of the following: |  | 4 |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| IA 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 21 st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |


| Computer Science Writing Requirement |  |  |
| :--- | :--- | ---: |
| Code <br> College Writing | Title | Hours |
| ENGW 1111 | First-Year Writing | 4 |


| Advanced Writing in the Disciplines |  |
| :--- | :--- |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Code Title Hours

Complete seven general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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 <br> Sample Patterns:

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


Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 3500 | 4 | CS 1210 | 1 | Elective |  | Co-op |  |
| MATH 2331 | 4 | CS 3000 | 4 | MATH 3081 | 4 |  |  |
| MATH 2341 | 4 | CS 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 | 4 Elective | 4 Co-op |  |
|  | elective |  |  |  |
|  | CS 4300 | 4 Elective | 4 |  |
|  | ENGW 3302 | 4 |  | 0 |
|  | MATH 3175 | 4 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :--- | :---: | ---: |
| Co-op | CS 4500 <br> and CS 4501 | 4 Elective | 4 |
|  | CS elective | 4 Elective | 4 |
| Math <br> elective | 4 |  |  |
| Computing <br> and social <br> issues | 4 | 8 |  |
| 0 | 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 |
| :--- | :---: | :---: | :---: | ---: |
| CS 1800 | 5 CS 2510 | 5 Vacation | 0 Vacation | 0 |
| and CS 1802 | and CS 2511 |  |  |  |


| 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 |
| MATH 2321 | 4 MATH 2331 | 4 |  | 0 |
| MATH 2341 | 4 MATH 3081 | 4 |  |  |
| Elective | 4 CS 1210 | 1 |  | 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 |  |  |
|  | THTR 1170 | 1 | 8 | 0 |
|  | 0 | 17 |  |  |

## Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | CS 4500 and CS 4501 | 4 | Elective | 4 | Co-op | 0 |
|  |  | MATH 3527 | 4 | Elective | 4 |  |  |
|  |  | MATH elective | 4 |  |  |  |  |
|  |  | CS elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 CS elective | 4 |
|  | Computing <br> and social <br> issues | 4 |
|  | MATH <br> elective | 4 |
|  | MATH <br> 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 |
| CS 1800 <br> and CS 1802 | 5 CS 2510 <br> and CS 2511 | 5 | Vacation | 0 Vacation |$\quad 0$

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 |  | 0 | 0 |

$\begin{array}{lll}\text { Year } 3 & \\ \text { Fall } & \text { Hours Spring } \quad \text { Hours Summer } 1 \text { Hours Summer } 2 \text { Hours }\end{array}$

| CS 3000 | 4 Co-op | 0 Co-op | 0 Elective |
| :--- | :--- | ---: | :--- |
| MATH 2331 | 4 |  | Elective |


| MATH 3081 | 4 |  |  |  |
| :--- | ---: | ---: | :--- | :--- |
| Elective | 4 |  |  |  |
| THTR 1170 | 1 | 0 | 0 | 8 |
|  | 17 |  |  |  |

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 |  |  | 8 |
|  | 16 | 0 | 0 |  |

Year 5

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 | CS elective | 4 |
| MATH 3175 |  | Computing and social issues | 4 |
| MATH elective | 4 | MATH elective | 4 |
| CS elective |  | MATH elective | 4 |
| 16 |  |  | 16 |

Total Hours: 135

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| ECON 1000 or MATH 1000 | Economics at Northeastern <br> 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 four economics electives with not more than two at the introductory level: |  | 16 |
| Introductory |  |  |
| ECON 1200 to ECON 1990 |  |  |
| Intermediate/Advanced |  |  |
| ECON 2990 to ECON 3499 |  |  |
| ECON 3915 | Intermediate Selected Topics in Macroeconomics |  |
| ECON 3916 | Intermediate Selected Topics in Microeconomics |  |
| ECON 3990 | Elective |  |
| ECON 4600 to ECON 4681 |  |  |
| ECON 4915 to ECON 4916 |  |  |
| ECON 4965 | Undergraduate Teaching Experience 1 |  |
| ECON 4970 to ECON 4990 |  |  |
| ECON 4992 | Directed Study |  |
| ECON 4994 | Internship |  |

## Mathematics Requirements

Code Title Hours

| Required Mathematics |  |  |
| :--- | :--- | :--- |
| MATH 1365 | Introduction to Mathematical <br> 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 | 4 |
| MATH 2331 | Algebra for Engineering | 4 |
| MATH 3081 | Linear Algebra | 4 |

## Mathematics Electives

Complete two courses in the following range:
MATH 3001 to MATH 4999
The following courses are recommended:

| MATH 3150 | Real Analysis |  |
| :--- | :--- | ---: |
| MATH 4581 | Statistics and Stochastic Processes |  |
| Breadth Course <br> Code <br> Computer Science | Title | Hours |
| CS 1100 | Computer Science and Its Applications | 4 |

## Integrative Requirements

Code Title Hours

## Advanced Writing in the Disciplines

| ENGW 3308 | Advanced Writing in the Social <br> Sciences | 4 |
| :--- | :--- | ---: |
| Integrative Course | 4 |  |
| Complete one of the following: |  |  |
| ECON 4692 | Senior Economics Seminar |  |
| MATH 4025 | Applied Mathematics Capstone |  |
| MATH 5131 | Introduction to Mathematical Methods <br> and Modeling |  |

## Combined-Major GPA/Credit Requirement

Code Title
Hours
A GPA of 2.000 is required in the following six courses with no grade lower than C-

| ECON 1115 | Principles of Macroeconomics |
| :--- | :--- |
| ECON 1116 | Principles of Microeconomics |
| 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. Complete 76 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |
| :---: | :---: | :---: |
| Art and Design at Northeastern |  |  |
| ARTF 1000 | Art and Design at Northeastern | 1 |
| Art and Design Fundamentals |  |  |
| ARTF 1122 | 2D Fundamentals: Surface and Drawing (with optional ARTF 1123) | 4 |
| ARTF 2220 | 4D Fundamentals: Sequence and Drawing (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 optinal 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 |
| Art and Design Elective |  |  |
| ARTG 4551 can count as an Art and Design elective as well as a capstone. |  |  |
| Complete o | following: | 4 |


| ARTD 2360 | Photo Basics (with optional <br> ARTD 2361) |
| :--- | :--- |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |
| ARTG 2260 | Programming Basics |
| ARTF 1120 | Observational Drawing |
| ARTF 1121 | Conceptual Drawing |
| ARTF 1124 | 3D Fundamentals: Structure and <br> Drawing (with optional ARTF 1125 ) |
| ARTF 2223 | 5D Fundamentals: Experience and <br>  <br> Arawing (with optional ARTF 2224 ) |
| ARTG 2400 | Interaction Design 1: Responsive (with <br> optinal ARTG 2401 ) |
| ARTG 3351 | Time-Based Design |
| ARTG 3450 | Graphic Design 2 <br> ARTG 3460 |
| Identity and Brand Design |  |
| ARTG 4552 | Design Degree Project 2 |


| ARTG 4553 | Environmental Information Design |
| :--- | :--- |
| ARTG 4554 | Typography 3 |

Mathematics Requirements
Code Title Hours

Math Reasoning

| MATH 1365 | Introduction to Mathematical <br>  <br> Reasoning | 4 |
| :--- | :--- | :--- |

## Calculus

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 |
| Intermediate Math |  | 4 |
| MATH 2341 | Differential Equations and Linear <br>  <br> MATH 2331 | Linebra for Engineering |

Advanced Elective
Complete one of the following:

| MATH 3150 | Real Analysis |
| :--- | :--- |
| MATH 3175 | Group Theory |
| MATH 3560 | Geometry |

## Mathematics Elective

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

## Combined-Major Credit Requirement <br> Complete 80 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Mathematics Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| MATH 1342 | Calculus 2 for Science and Engineering | 4 |
| MATH 1365 | Introduction to Mathematical <br> Reasoning | 4 |
| MATH 3081 | Probability and Statistics | 4 |

Calculus and Linear Algebra (Required) and Differential
Equations (Recommended)
Complete either Option 1 or Option 2 below:
Option 1 (Recommended)

| MATH 2321 | Calculus 3 for Science and Engineering |
| :---: | :--- |
| MATH 2341 | Differential Equations and Linear <br> Algebra for Engineering |
| Option 2 <br> MATH 2321 <br> or MATH 2323 | Calculus 3 for Science and Engineering <br> Calculus 3 for Business, Economics, and <br> Mathematics |
| MATH 2331 | Linear Algebra |
| Co-op Reflections | Co-op and Experiential Learning <br> MATH 3000 |

## Mathematics Electives

Complete three courses in the range MATH 3001 to MATH 12
5999. The following courses are recommended:

| MATH 4681 | Probability and Risks |
| :--- | :--- |
| MATH 4682 | Theory of Interest and Basics of Life <br> Insurance |
| MATH 4581 | Statistics and Stochastic Processes |

Business Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Accounting |  |  |
| ACCT 1201 | Financial Accounting and Reporting | 4 |
| ACCT 2301 | Managerial Accounting | 4 |
| Finance |  | 4 |
| FINA 2201 | Financial Management |  |
| Marketing |  | 4 |
| MKTG 2201 | Introduction to Marketing |  |

Organizational Behavior
ORGB $3201 \quad$ Organizational Behavior

International Business/Social Responsibility
INTB 1203
International Business and Global Social Responsibility

Strategy in Action
STRT 4501
Strategy in Action

## 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 |
| :--- | :--- | ---: |
| Finance Requirements |  |  |
| FINA 3301 | Corporate Finance | 4 |
| FINA 3303 | Investments | 4 |
| FINA 4512 | Financial Risk Management | 4 |
| Finance Elective |  | 4 |
| Complete one of the following: |  |  |
| ENTR 3520 | Impact Investing and Social Finance |  |
| or FINA 2720 | Sustainability in the Business Environment |  |

## Second Business Concentration (Optional)

A second business concentration is optional and may be chosen from the following list. Requirements for the concentrations are listed below (p. 254).

- Accounting (p. 254)
- Business/Interdisciplinary (p. 254)
- Entrepreneurship and Innovation (p. 254)
- Management (p. 255)
- Management Information Systems (p. 255)
- Marketing (p. 255)
- Supply Chain Management (p. 255)


## Supplemental Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Economics |  | 4 |
| ECON 1115 | Principles of Macroeconomics | 4 |
| ECON 1116 | Principles of Microeconomics |  |
| Co-op Preparation |  |  |


| BUSN 1103 | Professional Development for Business |
| ---: | :--- |
|  | Co-op |
| 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

| CONCENTRATION IN ACCOUNTING |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Required Courses |  |  |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 | 4 |
| Electives |  |  |
| Complete two of the following: |  | 8 |
| ACCT 3403 | Accounting Information Systems |  |
| ACCT 3416 | Strategic Cost Analysis for Decision Making |  |
| ACCT 4412 | Auditing and Other Assurance Services |  |
| ACCT 4414 | Income Tax Determination and Planning |  |
| CONCENTRATION IN BUSINESS/INTERDISCIPLINARY |  |  |
| Code | Title | Hours |
| Complete four courses in consultation with approved D'Amore-McKim School of Business faculty member. |  | 16 |
| CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION |  |  |
| Note: The following courses do not count toward this concentration: |  |  |
| ENTR 1201 | The Entrepreneurial Universe |  |
| ENTR 3308 | Business Economic History of South Africa |  |
| ENTR 3318 |  |  |
| ENTR 3328 |  |  |
| ENTR 3338 | Field Research in Sustainable Energy in Iceland |  |
| ENTR 3346 |  |  |
| ENTR 4510 | Management Consulting Abroad |  |
| ENTR 4514 | Development Practice and Global Citizenship in India |  |
| Introductory Course |  |  |
| $\begin{aligned} & \text { ENTR } 2301 \\ & \text { or ENTR } 2303 \end{aligned}$ | Innovation! <br> Entrepreneurial Marketing and Selling | 4 |
| Capstone Course |  |  |
| Complete one of th | following: | 4 |


| ENTR 4501 | Business Planning for Technology Ventures |  |
| :---: | :---: | :---: |
| ENTR 4503 | Business Planning for Small and Medium Enterprises |  |
| ENTR 4505 | Entrepreneurial Growth Strategy for Technology Ventures |  |
| ENTR 4506 | Advanced Studies in Social Enterprise |  |
| Electives |  |  |
| Note: Only one non-ENTR course may be used as an elective. |  |  |
| Complete two of the following: |  | 8 |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |  |
| ENTR 3212 | Innovation for Social Change |  |
| ENTR 3217 | Global Family Business Leadership |  |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |  |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |  |
| ENTR 3306 | Global Entrepreneurship |  |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |  |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |  |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |  |
| ENTR 3520 | Impact Investing and Social Finance |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |
| MGMT 3302 | Negotiating in Business |  |

CONCENTRATION IN MANAGEMENT
Code Title Hours

## Required Course

MGMT 4501 Skills for Managerial Success 4

Electives
Note: Only one non-MGMT course may be used as an elective.
Complete three of the following:

| MGMT 3302 | Negotiating in Business |
| :--- | :--- |
| MGMT 3315 | Managing Organizational Change and <br> Disruption |
| MGMT 3330 | Developing Leaders for Global <br> Sustainability |
| MGMT 3340 | Managing Healthcare Organizations: <br> Critical Challenges and New <br>  |


| MGMT 3350 | Managing a Diverse Workforce |  |
| :---: | :---: | :---: |
| MGMT 3360 | Law and the Legal Process |  |
| MGMT 3420 | Managing Human Capital |  |
| MGMT 3510 | Managing Global Teams Virtually and Locally |  |
| MGMT 3530 | Project Management |  |
| MGMT 4310 | The Management Practices of Great Organizations |  |
| MGMT 4410 | Human Resources and Workforce Analytics |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| MISM 3403 | Data Management in the Enterprise | 4 |
| MISM 4501 | Business Systems Integration | 4 |
| Electives |  |  |
| Note: Only one non-MISM course may be used as an elective. |  |  |
| Complete two of t | following: | 8 |
| MISM 2510 | Fundamentals of Information Analytics |  |
| MISM 3305 | Information Resource Management |  |
| MISM 3404 | Data Communications |  |
| MISM 3406 | Introduction to Web Design, Practices, and Standards |  |
| MISM 3501 | Information Visualization for Business |  |
| MISM 3515 | Data Mining for Business |  |
| MKTG 4508 | Digital Marketing |  |
| SCHM 3301 | Global Supply Chain Strategy |  |
| SCHM 3305 | Sourcing and Procurement |  |
| SCHM 3308 | Supply Chain Analytics |  |
| CONCENTRATION IN MARKETING |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| MKTG 3401 | Marketing Research | 4 |
| MKTG 3301 or MKTG 4506 | Marketing Management Consumer Behavior | 4 |
| Electives |  |  |
| 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 | Marketing in the Service Sector |  |
| 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 |

## CONCENTRATION IN SUPPLY CHAIN MANAGEMENT Code Title Hours

## Required Courses

| SCHM 3301 | Global Supply Chain Strategy | 4 |
| :--- | :--- | :--- |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation <br> $\quad$ Management | 4 |

## Elective

| Complete one of the following: |  |
| :--- | :--- |
| SCHM 3308 | Supply Chain Analytics |
| SCHM 3320 | Demand Planning and Forecasting |
| SCHM 3330 | Sustainability and Supply Chain <br> Management |
| SCHM 4401 | Advanced Problems in Supply Chain <br> Management |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Mathematics Requirements
Code Title Hours Calculus
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 |
| Intermediate and Advanced Math |  |  |
| MATH 2341 | Differential Equations and Linear | 4 |
|  | Algebra for Engineering |  |
| MATH 2331 | Linear Algebra | 4 |
| MATH 3081 | Probability and Statistics | 4 |
| MATH 3150 | Real Analysis | 4 |
| MATH 3175 | Group Theory | 4 |



## PHYS 3000 to PHYS 7999

## Integrative Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| PHYS 3601 | Classical Dynamics | 4 |
| MATH 4545 | Fourier Series and PDEs | 4 |
| or MATH 4525 | Applied Analysis |  |

## Combined-Major Credit Requirement

Complete 83 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 |
| :--- | :---: | :---: | :---: | ---: |
| 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 |  | 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 PHYS 2305 | 4 |  |  |
| PHYS 2371 | 3 Elective | 4 |  |  |
| PHYS 2372 | 1 EESC 2000 | 1 | 0 | 0 |
|  | 16 | 17 | 0 |  |

Year 3

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | ---: | :---: | ---: | Hours

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 MATH 3175 | 4 Elective | 4 Co-op | 0 |
|  | MATH <br> elective | 4 Elective | 4 |  |
|  | PHYS <br> undergraduate <br> elective | 4 |  |  |
|  | ENGW 3315 | 4 | 8 | 0 |

Year 5
Fall Hours Spring Hours
Co-op 0 PHYS 4
undergraduate
elective

| PHYS <br> undergraduatı <br> 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.

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Mathematics Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Problem Solving |  |  |
| 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 cou required in the req | es in the following range that are not ements above: | 8 |

## MATH 30001 to MATH 5999

Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Political Science | Required Courses |  |
| 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 |  | 4 |
| POLS 2325 | Ancient Philosophy and Political | 4 |
|  | Thought | 4 |
| POLS 2328 | Modern Political Thought | 4 |
| POLS 2330 | American Political Thought | 4 |
| POLS 2332 | Contemporary Political Thought |  |
| Political Science Electives |  |  |
| 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. )
- Campaigns and elections (p. 570)
- Comparative politics (p. 570)
- Identity, culture, and politics (p. 571)
- International relations and diplomacy (p. 571)
- Law and legal studies (p. 571)
- Public policy (p. 571)
- Security studies (p. 571)


## Integrative Requirement

Code Title

Hours
POLS 3402

## Mathematics and Political Science Combined-Major Credit Requirement

Complete 68 semester hours in the major.

## 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 3305 | The American Presidency |  |
| POLS 3307 | Public Policy and Administration |  |
| POLS 3310 | Public Opinion, Voting, and Elections |  |

CONCENTRATION IN CAMPAIGNS AND ELECTIONS
Code Title Hours

## Required Courses

With advisor approval, a co-op or internship may be substituted in place of POLS 4947:
POLS $3160 \quad$ Campaign Strategy 4
POLS 4947 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 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |

CONCENTRATION IN COMPARATIVE POLITICS
Code Title Hours

| Theoretical Requirement | Hours |
| :--- | ---: |
| Complete one of the following: | 4 |


| POLS 2370 | Religion and Politics |
| :--- | :--- |
| POLS 3418 | Nationalism |
| POLS 3427 | Civil-Military Relations |
| POLS 3487 | Politics of Developing Nations |
| Regional Requirements |  |
| Complete two of the following: | 8 |



MATH $1252 \quad$ 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 $4699{ }^{1}$
${ }^{1}$ 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
110 Dana Research Center
617.373.2902
617.373 .2943 (fax)
physics@northeastern.edu
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 worldrenowned faculty.

## Programs

## Bachelor of Science (BS)

- Physics (p. 572)
- Applied Physics (p. 577)
- Biomedical Physics (p. 582)
- Computer Science and Physics (p. 339)
- Mathematics and Physics (p. 568)
- Physics and Music with Concentration in Music Technology (p. 194)
- Physics and Philosophy (p. 592)


## Bachelor of Science in Chemical Engineering (BSCHE)

- Chemical Engineering and Physics (p. 383)


## Bachelor of Science in Computer Engineering (BSCompE) <br> - Computer Engineering and Physics (p. 402)

## Bachelor of Science in Electrical Engineering (BSEE)

- Electrical Engineering and Physics (p. 411)


## Bachelor of Science in Mechanical Engineering (BSME)

- Mechanical Engineering and Physics (p. 430)


## Minor

- Physics (p. 603)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 621)

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Physics Major Requirements

| Code Title | Hours |
| :--- | ---: |
| Introductory Physics |  |
| Physics 1 | 5 |
| Complete one of the following: |  |


| $\|$PHYS 1161 <br> and PHYS 1162 | Physics 1 <br> and Lab for PHYS 1161 |
| :--- | :--- |
| PHYS 1151 <br> and PHYS 1152 <br> and PHYS 1153 | Physics for Engineering 1 <br> and Lab for PHYS 1151 <br> and Interactive Learning Seminar for <br> PHYS 1151 |
| Physics 2 |  |
| Complete one of the following: |  |


| PHYS 1165 | Physics 2 |
| :--- | :--- |
| and PHYS 1166 | 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 |


| Intermediate Physics |  | 4 |
| :--- | :--- | ---: |
| PHYS 2303 | Modern Physics | 4 |
| PHYS 2305 | Thermodynamics and Statistical <br> Mechanics | 4 |
| PHYS 2371 | Electronics |  |
| and PHYS 2372 | and Lab for PHYS 2371 | 4 |
| Advanced Physics |  | 4 |
| PHYS 3600 | Advanced Physics Laboratory | 4 |
| PHYS 3601 | Classical Dynamics | 4 |
| PHYS 3602 | Electricity and Magnetism | 4 |
| PHYS 3603 | Electromagnetic Waves and Optics | 4 |
| PHYS 5115 | Quantum Mechanics |  |

## 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 advisor for additional information.

## Senior Capstone

PHYS 5318
Principles of Experimental Physics
4

## Supporting Courses



## Physics Major Credit Requirement <br> Complete 91 semester hours in the major. <br> Program Requirement

133 total semester hours required

## Plan of Study <br> 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. Thus, for example, a student who first enrolled in the fall of an even-numbered year should consult the plans of study listed below under Even-Numbered Year One. Those who enter in the fall of an odd-numbered year should consult the plans of study listed below under Odd-Numbered Year One.

## Even-Numbered Year One

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 |  |
| MATH 1341 | 4 PHYS 1166 | 1 |  |  |


| PHYS 1161 | 4 PHYS 1167 | 0 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| PHYS 1162 | 1 PHYS 1211 | 4 |  |  |
| PHYS 1163 | 0 MATH 1342 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  | 0 |
| Elective | 4 |  | 0 | 0 |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| PHYS 2303 $^{1}$ | 4 PHYS 2305 | 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 |  |  | 0 |  |
| CHEM 1213 | 0 | 17 | 0 |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | ---: |
| Co-op | PHYS $3602^{6}$ | 4 PHYS $3600^{4}$ | 4 Co-op |  |
|  | Technical <br> elective | 4 PHYS $3603^{7}$ | 4 |  |
|  | Elective | 4 |  |  |
|  | Elective | 4 | 8 | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | ---: |
| Co-op | PHYS $3601^{5}$ | 4 MATH 3081 | 4 Co-op |  |
|  | PHYS 5115 | 4 Elective | 4 |  |
|  | ENGW 3307 | 4 |  |  |
|  | Elective | 4 |  | 0 |

Year 5

| Fall | HoursSpring | Hours |
| :--- | :--- | ---: |
| Co-op | PHYS $5318^{9}$ | 4 |
|  | PHYS <br> advanced <br> elective | 4 |
|  | Technical <br> elective | 4 |
|  | Elective | 4 |
| 0 | 16 |  |

Total Hours: 133

## FOUR YEARS, TWO CO-OPS IN SUMMER 2/FALL

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 1000 | 1 PHYS 1165 | 4 MATH 2321 | 4 MATH 2331 | 4 |
| ENGW 1111 | 4 PHYS 1166 | 1 Elective | 4 Elective | 4 |
| MATH 1341 | 4 PHYS 1167 | 0 |  |  |
| PHYS 1161 | 4 PHYS 1211 | 4 |  |  |
| PHYS 1162 | 1 MATH 1342 | 4 |  |  |
| PHYS 1163 | 0 Elective | 4 |  |  |


| Elective | 4 |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | 18 | 17 | 8 | 8 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHYS $2303{ }^{1}$ | 4 | $\text { PHYS } 2305^{2}$ |  | $\text { PHYS } 3600^{4}$ | 4 | Co-op |  |
| PHYS $2371{ }^{3}$ | 3 | PHYS $3601{ }^{5}$ | 4 | Elective | 4 |  |  |
| PHYS $2372{ }^{3}$ | 1 | Technical elective | 4 |  |  |  |  |
| MATH 2341 | 4 | Elective | 4 |  |  |  |  |
| CHEM 1211 | 4 | EESC 2000 | 1 |  |  |  |  |
| CHEM 1212 | 1 |  |  |  |  |  |  |
| CHEM 1213 | 0 |  |  |  |  |  |  |
|  | 17 |  | 17 |  | 8 |  | 0 |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Co-op | PHYS $3602^{6}$ | 4 PHYS 3603 | 4 Co-op |  |
|  | PHYS 5115 | 4 MATH 3081 | 4 |  |
|  | ENGW 3307 | 4 |  |  |
|  | Elective | 4 |  | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | PHYS $5318^{9}$ | 4 |
|  | PHYS <br> advanced <br> elective | 4 |
|  | Technical <br> elective | 4 |
|  | Elective | 4 |
| 0 | 16 |  |

Total Hours: 133

## FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1

Year 1
$\left.\begin{array}{lrccr|}\hline \text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { PHYS 1000 } & 1 \text { PHYS 1165 } & 4 & \text { Vacation } & 0 \text { Vacation }\end{array}\right) 0$

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | :--- | :--- | ---: | Hours


| EESC 2000 | 1 |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| 18 | 0 | 0 | 8 |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 3601 | 4 Co-op | 0 Co-op | 0 MATH 3081 | 4 |
| MATH 2331 | 4 |  | Elective | 4 |
| MATH 2341 | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
|  | 16 | 0 | 0 | 8 |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| PHYS $3602^{6}$ | 4 Co-op | 0 Co-op | 0 |  |
| PHYS $5115^{8}$ | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  | 0 | 0 |
|  | 16 | 0 | 0 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| PHYS 3603 $^{7}$ | 4 PHYS $5318^{9}$ | 4 |
| ENGW 3315 | 4 PHYS <br> advanced <br> elective | 4 |
| Technical <br> elective | Technical <br> elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 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 |
| :--- | ---: | :---: | ---: | ---: | ---: |
| 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 PHYS 1211 | 4 |  |  |
| MATH 1341 | 4 MATH 1342 | 4 |  |  |
| ENGW 1111 | 4 CHEM 1211 | 4 |  |  |
| Elective | 4 CHEM 1212 | 1 |  | 8 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 2303 $^{1}$ | 4 Co-op | Co-op | PHYS 2305 | 4 |
| PHYS $2371^{3}$ | 3 |  | Elective | 4 |
| PHYS 2372 | 1 |  |  |  |
| PHYS $3602^{6}$ | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
| EESC 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ${\text { PHYS } 3601^{5}}^{\text {H }}$ | 4 Co-op | Co-op | PHYS $3600^{4}$ | 4 |
| PHYS $3603^{7}$ | 4 |  | MATH 3081 | 4 |


| Elective | 4 |  |  |  |
| :--- | ---: | ---: | :--- | :--- |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |

Year 4

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| PHYS $5115^{8}$ | 4 | PHYS $5318{ }^{9}$ | 4 |
| ENGW 3307 |  | PHYS <br> advanced elective | 4 |
| Technical elective | 4 | Technical elective | 4 |
| Elective | 4 | Elective | 4 |
| 16 |  |  | 16 |

Total Hours: 133

## Odd-Numbered Year One

FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL
Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 1000 | 1 MATH 1342 | 4 Vacation | 0 Vacation | 0 |
| ENGW 1111 | 4 PHYS 1165 | 4 |  |  |
| MATH 1341 | 4 PHYS 1166 | 1 |  |  |
| PHYS 1161 | 4 PHYS 1167 | 0 |  |  |
| PHYS 1162 | 1 PHYS 1211 | 4 |  | 0 |
| PHYS 1163 | 0 Elective | 4 |  | 0 |
| Elective | 4 |  | 0 |  |
|  | 18 | 17 |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 2303 $^{1}$ | 4 PHYS 2305 $^{2}$ | 4 Vacation | 0 Co-op | 0 |
| PHYS 2371 | 3 MATH 2331 | 4 |  |  |
| PHYS 2372 $^{3}$ | 1 MATH 2341 | 4 |  |  |
| MATH 2321 | 4 EESC 2000 | 1 |  |  |
| CHEM 1211 | 4 Elective | 4 |  |  |
| CHEM 1212 | 1 |  |  | 0 |
| CHEM 1213 | 0 | 17 | 0 |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | ---: | ---: |
| Co-op | 0 PHYS $3601^{5}$ | 4 PHYS $3600^{4}$ | 4 Co-op | 0 |
|  | PHYS $3602^{6}$ | 4 Elective | 4 |  |
|  | Elective | 4 |  |  |
|  | Elective | 4 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 PHYS $5115^{8}$ | 4 PHYS $3603{ }^{7}$ | 4 Co-op | 0 |
|  | ENGW 3315 | 4 MATH 3081 | 4 |  |
|  | Technical elective | 4 |  |  |
|  | Elective | 4 |  |  |
|  | 0 | 16 | 8 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 PHYS $5318^{9}$ | 4 |
|  | PHYS <br> advanced <br> elective | 4 |
| Technical <br> elective <br> Elective | 4 |  |
| 0 | 16 |  |

Total Hours: 133

## FOUR YEARS, TWO CO-OPS IN SUMMER 2/FALL

| Year 1 |  |  |  |  |
| :--- | ---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| PHYS 1000 | 1 MATH 1342 | 4 MATH 2321 | 4 MATH 2331 | 4 |
| ENGW 1111 | 4 PHYS 1165 | 4 Elective | 4 Elective | 4 |
| MATH 1341 | 4 PHYS 1166 | 1 |  |  |
| PHYS 1161 | 4 PHYS 1167 | 0 |  |  |
| PHYS 1162 | 1 PHYS 1211 | 4 |  |  |
| PHYS 1163 | 0 Elective | 4 |  | 8 |
| Elective | 4 |  | 8 |  |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PHYS 2303 $^{1}$ | $4{\text { PHYS } 2305^{2}}^{2}$ | 4 PHYS $3600^{4}$ | 4 Co-op |  |  |
| PHYS 2371 ${ }^{3}$ | 3 PHYS $3602^{6}$ | 4 PHYS $3603^{7}$ | 4 |  |  |
| PHYS 2372 | 1 Elective | 4 |  |  |  |
| MATH 2341 | 4 Elective | 4 |  |  |  |
| CHEM 1211 | 4 EESC 2000 | 1 |  |  |  |
| CHEM 1212 | 1 |  |  | 0 |  |
| CHEM 1213 | 0 | 17 | 8 |  |  |
|  | 17 |  |  |  |  |


| Year 3 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | ---: |
| Fall | PHYS $3601^{5}$ | 4 MATH 3081 | 4 Co-op |  |
| Co-op | PHYS $5115^{8}$ | 4 Elective | 4 |  |
|  | ENGW 3307 | 4 |  |  |
|  | $\begin{array}{l}\text { Technical } \\ \text { elective }\end{array}$ | 4 |  |  |
|  | 0 | 16 | 8 | 0 |

## Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | PHYS $5318^{9}$ | 4 |
|  | PHYS <br> advanced <br> elective | 4 |
| Technical <br> elective <br>  <br> 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 |
| :--- | :---: | :---: | :---: | :---: |
| PHYS 1000 | 1 PHYS 1165 | 4 Vacation | Vacation |  |
| ENGW 1111 | 4 PHYS 1166 | 1 |  |  |
| MATH 1341 | 4 PHYS 1167 | 0 |  |  |
| PHYS 1161 | 4 PHYS 1211 | 4 |  |  |
| PHYS 1162 | 1 Elective | 4 |  | 0 |
| PHYS 1163 | 0 |  | 0 |  |
| Elective | 4 | 13 |  |  |

Year 2


Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| PHYS 3602 | 4 Co-op | Co-op | PHYS 2305 | 4 |
| MATH 2331 | 4 |  | MATH 3081 | 4 |
| MATH 2341 | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
|  | 16 | 0 | 0 |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| PHYS $3601^{5}$ | 4 Co-op | Co-op | Vacation |  |
| PHYS $3603^{7}$ | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  | 0 | 0 |
|  | 16 | 0 | 0 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| PHYS $5115^{8}$ | 4 PHYS $5318^{9}$ | 4 |
| ENGW 3307 | 4 PHYS <br> advanced <br> elective | 4 |
| Technical | 4 Technical |  |
| elective | 4 Elective |  |$\quad 4$.

Total Hours: 129

## 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 | 8 | 8 |
|  | CHEM 1213 | 0 | 8 | 8 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| PHYS $2303{ }^{1}$ | 4 Co-op | Co-op | PHYS $3600{ }^{4}$ | 4 |
| PHYS $2371{ }^{3}$ | 3 |  | Elective | 4 |
| PHYS $2372{ }^{3}$ | 1 |  |  |  |
| PHYS $3602{ }^{6}$ | 4 |  |  |  |
| Elective | 4 |  |  |  |
| EESC 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 5115 | 4 Co-op | Co-op | PHYS 2305 | 4 |
| ENGW 3307 | 4 |  | MATH 3081 | 4 |
| Technical <br> elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| ${\text { PHYS } 3601^{5}}^{4}$ | 4 PHYS $5318^{9}$ | 4 |
| PHYS $3603^{7}$ | 4 PHYS <br> advanced <br> elective | 4 |
| Elective | 4 Technical |  |
| elective |  |  |$\quad 4$.

Total Hours: 133

1 PHYS 2303 offered every fall and spring
2 PHYS 2305 offered every spring and summer 2 (even years)
3 PHYS 2371/2372 offered every fall
4 PHYS 3600 offered every summer 1 and summer 2
5 PHYS 3601 offered spring and fall (even years)
6 PHYS 3602 offered every fall and spring
7 PHYS 3603 offered fall (even years) and summer 1 (odd years)
8 PHYS 5115 offered every fall and spring
9 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Applied Physics Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introductory Physics |  |  |
| Physics 1 |  |  |
| Complete one of the following: |  | 5 |
| PHYS 1161 and PHYS 1162 | Physics 1 and Lab for PHYS 1161 |  |
| PHYS 1151 <br> and PHYS 1152 <br> and PHYS 1153 | Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151 |  |
| Physics 2 |  |  |
| Complete one of the | following: | 5 |


| PHYS 1165 | Physics 2 |
| :--- | :--- |
| and PHYS 1166 | 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

## Intermediate Physics

| PHYS 2303 | Modern Physics | 4 |
| :--- | :--- | :---: |
| PHYS 2305 | Thermodynamics and Statistical | 4 |
|  | Mechanics | 4 |
| PHYS 2371 | Electronics | 4 |
| and PHYS 2372 | and Lab for PHYS 2371 |  |

## Advanced Physics

PHYS 3600 Advanced Physics Laboratory 4
PHYS 3602 Electricity and Magnetism 4
PHYS 3603 Electromagnetic Waves and Optics 4

Advanced Physics Electives
Complete three of the following: 12

| PHYS 3601 | Classical Dynamics |
| :--- | :--- |
| PHYS 5111 | Astrophysics and Cosmology |
| PHYS 5113 | Introduction to Particle and Nuclear <br> Physics |
| PHYS 5115 | Quantum Mechanics |
| 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 <br>  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 advisor for additional information. PHYS $4996 \quad$ Experiential Education Directed Study 4

## Senior Capstone

PHYS 5318
Principles of Experimental Physics 4
Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Mathematics |  |  |
| 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 <br>  Algebra for Engineering | 4 |

## 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 |
| Technical Electives |  |  |
| Complete 16 seme following: | er hours of technical electives from the | 16 |
| MATH 2280 | Statistics and Software |  |
| MATH 2285 | Introduction to Multisample Statistics |  |
| MATH 2321 to M | TH 5999 |  |
| PHYS 2303 to PH | S 7999 |  |
| CHEM 2311 to C | EM 5999 |  |
| BIOL 2301 to BIO | 5999 |  |
| ENVR 2300 to EN | R 5999 |  |
| CS 2990 to CS 49 |  |  |
| CHME 2001 to C | ME 4699 |  |
| CIVE 2001 to CIV | 4699 |  |
| EECE 2001 to EE | 5999 |  |
| ME 2001 to ME 4 |  |  |
| IE 2001 to IE 469 |  |  |

## 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. Thus, for example, a student who first enrolled in the fall of an even-numbered year should consult the plans of study listed below under Even-Numbered Year One. Those who enter in the fall of an odd-numbered year should consult the plans of study listed below under Odd-Numbered Year One.

## Even-Numbered Year One

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 | 0 Vacation | 0 |
| PHYS 1161 | 4 PHYS 1166 | 1 |  |  |
| PHYS 1162 | 1 PHYS 1167 | 0 |  |  |
| PHYS 1163 | 0 PHYS 1211 | 4 |  |  |
| ENGW 1111 | 4 MATH 1342 | 4 |  | 0 |
| MATH 1341 | 4 Elective | 4 |  | 0 |
| Elective | 4 |  | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 2303 $^{1}$ | 4 PHYS 2305 | 4 | Vacation | 0 Co-op |$\quad 0$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | ---: |
| Co-op | PHYS $3602^{5}$ | 4 PHYS $3600^{4}$ | 4 Co-op | 0 |
| Technical <br> elective | 4 PHYS $3603^{6}$ | 4 |  |  |
| Technical <br> elective | 4 |  |  |  |
| Elective | 4 | 8 | 0 |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 ENGW 3307 | 4 Elective | 4 Co-op | 0 |
| PHYS <br> advanced <br> elective | 4 Elective | 4 |  |  |
| PHYS <br> advanced <br> elective | 4 |  |  |  |
| Technical <br> elective | 4 | 8 | 0 |  |
| 0 | 16 |  |  |  |

Year 5

| Fall | Hours | Spring | Hours |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | PHYS $5318{ }^{7}$ | 4 |  |  |
|  |  | PHYS <br> advanced elective | 4 |  |  |
|  |  | Technical elective | 4 |  |  |
|  |  | Elective | 4 |  |  |
|  | 0 |  | 16 |  |  |
| Total Hours: | 133 |  |  |  |  |
| FOUR YEAR <br> Year 1 | S, TWO | CO-OPS IN | SUMMER 2/FALL |  |  |
| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| PHYS 1000 | 1 | PHYS 1165 | 4 MATH 2321 | 4 MATH 2341 | 4 |
| PHYS 1161 | 4 | PHYS 1166 | 1 Elective | 4 Elective | 4 |
| 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 | 8 | 8 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| PHYS $2303{ }^{1}$ | 4 PHYS $2305{ }^{2}$ | 4 PHYS $3600{ }^{4}$ | 4 Co-op |  |
| PHYS $2371{ }^{3}$ | 3 PHYS $3602{ }^{5}$ | 4 Elective | 4 |  |
| PHYS $2372{ }^{3}$ | 1 Elective | 4 |  |  |
| MATH 2331 | 4 Elective | 4 |  |  |
| CHEM 1211 | 4 EESC 2000 | 1 |  |  |
| CHEM 1212 | 1 |  |  |  |
| CHEM 1213 | 0 |  |  |  |
|  | 17 | 17 | 8 | 0 |

Year 3

| Fall <br> Co-op | Hours | Spring <br> ENGW 3307 | Hours | Summer 1 PHYS $3603^{6}$ | Hours $4$ | Summer 2 <br> Co-op | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | PHYS <br> advanced elective | 4 | Technical elective | 4 |  |  |
|  |  | PHYS <br> advanced elective | 4 |  |  |  |  |
|  |  | Technical elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

## Year 4

| Fall | Hours | Spring |
| :--- | :--- | ---: | Hours

Technical
elective $\quad 4$

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 1000 | 1 PHYS 1165 | 4 | Vacation | 0 Vacation |$\quad 0$

Year 2 Hours Spring Summer 1 Hours Summer 2 Hours

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| PHYS $2303{ }^{1}$ | 4 Co-op | 0 Co-op | 0 PHYS $2305{ }^{2}$ | 4 |
| PHYS $2371{ }^{3}$ | 3 |  | MATH 2341 | 4 |
| PHYS $2372{ }^{3}$ | 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 $3602^{5}$ | 4 Co-op | 0 Co-op | 0 PHYS $3600^{4}$ | 4 |
| MATH 2331 | 4 |  | Elective | 4 |
| Technical <br> elective | 4 |  |  |  |
| Technical <br> elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |

Year 4
Fall $\quad$ Hours Spring $\quad$ Hours Summer $1 \quad$ Hours Summer 2 Hours

| ENGW 3307 | 4 Co-op | 0 Co-op | 0 | 0 |
| :--- | :---: | :---: | :---: | :---: |
| Technical <br> elective | 4 |  |  |  |
| Technical <br> elective | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 0 |

Year 5

| Fall | HoursSpring | Hours |
| :--- | :---: | ---: |
| PHYS $3603^{6}$ | 4 PHYS $5318^{7}$ | 4 |
| Elective | 4 PHYS <br> advanced <br> elective | 4 |
| Elective | 4 <br> PHYS <br> advanced <br> elective | 4 |


| Elective | 4 PHYS <br> advanced <br> elective | 4 |
| :--- | :---: | :---: |
| 16 | 16 |  |

Total Hours: 133

## Odd-Numbered Year One

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 | 0 |
| PHYS 1161 | 4 PHYS 1166 | 1 |  |  |
| PHYS 1162 | 1 PHYS 1167 | 0 |  |  |
| PHYS 1163 | 0 PHYS 1211 | 4 |  |  |
| ENGW 1111 | 4 MATH 1342 | 4 |  |  |
| MATH 1341 | 4 Elective | 4 |  | 0 |
| Elective | 4 |  | 0 |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 2303 $^{1}$ | 4 PHYS 2305 $^{2}$ | 4 Vacation | 0 Co-op | 0 |
| 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 |  |  | 0 |
| CHEM 1213 | 0 | 17 | 0 |  |
|  | 17 |  |  |  |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | PHYS $3602{ }^{5}$ |  | PHYS $3600{ }^{4}$ | 4 | Co-op | 0 |
|  |  | Technical elective | 4 | Elective | 4 |  |  |
|  |  | Technical elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

## Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | ENGW 3307 | 4 | PHYS $3603{ }^{6}$ | 4 | Co-op | 0 |
|  |  | PHYS <br> advanced elective | 4 | Elective | 4 |  |  |
|  |  | PHYS <br> advanced elective | 4 |  |  |  |  |
|  |  | Technical elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

## Year 5

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| Co-op | 0 | PHYS $5318{ }^{7}$ | 4 |
|  |  | PHYS <br> advanced <br> elective | 4 |


| Technical <br> elective <br> Elective | 4 |
| :--- | ---: |
| 0 | 16 |

Total Hours: 133
FOUR YEARS, TWO CO-OPS IN SUMMER 2/FALL
Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 1000 | 1 PHYS 1165 | 4 MATH 2321 | 4 MATH 2341 | 4 |
| PHYS 1161 | 4 PHYS 1166 | 1 Elective | 4 Elective | 4 |
| PHYS 1162 | 1 PHYS 1167 | 0 |  |  |
| PHYS 1163 | 0 MATH 1342 | 4 |  |  |
| MATH 1341 | 4 PHYS 1211 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  | 8 |
| Elective | 4 |  | 8 |  |

$\begin{array}{lll}\text { Year } 2 & \\ \text { Fall } & \text { Hours Spring } \quad \text { Hours Summer } 1 \text { Hours Summer } 2 \text { Hours }\end{array}$

| PHYS $2303{ }^{1}$ | 4 PHYS $2305{ }^{2}$ | 4 PHYS $3600{ }^{4}$ | 4 Co-op |  |
| :---: | :---: | :---: | :---: | :---: |
| PHYS $2371{ }^{3}$ | 3 PHYS $3602{ }^{5}$ | 4 PHYS $3603{ }^{6}$ | 4 |  |
| PHYS $2372{ }^{3}$ | 1 Elective | 4 |  |  |
| MATH 2331 | 4 Elective | 4 |  |  |
| CHEM 1211 | 4 EESC 2000 | 1 |  |  |
| CHEM 1212 | 1 |  |  |  |
| CHEM 1213 | 0 |  |  |  |
|  | 17 | 17 | 8 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Co-op | ENGW 3307 | 4 Technical <br> elective | 4 Co-op |  |
| PHYS <br> advanced <br> elective | 4 Elective | 4 |  |  |
| PHYS <br> advanced <br> elective | 4 |  |  |  |
| Technical <br> elective | 4 | 8 | 0 |  |

Year 4

| Fall | HoursSpring | Hours |
| :--- | :---: | ---: |
| Co-op | PHYS $5318^{7}$ | 4 |
| PHYS <br> advanced <br> elective | 4 |  |
| Technical <br> elective | 4 |  |
| Technical <br> elective | 4 |  |
| 0 | 16 |  |

[^14]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 |  | 0 |
| Elective | 4 |  | 0 |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| PHYS $2303{ }^{1}$ | 4 Co-op | 0 Co-op | 0 PHYS $3600{ }^{4}$ | 4 |
| PHYS $2371{ }^{3}$ | 3 |  | MATH 2341 | 4 |
| PHYS $2372{ }^{3}$ | 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 $3602^{5}$ | 4 Co-op | 0 Co-op | 0 PHYS 2305 ${ }^{2}$ | 4 |
| MATH 2331 | 4 |  | Elective | 4 |
| Technical <br> elective | 4 |  |  |  |
| Technical <br> elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| PHYS $3603^{6}$ | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| ENGW 3307 | 4 |  |  |  |
| Technical <br> elective | 4 |  |  |  |
| Elective | 4 |  |  | 0 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Technical <br> elective | 4 PHYS $5318^{7}$ | 4 |
| Elective | 4 PHYS <br> advanced <br> elective | 4 |
| Elective | 4 <br> PHYS <br> advanced <br> elective | 4 |


| Elective | 4 PHYS <br> advanced <br> elective | 4 |
| :--- | :---: | :---: |
| 16 | 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 |  |
| :--- | :--- | :---: | :---: | ---: | ---: |
| PHYS 1000 | 1 PHYS 1165 | 4 MATH 2321 | 4 MATH 2341 | 4 |  |
| PHYS 1161 | 4 PHYS 1166 | 1 Elective | 4 Elective | 4 |  |
| PHYS 1162 | 1 PHYS 1167 | 0 |  |  |  |
| PHYS 1163 | 0 PHYS 1211 | 4 |  |  |  |
| MATH 1341 | 4 MATH 1342 | 4 |  |  |  |
| ENGW 1111 | 4 Elective | 4 |  | 8 |  |
| Elective | 4 |  | 8 |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| PHYS $2303{ }^{1}$ | 4 Co-op | Co-op | PHYS $3600{ }^{4}$ | 4 |
| PHYS $2371{ }^{3}$ | 3 |  | Elective | 4 |
| PHYS $2372{ }^{3}$ | 1 |  |  |  |
| MATH 2331 | 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 $3602^{5}$ | 4 Co-op | Co-op | PHYS 2305 ${ }^{2}$ | 4 |
| ENGW 3307 | 4 |  | Technical <br> elective | 4 |
| Technical <br> elective | 4 |  |  |  |
| Elective | 4 |  |  | 8 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| PHYS $3603^{6}$ | 4 PHYS $5318^{7}$ | 4 |
| Technical <br> elective | 4 PHYS <br> advanced <br> elective | 4 |
| Technical <br> elective | 4 PHYS <br> advanced <br> elective | 4 |
| Elective | 4 PHYS <br> advanced <br> elective | 4 |
| 16 | 16 |  |

Total Hours: 133
1 PHYS 2303 offered every fall and spring
2 PHYS 2305 offered every spring and summer 2 (even years)
${ }^{3}$ PHYS 2371/2372 offered every fall
${ }^{4}$ PHYS 3600 offered every summer 1 and summer 2
${ }^{5}$ PHYS 3602 offered every fall and spring
${ }^{6}$ PHYS 3603 offered fall (even years) and summer 1 (odd years)
${ }^{7}$ 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

| Biomedical Physics Major Requirements <br> Code <br> Introductory Physics | Hours |
| :--- | ---: |
| Physics 1 |  |
| Complete one of the following: | 5 |

PHYS 1161 Physics 1
and PHYS 1162 and Lab for PHYS 1161
PHYS 1151 Physics for Engineering 1
and PHYS 1152 and Lab for PHYS 1151
and PHYS 1153 and Interactive Learning Seminar for
PHYS 1151

## Physics 2

Complete one of the following: 5
PHYS 1165 Physics 2
and PHYS 1166 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

| Intermediate Physics |  | 4 |
| :--- | :--- | ---: |
| PHYS 2303 | Modern Physics | 4 |
| PHYS 2305 | Thermodynamics and Statistical <br> Mechanics | 4 |
| PHYS 2371 | Electronics <br> and PHYS 2372 | and Lab for PHYS 2371 |

## Biomedical Physics

| 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 |

Advanced Physics Elective
Complete one of the following:

## MATH 4606 Mathematical and Computational Methods for Physics

PHYS 2300 to PHYS 7999

## 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.
PHYS 4996 Experiential Education Directed Study 4

Senior Capstone
PHYS 5318
Principles of Experimental Physics

## Supporting Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Mathematics |  |  |
| 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 |
| Computational Methods |  |  |
| PHYS 1211 <br> or PHYS 1130 or GE 1111 | Computational Problem Solving in Physics <br> Computing, Data, and Science <br> Engineering Problem Solving and Computation | 4 |
| Biology |  |  |
| 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 |
| Chemistry |  |  |
| CHEM 1211 and CHEM 1212 | General Chemistry 1 and Lab for CHEM 1211 | 5 |

Technical Electives
Complete two of the following: 8
MATH $2280 \quad$ Statistics and Software
MATH 2285 Introduction to Multisample Statistics
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 <br> 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 | General Chemistry 2 |  |
| and CHEM 1215 | and Lab for CHEM 1214 |  |
| and CHEM 1216 | and Recitation for CHEM 1214 | 5 |
| CHEM 2311 <br> and CHEM 2312 <br> and CHEM 2319 | Organic Chemistry 1 <br> and Lab for CHEM 2311 <br> and Recitation for CHEM 2311 | 5 |
| CHEM 2313 <br> and CHEM 2314 <br> and CHEM 2320 | Organic Chemistry 2 <br> and Lab for CHEM 2313 <br> and Recitation for CHEM 2313 |  |
| BIOL 2301 <br> and BIOL 2302 | Genetics and Molecular Biology <br> and Lab for BIOL 2301 | 5 |
| BIOL 3611 <br> and BIOL 3612 | Biochemistry <br> and Lab for BIOL 3611 | 5 |
| MATH 2280 | Statistics and Software | 5 |

## 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. Thus, for example, a student who first enrolled in the fall of an even-numbered year should consult the plans of study listed below under Even-Numbered Year One. Those who enter in the fall of an odd-numbered year should consult the plans of study listed below under Odd-Numbered Year One.

## Even-Numbered Year One

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 | 0 Vacation |

## Year 2

Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours
PHYS 2303 ${ }^{1} 4$ PHYS $2305^{2} 4$ Vacation 0 Co-op 0

| PHYS $2371{ }^{3}$ | 3 | MATH 2341 | 4 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PHYS $2372{ }^{3}$ | 1 | BIOL 1113 | 4 |  |  |
| MATH 2321 | 4 | BIOL 1114 | 1 |  |  |
| CHEM 1211 | 4 | EESC 2000 | 1 |  |  |
| CHEM 1212 | 1 | Elective | 4 |  |  |
| CHEM 1213 | 0 |  |  |  |  |
|  | 17 |  | 18 | 0 | 0 |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | PHYS $3602{ }^{6}$ | 4 | PHYS $3600^{4}$ | 4 | Co-op | 0 |
|  |  | PHYS $4621{ }^{10}$ | 4 | PHYS $3603{ }^{7}$ | 4 |  |  |
|  |  | Technical elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 PHYS $5318^{9}$ | 4 PHYS 4623 ${ }^{11}$ | 4 Co-op | 0 |
|  | ENGW 3307 | 4 Elective | 4 |  |
|  | PHYS <br> advanced <br> elective | 4 |  |  |
|  | Technical <br> elective | 4 | 8 | 0 |


| Year 5 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| Co-op | 0 PHYS $4651^{12}$ | 4 |
|  | PHYS $4652^{13}$ | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
| 0 | 16 |  |

Total Hours: 135

## FOUR YEARS, TWO CO-OPS IN SUMMER 2/FALL

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | ---: | ---: |
| PHYS 1000 | 1 PHYS 1165 | 4 MATH 2321 | 4 MATH 2341 | 4 |
| PHYS 1161 | 4 PHYS 1166 | 1 Elective | 4 Elective | 4 |
| PHYS 1162 | 1 PHYS 1167 | 0 |  |  |
| PHYS 1163 | 0 PHYS 1211 | 4 |  |  |
| MATH 1341 | 4 MATH 1342 | 4 |  |  |
| ENGW 1111 | 4 BIOL 1113 | 4 |  | 8 |
| BIOL 1111 | 4 BIOL 1114 | 1 |  | 8 |
| BIOL 1112 | 1 |  | 8 |  |
|  | 19 | 18 |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| PHYS $2303{ }^{1}$ | 4 PHYS $2305{ }^{2}$ | 4 PHYS 3600 ${ }^{4}$ | 4 Co-op |  |
| PHYS $2371{ }^{3}$ | 3 PHYS $3602{ }^{6}$ | 4 PHYS $4623{ }^{11}$ | 4 |  |
| PHYS $2372{ }^{3}$ | 1 Elective | 4 |  |  |
| CHEM 1211 | 4 Elective | 4 |  |  |
| CHEM 1212 | 1 EESC 2000 | 1 |  |  |


| Elective 4 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 |  | 17 | 8 | 0 |
| Year 3 |  |  |  |  |  |
| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op |  | PHYS $4621{ }^{10}$ | 4 PHYS 3603 ${ }^{7}$ | 4 Co-op |  |
|  |  | PHYS $4651{ }^{12}$ | 4 Technical elective | 4 |  |
|  |  | ENGW 3307 | 4 |  |  |
|  |  | PHYS advanced elective | 4 |  |  |
|  | 0 |  | 16 | 8 | 0 |
| Year 4 |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |
| Co-op |  | PHYS $4652{ }^{13}$ | 4 |  |  |
|  |  | PHYS $5318{ }^{9}$ | 4 |  |  |
|  |  | Technical elective | 4 |  |  |
|  |  | Elective | 4 |  |  |
|  | 0 |  | 16 |  |  |
| Total Hours: 135 |  |  |  |  |  |
| FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 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 $2303{ }^{1}$ | 4 Co-op | 0 Co-op | 0 | PHYS $2305{ }^{2}$ | 4 |
| PHYS $2371{ }^{3}$ | 3 |  |  | MATH 2341 | 4 |
| PHYS $2372{ }^{3}$ | 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 $4621^{10}$ | 4 Co-op | 0 | Co-op | 0 |
| PHYS $4623^{11}$ | 4 |  | Elective | 4 |
| Technical | 4 |  |  | 4 |
| elective |  |  |  |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS $3602^{6}$ | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| PHYS $4651^{12}$ | 4 |  |  |  |
| Technical <br> elective | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
|  | 16 | 0 | 0 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ${\text { PHYS } 3603^{7}}^{4}$ | 4 PHYS $4652^{13}$ | 4 |
| ENGW 3307 | 4 PHYS $5318^{9}$ | 4 |
| Elective | 4 PHYS <br> advanced <br> elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 135

## 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 2341 | 4 |
| PHYS 1161 | 4 PHYS 1166 | 1 Elective | 4 Elective | 4 |
| PHYS 1162 | 1 PHYS 1167 | 0 |  |  |
| PHYS 1163 | 0 MATH 1342 | 4 |  |  |
| MATH 1341 | 4 PHYS 1211 | 4 |  |  |
| ENGW 1111 | 4 BIOL 1113 | 4 |  |  |
| BIOL 1111 | 4 BIOL 1114 | 1 |  | 8 |
| BIOL 1112 | 1 |  | 8 |  |
|  | 19 | 18 | 8 |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PHYS $2303{ }^{1}$ | 4 Co-op | Co-op |  | PHYS $3600{ }^{4}$ | 4 |
| PHYS $2371{ }^{3}$ | 3 |  |  | PHYS $2305{ }^{2}$ | 4 |
| PHYS $2372{ }^{3}$ | 1 |  |  |  |  |
| PHYS $3602{ }^{6}$ | 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 $3603{ }^{7}$ | 4 Co-op | Co-op |  | Technical elective | 4 |
| PHYS $4621{ }^{10}$ | 4 |  |  | Elective | 4 |
| PHYS $4623{ }^{11}$ | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |
|  | 16 | 0 | 0 |  | 8 |

## Year 4

Fall Hours Spring Hours

| ENGW 3307 | 4 PHYS $5318^{9}$ | 4 |
| :--- | :--- | ---: |
| Technical <br> elective | 4 PHYS <br> advanced <br> elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 135

## Odd-Numbered Year One

FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL
Year 1
$\left.\begin{array}{lrccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { PHYS 1000 } & 1 \text { PHYS 1165 } & 4 & \text { Vacation } & 0 \text { Vacation }\end{array}\right) 0$

| Year 2 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| PHYS $2303{ }^{1}$ | 4 | PHYS $2305{ }^{2}$ | 4 | Vacation | 0 Co-op | 0 |
| PHYS $2371{ }^{3}$ | 3 | MATH 2341 | 4 |  |  |  |
| PHYS $2372{ }^{3}$ | 1 | BIOL 1113 | 4 |  |  |  |
| MATH 2321 | 4 | BIOL 1114 | 1 |  |  |  |
| CHEM 1211 | 4 | EESC 2000 | 1 |  |  |  |
| CHEM 1212 | 1 | Elective | 4 |  |  |  |
| CHEM 1213 | 0 |  |  |  |  |  |
|  | 17 |  | 18 |  | 0 | 0 |


| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | PHYS $3602{ }^{6}$ | 4 | PHYS $3600{ }^{4}$ | 4 | Co-op | 0 |
|  |  | PHYS <br> advanced elective | 4 | PHYS $4623{ }^{11}$ | 4 |  |  |
|  |  | Technical elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 PHYS 4621 ${ }^{10}$ | $4{\text { PHYS } 3603^{7}}^{12}$ | 4 Co-op | 0 |
|  | PHYS 4651 | 4 Elective | 4 |  |
|  | ENGW 3307 | 4 |  |  |
|  | Technical <br> elective | 4 |  | 0 |
| 0 | 16 | 8 | 0 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | 0 PHYS $4652^{13}$ | 4 |
|  | PHYS $5318^{9}$ | 4 |


| Elective | 4 |
| ---: | ---: | ---: |
| Elective | 4 |
| 0 | 16 |

Total Hours: 135
FOUR YEARS, TWO CO-OPS IN SUMMER 2/FALL
Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 1000 | 1 PHYS 1165 | 4 MATH 2321 | 4 MATH 2341 | 4 |
| PHYS 1161 | 4 PHYS 1166 | 1 Elective | 4 Elective | 4 |
| PHYS 1162 | 1 PHYS 1167 | 0 |  |  |
| PHYS 1163 | 0 PHYS 1211 | 4 |  |  |
| MATH 1341 | 4 MATH 1342 | 4 |  |  |
| ENGW 1111 | 4 BIOL 1113 | 4 |  |  |
| BIOL 1111 | 4 BIOL 1114 | 1 |  | 8 |
| BIOL 1112 | 1 |  | 8 |  |
|  | 19 | 18 |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| PHYS $2303{ }^{1}$ | 4 PHYS $2305{ }^{2}$ | 4 PHYS $3600^{4}$ | 4 Co-op |  |
| PHYS $2371{ }^{3}$ | 3 PHYS $3602{ }^{6}$ | 4 PHYS $3603{ }^{7}$ | 4 |  |
| PHYS $2372{ }^{3}$ | 1 Elective | 4 |  |  |
| CHEM 1211 | 4 Elective | 4 |  |  |
| CHEM 1212 | 1 EESC 2000 | 1 |  |  |
| Elective | 4 |  |  |  |
|  | 17 | 17 | 8 | 0 |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | PHYS $5318{ }^{9}$ | 4 | $\text { PHYS } 4623^{11}$ | 4 | Co-op |  |
|  |  | ENGW 3307 | 4 | Technical elective | 4 |  |  |
|  |  | PHYS <br> advanced elective | 4 |  |  |  |  |
|  |  | Technical elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | PHYS 4621 | 4 |
|  | PHYS 4651 | 4 |
|  | PHYS 4652 | 4 |
|  | Elective | 4 |
|  | 0 | 4 |
|  | 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 |
| :--- | ---: | :---: | :---: | ---: |
| 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 |  |  |



Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| PHYS 3602 | 4 Co-op | 0 Co-op | 0 PHYS 2305 $^{2}$ | 4 |
| Technical <br> elective | 4 |  | PHYS $3600^{4}$ | 4 |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
|  | 16 | 0 | 0 |  |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| PHYS $3603^{7}$ | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| PHYS $4621^{10}$ | 4 |  |  |  |
| PHYS 4623 | 4 |  | 0 | 0 |
| Elective | 4 | 0 | 0 |  |

Year 5

| Fall | Hours Spring |  | Hours |
| :---: | :---: | :---: | :---: |
| PHYS $4651{ }^{12}$ | 4 | PHYS $4652^{13}$ | 4 |
| ENGW 3307 | 4 | PHYS $5318^{9}$ | 4 |
| Elective | 4 | PHYS <br> advanced <br> elective | 4 |
| Elective | 4 | Elective | 4 |
|  | 16 |  | 16 |

Total Hours: 135

## 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 2341 | 4 |  |
| PHYS 1161 | 4 PHYS 1166 | 1 Elective | 4 Elective | 4 |  |
| PHYS 1162 | 1 PHYS 1167 | 0 |  |  |  |
| PHYS 1163 | 0 PHYS 1211 | 4 |  |  |  |
| MATH 1341 | 4 MATH 1342 | 4 |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |
| BIOL 1111 | 4 | BIOL 1114 113 | 4 | 1 |  |


| BIOL 1112 | 1 |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | 19 | 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 |  | Technical <br> elective | 4 |
| PHYS 2372 | 1 |  |  |  |
| CHEM 1211 | 4 |  |  |  |
| CHEM 1212 | 1 |  |  |  |
| CHEM 1213 | 0 |  |  | 8 |
| Elective | 4 |  | 0 |  |
| EESC 2000 | 1 | 0 |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| PHYS 3602 | 4 Co-op | Co-op | PHYS 2305 | 4 |  |
| ENGW 3307 | 4 |  | Elective | 4 |  |
| Technical <br> elective | 4 |  |  |  |  |
| Elective | 4 |  |  | 8 |  |
|  | 16 | 0 | 0 |  |  |

## Year 4

| Fall | Hours Spring | Hours |
| :--- | :--- | :--- |
| PHYS $3603^{7}$ | 4 PHYS 4651 $1^{12}$ | 4 |
| PHYS 4621 $1^{10}$ | 4 PHYS $4652^{13}$ | 4 |
| PHYS 4623 ${ }^{11}$ | 4 PHYS $5318^{9}$ | 4 |
| Elective | 4 PHYS <br> advanced <br> elective | 4 |
|  | 16 | 16 |

Total Hours: 135
${ }^{1}$ PHYS 2303 offered every fall \& spring
2 PHYS 2305 offered every spring \& summer 2 (even years)
3 PHYS 2371/2372 offered every fall
${ }^{4}$ PHYS 3600 offered every summer $1 \&$ summer 2
${ }^{5}$ PHYS 3601 offered spring \& fall (even years)
${ }^{6}$ PHYS 3602 offered every fall \& spring
${ }^{7}$ PHYS 3603 offered fall (even years) \& summer 1 (odd years)
${ }^{8}$ PHYS 5115 offered every fall \& spring
${ }^{9}$ PHYS 5318 offered every spring
${ }^{10}$ PHYS 4621 offered fall (even years) \& spring (odd years)
${ }^{11}$ PHYS 4623 offered fall \& summer 1 (even years)
${ }^{12}$ PHYS 4651 offered fall \& spring (odd years)
${ }^{13}$ 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Mathematics Requirements

Code Title Hours

## Calculus

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 |
| Intermediate and Advanced Math |  |  |
| 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 |
| Co-op Reflections |  |  |
| MATH 3000 | Co-op and Experiential Learning Reflection Seminar 1 | 1 |
| Mathematics Elective |  |  |
| Complete one | in the following range: | 4 |



| Physics 2 |  |
| :--- | :--- |
| Complete one of the following: |  |
| PHYS 1165 <br> and PHYS 1166 | Physics 2 <br> and Lab for PHYS 1165 |
| PHYS 1155 Physics for Engineering 2 <br> and PHYS 1156 and Lab for PHYS 1155 <br> and PHYS 1157 and Interactive Learning Seminar for <br> PHYS 1155 |  |

## Intermediate Physics

| PHYS 2303 | Modern Physics | 4 |
| :--- | :--- | ---: |
| PHYS 2305 | Thermodynamics and Statistical | 4 |
|  | Mechanics |  |
| PHYS 2371 | Electronics | 4 |
| and PHYS 2372 | and Lab for PHYS 2371 |  |

Advanced Physics

| PHYS 3600 | Advanced Physics Laboratory | 4 |
| :--- | :--- | :--- |
| PHYS 3602 | Electricity and Magnetism | 4 |
| Elective Courses |  | 8 |
| Complete two courses in the following range: |  |  |

PHYS 3000 to PHYS 7999

## Integrative Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| PHYS 3601 | Classical Dynamics | 4 |
| MATH 4545 | Fourier Series and PDEs | 4 |
| or MATH 4525 | Applied Analysis |  |

## Combined-Major Credit Requirement

Complete 83 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 2
$\left.\begin{array}{lcccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { MATH 2321 } & 4 \text { MATH 2341 } & 4 & \text { Vacation } & 0 \text { Co-op }\end{array}\right) 0$

Year 3

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | ---: | ---: | :---: | ---: | Hours

Year 4
Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours
Co-op 0 MATH 31754 Elective 4 Co-op 0


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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer Science Courses

Code Title Hours

Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |
| Computer Science Fundamental Courses |  |  |

A grade of C - or higher is required in computer science
fundamental courses.

CS 1800
and CS 1802
CS 2500
and CS 2501
Discrete Structures
5
and Seminar for CS 1800
Fundamentals of Computer Science
5

| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | Logic and Computation and Lab for CS 2800 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3800 | Theory of Computation | 4 |
| CS 4500 and CS 4501 | Software Development and Recitation for CS 4500 | 4 |
| Computer Science Senior Seminar |  |  |
| THTR 1170 | The Eloquent Presenter | 1 |

## Physics Courses

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| PHYS 1161 <br> and PHYS 1162 | Physics 1 <br> and Lab for PHYS 1161 | 5 |
| PHYS 1165 <br> and PHYS 1166 | Physics 2 <br> and Lab for PHYS 1165 | 5 |
| Intermediate Physics | Modern Physics | 4 |
| PHYS 2303 | Thermodynamics and Statistical <br> Mechanics | 4 |
| PHYS 2305 | Electronics <br> and Lab for PHYS 2371 (Integrative <br> and PHYS 2372 | course) |
| Advanced Physics | Advanced Physics Laboratory | 4 |
| PHYS 3600 | Electricity and Magnetism | 4 |
| PHYS 3602 |  | 4 |

## Capstone and Electives

Code Title Hours

Capstone
Complete either one computer science capstone or the 4
physics capstone:
Computer Science Capstone

| CS 4100 | Artificial Intelligence |
| :--- | :--- |
| CS 4300 | Computer Graphics |
| CS 4410 | Compilers |
| CS 4150 | Game Artificial Intelligence |
| CS 4550 | Web Development |
| Physics Capstone |  |
| PHYS 5318 | Principles of Experimental Physics |

## Computer Science Elective

The computer science elective is not required if the student has completed the computer science capstone (above). 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, IS, or DS classes that are not
already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 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 |
| :--- | :--- | ---: |
| Calculus | Calculus 1 for Science and Engineering |  |
| MATH 1341 | (a grade of C- or higher is required) | 4 |
| MATH 1342 | Calculus 2 for Science and Engineering <br> (a grade of C- or higher is required) | 4 |
| MATH 2321 | Calculus 3 for Science and Engineering | 4 |


| Additional Mathematics Requirements |  | 4 |
| :--- | :--- | :--- |
| MATH 2341 | Differential Equations and Linear <br> Algebra for Engineering | 4 |
| MATH 4525 | Applied Analysis |  |

## Supporting Course

| Code | Title <br> Complete one of the following: | Hours |
| :--- | :--- | ---: |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics | 4 |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |  |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |  |
| PHIL 1145 | Technology and Human Values |  |
| SOCL 1280 | The 21st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |


| Computer Science Writing Requirement |  |  |
| :--- | :--- | ---: |
| Code Title | Hours |  |
| College Writing |  | 4 |
| ENGW 1111 | First-Year Writing |  |
| Advanced Writing in the Disciplines |  |  |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions | 4 |
| or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |  |

## Required General Electives

## Code <br> Title

Hours
Complete six general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | MATH 1342 | 4 | MATH 2321 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | PHYS 1165 | 4 |  |  |  |  |
| MATH 1341 | 4 | PHYS 1166 | 1 |  |  |  |  |
| PHYS 1161 | 4 | ENGW 1111 | 4 |  |  |  |  |
| PHYS 1162 | 1 |  |  |  |  |  |  |
|  | 20 |  | 18 |  | 8 |  | 0 |

Year 2

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | 5 | CS 3000 | 4 Elective | 4 Co-op |  |
| MATH 2341 | 4 | PHYS 3602 | 4 Elective | 4 |  |
| PHYS 2371 | 3 | Computing and social issues | 4 |  |  |
| PHYS 2372 | 1 | PHYS 2305 | 4 |  |  |
| PHYS 2303 | 4 | CS 1210 | 1 |  |  |
|  | 17 |  | 17 | 8 | 0 |

Year 3

| Fall <br> Co-op | Hours | Spring CS 3800 | Hours <br> 4 | Summer 1 <br> PHYS 3600 | Hours <br> 4 | Summer 2 <br> Co-op | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Elective | 4 | Elective | 4 |  |  |
|  |  | PHYS <br> elective if CS capstone (CS elective if PHYS capstone) | 4 |  |  |  |  |
|  |  | CS or PHYS capstone | 4 |  |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :--- | :---: | ---: |
| Co-op | CS 4500 <br> and CS 4501 | 4 Elective | 4 |
|  | MATH 4525 | 4 Elective | 4 |
|  | PHYS <br> elective | 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 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | MATH 1342 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 | 4 CS 3000 | 4 Vacation | 0 Co-op | 0 |
| PHYS 2303 | 4 MATH 2321 | 4 |  |  |
| PHYS 2371 | 3 PHYS 2305 | 4 |  |  |
| PHYS 2372 | 1 MATH 2341 | 4 |  |  |
| CS 2800 | 5 CS 1210 | 1 |  | 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 |  |  |
|  | THTR 1170 | 1 | 8 | 0 |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | 0 CS 4500 <br> and CS 4501 | 4 Elective | 4 Co-op | 0 |
|  | MATH 4525 | 4 Elective | 4 |  |
|  | PHYS <br> elective | 4 |  |  |
|  | Computing <br> and social <br> issues | 4 | 8 | 0 |


| Year 5 |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours |
| Co-op | 0 | CS or PHYS capstone | 4 |
|  |  | PHYS elective if CS capstone (CS 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 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 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 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| PHYS 2303 | 4 |  |  |  |
| PHYS 2371 | 3 |  |  |  |
| PHYS 2372 | 1 |  |  | 0 |
| CS 2800 | 5 |  | 0 | 0 |
| and CS 2801 |  |  |  |  |
| CS 1210 | 1 | 0 | 0 |  |
|  | 18 |  |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | ---: | ---: | ---: | ---: |
| MATH 2321 | 4 Co-op | 0 Co-op | 0 PHYS 2305 | 4 |
| CS 3000 | 4 |  | PHYS 3600 | 4 |
| MATH 2341 | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
|  | 16 | 0 | 0 |  |


| 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 |  |  | 8 |
| THTR 1170 | 1 |  | 0 |  |
|  | 17 | 0 |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| CS 4500 <br> and CS 4501 | 4 CS or PHYS <br> capstone | 4 |
| MATH 4525 | 4 PHYS <br> elective if <br> CS capstone <br> (CS elective | 4 |
|  | if PHYS <br> capstone) |  |
| PHYS <br> elective | 4 Elective | 4 |


| Computing <br> and social <br> issues | 4 Elective | 4 |
| :--- | :---: | :---: |
|  | 16 | 16 |

Total Hours: 137

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Physics Major Requirements

Code Title Hours

Introductory Physics
Physics 1
PHYS $1161 \quad$ Physics $1 \quad 5$
and PHYS 1162 and Lab for PHYS 1161
Physics 2
PHYS $1165 \quad$ Physics 2 5
and PHYS 1166
and Lab for PHYS 1165
5

## Intermediate Physics

PHYS 2303 Modern Physics 4

PHYS 2305 Thermodynamics and Statistical 4
PHYS 2371
and PHYS 2372
Mechanics

| Advanced Physics |  | 4 |
| :--- | :--- | :--- |
| PHYS 3600 | Advanced Physics Laboratory | 4 |
| PHYS 3602 | Electricity and Magnetism | 4 |
| PHYS 5115 | Quantum Mechanics | 4 |
| PHYS 5318 | Principles of Experimental Physics |  |

## Music Requirements

Code Title
Hours
Music Theory and Composition
MUSC 1201 Music Theory $1 \quad 4$

MUSC 1202 Music Theory 2 4

| Elective | 4 MUSC xxxx <br> contemporary <br> elective | 4 |  | 0 |
| :--- | :--- | :--- | :--- | :--- |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 2371 $^{3}$ | 3 Co-op | Co-op | PHYS 3600 | 4 |
| PHYS 2372 | 1 |  | Elective | 4 |
| MUST 1301 | 4 |  |  |  |
| MUST 2431 | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
| EESC 2000 | 1 |  | 0 |  |
|  | 17 | 0 |  |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| PHYS $3602^{6}$ | 4 Co-op | Co-op | Vacation |  |
| MUSC 3541 | 4 |  |  |  |
| MUSC <br> xxxx music <br> technology <br> elective | 4 |  |  |  |
| Music <br> elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| PHYS 5115 $5^{8}$ | $4{\text { PHYS } 5318^{9}}^{2}$ | 4 |
| ENGW 3307 | 4 MUST 4611 | 4 |
| MUSC <br> xxxx music <br> technology <br> elective | 4 |  |
|  | 12 | 8 |

Total Hours: 128

## FOUR YEARS, ONE CO-OP IN SPRING/SUMMER 1

Year 1
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { PHYS 1000 } & 1 \text { PHYS 1165 } & 4 & \text { Vacation } & \text { Vacation }\end{array}\right]$

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHYS $2303{ }^{1}$ | 4 | PHYS $2305{ }^{2}$ | 4 | Vacation |  | Elective | 4 |
| PHYS $2371{ }^{3}$ | 3 | MUSC 1202 | 4 |  |  | Elective | 4 |
| PHYS $2372{ }^{3}$ | 1 | MUSC 2350 | 4 |  |  |  |  |
| MATH 2321 | 4 | MUSC xxxx contemporary elective | , |  |  |  |  |


| MUSC 1201 | 4 |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | 16 | 16 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :--- | :--- | :--- |
| PHYS 3602 | 4 Co-op | Co-op | PHYS 3600 | 4 |
| MUST 1301 | 4 |  | ENGW 3307 | 4 |
| MUST 2431 | 4 |  |  |  |
| MUST 3421 | 4 |  |  |  |
| EESC 2000 | 1 |  |  | 8 |
|  | 17 | 0 | 0 |  |

Year 4


Total Hours: 124

PHYS 2303 offered fall and spring
PHYS 2305 offered every spring and summer 2 (even years)
PHYS 2371/2372 offered every fall
4 PHYS 3600 offered every summer 1 and summer 2
6 PHYS 3602 offered every fall and spring
PHYS 5115 offered every fall and spring
9 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Physics Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introductory Physics |  |  |
| Physics 1 |  |  |
| Complete one of the following: |  | 5 |
| PHYS 1161 and PHYS 1162 | Physics 1 and Lab for PHYS 1161 |  |
| PHYS 1151 <br> and PHYS 1152 <br> and PHYS 1153 | Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151 |  |
| Physics 2 |  |  |
| Complete one of the following: |  | 5 |
| PHYS 1165 and PHYS 1166 | Physics 2 and Lab for PHYS 1165 |  |
| PHYS 1155 <br> and PHYS 1156 <br> 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 2305 | Thermodynamics and Statistical Mechanics | 4 |
| PHYS 2371 <br> and PHYS 2372 | Electronics and Lab for PHYS 2371 | 4 |
| Advanced Physics |  |  |
| PHYS 3600 | Advanced Physics Laboratory | 4 |
| PHYS 3602 | Electricity and Magnetism | 4 |
| PHYS 5115 | Quantum Mechanics | 4 |
| Physics Elective |  |  |
| Complete one of the | following: | 4 |


| MATH 4606 | Mathematical and Computational <br> Methods for Physics |
| :--- | :--- |
| PHYS 5111 | Astrophysics and Cosmology |
| PHYS 5113 | Introduction to Particle and Nuclear <br> Physics |
| PHYS 5116 | Complex Networks and Applications |
| PHYS 5260 | Introduction to Nanoscience and <br> 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 $\quad$ Title Hours

## 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 |
| PHIL 4500 | Theory of Knowledge | 4 |
| Philosophy Advanced Elective |  |  |
| Complete one of t | following: | 4 |
| PHIL 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |

## Additional Electives

Complete four PHIL courses. 16

## Physics/Philosophy Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative Course Requirements |  |  |
| PHIL 4510 | Philosophy of Science | 4 |
| PHYS 3601 | Classical Dynamics | 4 |

## Breadth Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Mathematics |  |  |
| 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 <br> $\quad$ Algebra for Engineering | 4 |

## Physics and Philosophy Major Credit Requirement

Complete 98 semester hours in the major.

## Program Requirement

132 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 |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| 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 MATH 1342 | 4 |  |  |  |
| MATH 1341 | 4 PHIL 2325 | 4 |  |  |  |
| PHIL 1115 | 4 Elective | 4 |  |  |  |



Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 PHYS 5115 | 4 |
|  | PHIL <br> advanced <br> 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 Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 1000 | 1 PHYS 1165 | 4 MATH 2321 | 4 MATH 2341 | 4 |
| PHYS 1161 | 4 PHYS 1166 | 1 Elective | 4 Elective | 4 |
| PHYS 1162 | 1 PHYS 1167 | 0 |  |  |
| PHYS 1163 | 0 MATH 1342 | 4 |  |  |
| MATH 1341 | 4 PHIL 2325 | 4 |  |  |
| PHIL 1115 or | 4 PHIL 2330 | 4 |  |  |
| 1215 |  |  |  | 8 |
| ENGW 1111 | 4 | 17 | 8 |  |
|  | 18 |  |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 2303 | 4 PHYS 2305 | 4 PHYS 3600 | 4 Co-op | 0 |
| PHYS 2371 | $3{\text { PHYS } 3601^{1}}$ | 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 | Summer 2 | Hours |
| Co-op | 0 | PHYS 3602 | 4 | ENGW 3307 |  | Co-op | 0 |
|  |  | PHYS elective | 4 | Elective | 4 |  |  |
|  |  | PHIL 4505 or PHIL 4500 | 4 |  |  |  |  |
|  |  | PHIL 4510 | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |  |
| Co-op | 0 | PHYS 5115 | 4 |  |  |  |  |
|  |  | PHIL <br> advanced elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  |  |  |  |
| Total Hours: 132 |  |  |  |  |  |  |  |
| 1 PHYS 3601 offered spring and fall (even years) |  |  |  |  |  |  |  |

## 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 chemicalbased 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Major GPA Requirement

### 2.000 minimum required in CHME courses

## Mathematics/Science Requirement

Complete 47 semester hours in mathematics and science as indicated below.


## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

139 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CHEM 1151 | 4 | CHME 2308 | 4 | MATH 2321 | 4 | Vacation | 0 |
| CHEM 1153 | 0 | GE 1502 (ER) | 4 | PHYS 1155 <br> (ND) | 3 |  |  |
| $\begin{aligned} & \text { ENGW } 1111 \\ & \text { (WF) } \end{aligned}$ | 4 | $\begin{aligned} & \text { MATH } 1342 \\ & \text { (FQ) } \end{aligned}$ | 4 | PHYS 1156 <br> (AD) | 1 |  |  |
| GE 1000 | 1 | PHYS 1151 <br> (ND) | 3 | PHYS 1157 | 1 |  |  |
| GE 1501 | 4 | PHYS 1152 <br> (AD) | 1 |  |  |  |  |
| $\begin{aligned} & \text { MATH } 1341 \\ & \text { (FQ) } \end{aligned}$ | 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 <br> and <br> CHEM 2314 <br> and <br> CHEM 2320 | 5General <br> elective <br> (online <br> course or <br> advanced <br> placement) | 4 Co-op |  |$\quad 0$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | ---: | :---: | ---: |
| Co-op | 0 CHME 3312 | 4 PHYS 3600 | 4 Co-op | 0 |
|  | CHME 3315 | (ND, AD, WI) |  |  |
|  |  | General <br> elective | 4 |  |
|  | ENGW 3315 | 4 |  |  |
|  | PHYS 3601 | 4 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | ---: |
| Co-op | 0 CHME 3000 | 1 Vacation | 0 Co-op | 0 |
|  | CHME 4315 | 4 |  |  |
|  | CHME 4510 | 4 |  |  |



Total Hours: 139

## Computer Engineering and Physics, BSCompE

This intercollege dual 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum GPA required in EECE courses

## Engineering

Complete 48 semester hours in engineering as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| EECE 2150 | Circuits and Signals: Biomedical Applications | 5 |
| EECE 2160 | Embedded Design: Enabling Robotics | 4 |
| Computer Engineering Fundamentals |  |  |
| EECE 2322 <br> 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 |
| Electrical Engineering Fundamentals |  |  |
| 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 <br> and EECE 2413 | Fundamentals of Electronics and Lab for EECE 2412 |  |
| EECE 2520 | Fundamentals of Linear Systems |  |
| EECE 2530 <br> and EECE 2531 | Fundamentals of Electromagnetics and Lab for EECE 2530 |  |
| Capstone Courses |  |  |
| EECE 4790 | Electrical and Computer Engineering Capstone 1 | 4 |
| EECE 4792 | Electrical and Computer Engineering Capstone 2 | 4 |
| Technical Electives |  |  |
| One CS course from the following approved list may be taken toward the EECE technical elective requirement: |  | 8 |
| EECE 2750 | Enabling Engineering |  |
| EECE 4991 | Research |  |
| EECE 4992 | Directed Study |  |
| EECE 4993 | Independent Study |  |
| EECE 2412 to EECE 2530 |  |  |
| EECE 3324 to EECE 4698 |  |  |
| EECE 5155 to EECE 5698 |  |  |
| ENGR 5670 | Sustainable Energy. Materials, Conversion, Storage, and Usage |  |
| GE 4608 | Nanotechnology in Engineering |  |
| CS 2550 | Foundations of Cybersecurity |  |
| CS 3200 | Database Design |  |
| CS 3500 | Object-Oriented Design |  |
| CS 4850 | Building Game Engines |  |
| CS 3540 to CS 3800 |  |  |
| CS 4100 to CS 4770 |  |  |
| IS 4200 to IS 4700 |  |  |
| Supplemental Credit |  |  |
| 3 semester hours from the following course count toward the engineering requirement: |  | 3 |
| GE 1501 | Cornerstone of Engineering 1 |  |
| 3 semester hours engineering requir | $m$ the following course count toward the ent: | 3 |
| GE 1502 | Cornerstone of Engineering 2 |  |

## Mathematics/Science

Complete 63 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Mathematics/Science |  |  |
| 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 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 |  |
| Complete one of the following: |  | 5 |
| PHYS 1165 and PHYS 1166 | Physics 2 <br> 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 |  |
| PHYS 2303 | Modern Physics | 4 |
| PHYS 2305 | Thermodynamics and Statistical Mechanics | 4 |
| PHYS 3600 | Advanced Physics Laboratory | 4 |
| PHYS 3602 | Electricity and Magnetism | 4 |
| PHYS 5115 | Quantum Mechanics | 4 |

## Advanced Physics Elective

Complete one of the following: 4

| MATH 4606 | Mathematical and Computational <br> Methods for Physics |
| :--- | :--- |

PHYS 3600 to PHYS 7999

## Supplemental Credit

1 semester hour from the following course counts toward the 1 mathematics/science requirement:

$$
\text { GE } 1502 \quad \text { Cornerstone of Engineering } 2
$$

## Professional Development

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Professional Development |  |  |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| EECE 2000 | Introduction to Engineering Co-op <br> Education | 1 |
| EECE 3000 | Professional Issues in Engineering | 1 |

Additional Required Courses
One credit hour from the following course counts toward the 1 engineering requirement:

GE 1501
Cornerstone of Engineering 1

## Integrative Requirement

The following course, which counts toward the engineering requirement above, is an integrative course:

| Code | Title |
| :--- | :--- |
| EECE 4790 | Electrical and Computer Engineering |
|  | Capstone 1 |

Writing Requirement and NUpath Courses

| Code <br> Writing | Title | Hours |
| :--- | :--- | ---: |
| A grade of C or higher is required: | 4 |  |
| ENGW 1111 | First-Year Writing | 4 |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions <br> or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## NUpath Requirements through General Electives

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.

## Required General Electives

Complete two academic, nonremedial, nonrepetitve courses, each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

132 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 |
| $\begin{aligned} & \text { MATH } 1341 \\ & \text { (FQ) } \end{aligned}$ | 4 | $\begin{aligned} & \text { MATH } 1342 \\ & \text { (FQ) } \end{aligned}$ | 4 | Vacation | 0 Vacation | 0 |
| CHEM 1151 |  | PHYS 1165 <br> (ND) | 4 |  |  |  |
| CHEM 1153 | 0 | PHYS 1166 <br> (AD) | 1 |  |  |  |
| PHYS 1161 <br> (ND) | 4 | GE 1502 (ER) | 4 |  |  |  |
| PHYS 1162 <br> (AD) | 1 |  |  |  |  |  |
| GE 1000 | 1 |  |  |  |  |  |
| GE 1501 | 4 |  |  |  |  |  |



Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 2321 <br> (FQ) | 4 | PHYS 2305 <br> (ND) | 4 | Vacation | 0 | Co-op | 0 |
| MATH 2341 | 4 | EECE 2000 | 1 |  |  |  |  |
| PHYS 2303 <br> (ND) | 4 | EECE 2150 | 5 |  |  |  |  |
| EECE 2160 | 4 | CE fundamentals | 4 |  |  |  |  |
|  |  | $\begin{aligned} & \text { CS } 1800 \\ & \text { (FQ) } \end{aligned}$ | 4 |  |  |  |  |
|  |  | CS 1802 | 1 |  |  |  |  |
|  | 16 |  | 19 |  | 0 |  | 0 |
| Year 3 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | PHYS 3602 (ND) | 4 | PHYS 3600 <br> (ND, AD< WI) | 4 | Co-op | 0 |
|  |  | EE <br> fundamentals | 4 | General elective | 4 |  |  |
|  |  | CE <br> fundamentals | 5 |  |  |  |  |
|  |  | ENGW 3302 <br> (WD) | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | PHYS 5115 <br> (ND, FQ) |  | EECE 4790 <br> (EI, WI, CE) | 4 | Co-op | 0 |
|  |  | EECE 3000 |  | EECE <br> technical elective | 4 |  |  |
|  |  | CE fundamentals | 4 |  |  |  |  |
|  |  | MATH 3081 <br> (AD) | 4 |  |  |  |  |
|  |  | General elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

Year 5

| Fall | Hours | Spring |
| :--- | ---: | ---: |
| Co-op |  EECE 4792 <br> (EI, WI, CE)  | 4 |
|  | EECE <br> technical <br> elective | 4 |
|  | PHYS <br> advanced <br> elective | 4 |
| 0 | 12 |  |

Total Hours: 132

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum GPA required in EECE courses

## Engineering

Complete 51 semester hours in engineering as indicated below.


| EECE 2322 <br> 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 |  |
| Capstone Courses |  |  |
| EECE 4790 | Electrical and Computer Engineering Capstone 1 | 4 |
| EECE 4792 | Electrical and Computer Engineering Capstone 2 | 4 |
| EECE Technical Electives |  |  |
| Complete two of the following: |  | 8-9 |
| EECE 2322 <br> and EECE 2323 | Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322 |  |
| EECE 4991 | Research |  |
| EECE 4992 | Directed Study |  |
| EECE 4993 | Independent Study |  |
| ENGR 5670 | Sustainable Energy: Materials, Conversion, Storage, and Usage |  |
| GE 4608 | Nanotechnology in Engineering |  |
| EECE 2540 to EECE 2750 |  |  |
| EECE 3324 to EECE 3410 |  |  |
| EECE 4512 to EECE 4698 |  |  |
| EECE 5155 to EECE 5698 |  |  |
| Supplemental Credit |  |  |
| 2 semester hours from the following course count toward the engineering requirement: |  |  |
| EECE 3468 | Noise and Stochastic Processes |  |
| 3 semester hours from the following course count toward the engineering requirement: |  |  |
| GE 1501 | Cornerstone of Engineering 1 |  |
| 3 semester hours from the following course count toward the engineering requirement: |  |  |

GE 1502 Cornerstone of Engineering 2

## Professional Development

Code Title Hours

Required Professional Development

| GE 1000 | Introduction to the Study of Engineering | 1 |
| :--- | :--- | :--- |
| EECE 2000 | Introduction to Engineering Co-op | 1 |
|  | Education |  |
| EECE 3000 | Professional Issues in Engineering | 1 |

## Additional Required Courses

The remaining credit from the following course will apply to 1 the professional development area:

$$
\text { GE } 1501 \quad \text { Cornerstone of Engineering } 1
$$

## Mathematics/Science

Complete 57 semester hours in mathematics and science as indicated below.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Mathematics/Science |  |  |
| CHEM 1151 | General Chemistry for Engineers | 4 |
| and CHEM 1153 | and Recitation for CHEM 1151 |  |




Total Hours: 132

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Major GPA Requirement

2.000 minimum GPA required in $I E, M E$, and MEIE courses

## Engineering Requirement

Complete 60 semester hours in engineering as indicated below:

| Code <br> Required Engineering | Title | Hours |
| :--- | :--- | ---: |
| ME 2340 Introduction to Material Science <br> and ME 2341 and Lab for ME 2340 | 5 |  |
| ME 2350 | Engineering Mechanics and Design | 4 |


| ME 2355 |  |  |
| :--- | :--- | ---: |
| and ME 2356 | Mechanics of Materials | 5 |
| ME 2380 | and Lab for ME 2355 | Thermodynamics |
| ME 3455 | Dynamics and Vibrations |  |
| and ME 3456 | and Lab for ME 3455 <br> ME 3475 <br> or ME 3480 | Fluid Mechanics <br> International Applications of Fluid Mechanics |
| ME 4505 | Measurement and Analysis with <br> and ME 4506 | Thermal Science Application <br> and Lab for ME 4505 |
| ME 4508 | Mechanical Engineering Computation <br> and Design | 5 |
| ME 4550 | Mechanical Engineering Design |  |
| ME 4555 | System Analysis and Control |  |
| ME 4570 | Thermal Systems Analysis and Design | 4 |
| MEIE 4701 | Capstone Design 1 | 4 |
| MEIE 4702 | Capstone Design 2 | 4 |

Supplemental Credit
3 semester hours from the following course counts toward 3 the engineering requirement:
GE 1501 Cornerstone of Engineering 1
3 semester hours from the following course counts toward 3 the engineering requirement:

GE 1502 Cornerstone of Engineering 2

## Professional Development Requirement

| Code Title <br> Professional Development  | Hours |  |
| :--- | :--- | ---: |
| GE 1000 | Introduction to the Study of Engineering | 1 |
| MEIE 2000 | Introduction to Engineering Co-op <br>  <br> Education | 1 |
| MEIE 3000 | Professional Issues in Engineering | 1 |
| Additional Required Courses |  |  |
| The remaining credit from the following course will apply to | 1 |  |
| the professional development area: |  |  |
| GE 1501 | Cornerstone of Engineering 1 |  |

## Mathematics/Science Requirement

Complete 59 semester hours in mathematics and science as indicated below:

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 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 |
| PHYS 2303 | Modern Physics | 4 |
| PHYS 2371 and PHYS 2372 | Electronics and Lab for PHYS 2371 | 4 |


| PHYS 3602 | Electricity and Magnetism | 4 |
| :--- | :--- | :--- |
| PHYS 3600 | Advanced Physics Laboratory | 4 |
| PHYS 3601 | Classical Dynamics | 4 |
| PHYS 5318 | Principles of Experimental Physics | 4 |

Advanced Physics Elective
Complete one 4-semester-hour course in the following range:

PHYS 3600 to PHYS 5999

## Supplemental Credit

1 semester hour from the following course counts toward the 1 mathematics/science requirement:

| GE 1502 | Cornerstone of Engineering 2 | Hours |
| :--- | :--- | ---: |
| Writing Requirement and NUpath Courses |  |  |
| Code | Title | 4 |
| Writing | First-Year Writing (a grade of C or <br> higher is required) |  |
| ENGW 1111 | Advanced Writing in the Technical <br> Professions (a grade of C or higher is <br> required) | 4 |
| ENGW 3302 | Interdisciplinary Advanced Writing in the |  |
| or ENGW 3315 |  |  |

## NUpath Requirements through General Electives

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.

## Integrative Requirement

Principles of Experimental Physics (PHYS 5318) is part of the mathematics/science requirement above and is an integrative course.

| Code | Title | Hours |
| :--- | :--- | ---: |
| PHYS 5318 | Principles of Experimental Physics | 4 |

## Required General Electives

Complete two academic, nonremedial, nonrepetitve courses, each equivalent to 4 semester hours.

## Course Work That Does Not Count Toward the Engineering Degree

Students in engineering are allowed to count a maximum of two pass/ fail courses toward their degree program. Only general electives outside the College of Engineering may be taken on a pass/fail grading basis. A maximum of one pass/fail course is allowed per semester.

## Program Requirement

139 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 |
| (FQ) | (FQ) |  |  |  |
| CHEM 1151 | 4 PHYS 1165 | 4 |  |  |
|  | (ND) |  |  |  |


| CHEM 1153 |  | PHYS 1166 <br> (AD) | 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHYS 1161 <br> (ND) | 4 | GE 1502 (ER) | 4 |  |  |  |  |
| PHYS 1162 <br> (AD) | 1 | ENGW 1111 <br> (WF) | 4 |  |  |  |  |
| GE 1000 | 1 |  |  |  |  |  |  |
| GE 1501 | 4 |  |  |  |  |  |  |
|  | 18 |  | 17 |  | 0 |  | 0 |
| Year 2 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| $\begin{aligned} & \text { MATH } 2321 \\ & \text { (FQ) } \end{aligned}$ | 4 | PHYS 2303 <br> (ND) | 4 | Vacation | 0 | Co-op | 0 |
| MATH 2341 | 4 | MEIE 2000 | 1 |  |  |  |  |
| PHYS 2371 <br> (ND) | 3 | ME 2340 <br> (WI) | 4 |  |  |  |  |
| PHYS 2372 <br> (EI) | 1 | ME 2341 | 1 |  |  |  |  |
| ME 2350 | 4 | ME 2355 | 4 |  |  |  |  |
|  |  | ME 2356 | 1 |  |  |  |  |
|  |  | ME 2380 | 4 |  |  |  |  |
|  | 16 |  | 19 |  | 0 |  | 0 |

Year 3
Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours
Co-op 0 PHYS 3602 4 ME 3475 4 Co-op 0
(ND)
$\left.\begin{array}{cccc}\text { ME 3455 } & \begin{array}{c}4 \text { PHYS 3600 } \\ (\text { ND, AD, WI) }\end{array} & 4\end{array}\right]$

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 PHYS 3601 <br> (ND) | 4 ME 4550 | 4 Co-op | 0 |
|  | MEIE 3000 | 1 MEIE 4701 (EI, WI, CE) | 1 |  |
|  | ME 4505 <br> (AD) | 4 General elective | 4 |  |
|  | ME 4506 | 1 |  |  |
|  | ME 4555 | 4 |  |  |
|  | ME 4570 | 4 |  |  |
|  | 0 | 18 | 9 | 0 |

Year 5


| General <br> elective | 4 |
| :---: | :---: |
| 0 | 17 |

Total Hours: 139

## 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 th | 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 <br> and PHYS 1152 <br> and PHYS 1153 | Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151 |  |
| PHYS 1155 <br> and PHYS 1156 <br> 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

MATH $4606 \quad$ 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)

## Joanne L. Miller, PhD

Matthews Distinguished University Professor and Chair
125 Nightingale Hall
617.373.3076
617.373 .8714 (fax)

Maribel Pereira, Administrative Secretary, m.pereira@northeastern.edu

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 and develop assessment tools and treatment options for addressing clinical problems.

The psychology curriculum explores such topics as how brain function determines behavior; how we see, hear, and learn; what constitutes normal and abnormal personality; the nature of language and cognitive processing; how emotions affect behavior; and how individuals work in groups. 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.

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. 603)
- American Sign Language and Psychology (p. 611)
- Business Administration and Psychology (p. 231)
- Computer Science and Cognitive Psychology (p. 301)
- Criminal Justice and Psychology (p. 612)
- Information Science and Cognitive Psychology (p. 360)
- Linguistics and Psychology (p. 509)


## Minor

- Psychology (p. 621)


## 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 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. 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Psychology Major Requirements

| Code <br> Introductory Course | Title | Hours |
| :--- | :--- | ---: |
| PSYC 1101 Foundations of Psychology | 4 |  |
| Personal/Social Bases of Behavior (Area A) | 4 |  |
| Complete two of the following: |  |  |
| PSYC 3400 | Personality | 8 |
| PSYC 3402 | Social Psychology |  |
| PSYC 3404 | Developmental Psychology |  |
| PSYC 3406 | Abnormal Psychology |  |
| Biological/Cognitive Bases of Behavior (Area 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 |  |
| Statistics |  |  |
| PSYC 2320 | Statistics in Psychological Research | 4 |

Psychology Seminar
Complete one of the following:

| PSYC 4650 | Seminar in Clinical Case Study |
| :--- | :--- |
| 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 |

## Lab Requirement

Complete two psychology lab courses OR one psychology lab

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 |

## 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 11-15
one group only. Students may petition to create their own interdisciplinary cluster.

## Educational Psychology

SOCL 1290 Juvenile Delinquency
EDUC 4530 Race and Urban Education
EDUC 5570 Inclusion, Equity, and Diversity
EDUC 4552 Inquiry in the Humanities and Social Sciences at the Elementary Level
EDUC 1111 Education in the Community
EDUC 4570 Inclusion, Equity, and Diversity
EDUC $5503 \quad$ Culture, Equity, Power, and Influence
EDUC 5504 Child and Adolescent Development,
Learning, and Teaching
Society and Psychology

| ANTH 1101 | Peoples and Cultures |
| :--- | :--- |
| ANTH 2302 | Gender and Sexuality: A Cross-Cultural <br> Perspective |
| ANTH 2315 | Religion and Modernity |
| LING 3412 | Language and Culture |
| SOCL 1241 | Sociology of Violence |
| SOCL 1255 | Sociology of the Family |
| SOCL 1260 | Gender in a Changing Society |
| SOCL 1285 | Deviant Behavior and Social Control |
| SOCL 1290 | Juvenile Delinquency |
| SOCL 1295 | Drugs and Society |
| Forensic Psychology |  |

Forensic Psychology
CHEM 1107 Introduction to Forensic Science
CRIM 2200 Criminology
CRIM 4010 Gender, Crime, and Justice
CRIM 4020 Race, Crime, and Justice
CRIM 4710 Law and Psychology
Cross-Cultural Psychology

| ANTH 1101 | Peoples and Cultures |
| :---: | :--- |
| LING 3412 | Language and Culture |
| LING 3442 | Sociolinguistics |
| Expressive Therapy |  |
| MUSC 1118 | Music Therapy 1 |
| THTR 1130 | Introduction to Acting |
| ARTF 1121 | Conceptual Drawing |


| 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 3450 | Syntax |
| LING 3452 | Semantics |
| LING 3456 | Language and Gender |
| LING 3422 | Phonology |
| LING 3434 | Bilingualism |
| LING 3412 | Language and Culture |
| LING 3442 | Sociolinguistics |
| SLPA 1205 | Speech and Hearing Science |
| Human Factors | Principles of Information Science |
| IS 2000 | Information System Design and |
| IS 3500 | Development |
| IS 4200 | Information Retrieval |
| IS 4300 | Human Computer Interaction |
| IS 4800 | Empirical Research Methods |


| Child and Adolescent Abnormal Psychology |  |
| :--- | :--- |
| CRIM 3200 | Youth Crime and Justice |
| HUSV 3520 | Child Intervention and Treatment |
| HUSV 3580 | Sexual Violence: Counseling, Programs, <br> and Policy |
| SOCL 1290 | Juvenile Delinquency |
| SOCL 1295 | Drugs and Society |
| Human Resource Management and Business |  |
| ORGB 3201 | Organizational Behavior |
| INTB 3310 | Cultural Aspects of International <br> Business |
| MISM 2301 | Management Information Systems |
| MKTG 2209 | Introduction to Marketing |
| PHIL 1170 | Business Ethics |
| SOCL 1280 | The 21 st-Century Workplace |
| Philosophy of Science and Psychology |  |
| PHIL 1105 | Science and Pseudoscience |
| 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 |
| PHIL 1180 | Environmental Ethics |
| PHIL 3435 | Moral Philosophy |
| Biological and Chemical Sciences |  |
| BIOL 1141 | Microbes and Society |
| BIOL 1147 | The Human Organism |
| BIOL 1149 | Biology of Human Reproduction |
| EEMB 1450 | Introduction to Marine Biology |
| CHEM 1101 | General Chemistry for Health Sciences |
| and CHEM 1102 | and Lab for CHEM 1101 |
| CHEM 1104 | Organic Chemistry for Health Sciences |
| and CHEM 1105 | and Lab for CHEM 1104 |
| CHEM 1211 | General Chemistry 1 |
| and CHEM 1212 | and Lab for CHEM 1211 |
| CHEM 1214 | General Chemistry 2 |
| and CHEM 1215 | and Lab for CHEM 1214 |
| BIOL 1111 | General Biology 1 |
| and BIOL 1112 | and Lab for BIOL 1111 |
| BIOL 1113 | General Biology 2 |
| and BIOL 1114 | and Lab for BIOL 1113 |
| BIOL 1117 | Integrated Anatomy and Physiology 1 |
| and BIOL 1118 | and Lab for BIOL 1117 |
| BIOL 119 | Integrated Anatomy and Physiology 2 |
| and BIOL 1120 | and Lab for BIOL 1119 |
| BIOL 3403 | Animal Behavior |
| BIOL 3405 | Neurobiology |
| EEMB 2302 | Ecology |
| EEMB 5548 | Sociobiology |
| BIOL 5585 | Evolution |
| CHEM 1107 | Introduction to Forensic Science |
| Pr |  |

Physical Sciences and Mathematics
In addition to the following courses, any math skill course may be used with advisor approval:

| ENVR 1120 | Oceans and Coasts |
| :--- | :--- |
| ENVR 1112 | Environmental Geology |
| ENVR 1101 | Environmental Science |
| ENVR 1110 | Global Climate Change |
| ENVR 1200 | Dynamic Earth |
| ENVR 3418 | Geophysics |
| MATH 2310 | Discrete Mathematics |
| MATH 4581 | Statistics and Stochastic Processes |
| or any PHYS course |  |
| Health and Wellness |  |
| NRSG 1205 | Wellness |
| HSCI 1105 | Human Nutrition |
| HSCI 1106 | Contemporary Issues in Nutrition |
| HSCI 5230 | Clinical Nutrition Applications in Health <br> and Disease |


| BIOL 1117 <br> and BIOL 1119 | Integrated Anatomy and Physiology 1 and Integrated Anatomy and Physiology 2 |
| :---: | :---: |
| BIOL 1141 | Microbes and Society |
| BIOL 1143 | Biology and Society |
| BIOL 1147 | The Human Organism |
| BIOL 1149 | Biology of Human Reproduction |
| PT 1880 | Introduction to Sports Medicine |
| COMM 3201 | Health Communication |
| PHIL 1165 | Moral and Social Problems in Healthcare |
| PHIL 1185 | The Ethics of Food |
| PHIL 1180 | Environmental Ethics |
| SOCL 1120 | Society and Health |
| SOCL 1295 | Drugs and Society |
| Communication, Culture, and Society |  |
| COMM 2304 | Communication and Gender |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |
| COMM 1131 | Sex, Relationships, and Communication |
| COMM 1255 | Communication in a Digital Age |
| COMM 3304 | Communication and Inclusion |
| COMM 2105 | Social Networks |
| COMM 2551 | Free Speech in Cyberspace |
| COMM 3230 | Interpersonal Communication |
| COMM 3610 | Communication, Politics, and Social Change |
| 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 |

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 <br>  <br> MATH 1252 |
| Ciology 1 |  |
| MATH 1340 | Biology 2 |
| MATH 1341 | Calculus and Differential Equations for |
| MATH 1342 | Calculus 2 for Science Sce 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 <br> elective | 4 Vacation | 0 Vacation | 0 |
| ENGW 1111 | 4 PSYC <br> elective | 4 |  |  |
| Math <br> requirement | 4 Elective | 4 |  |  |
| PSYC 1214 <br> (or other <br> PSYC <br> elective) | 4 Elective | 4 |  | 0 |
| PSYC 1000 | 1 | 17 | 0 | 0 |

Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PSYC 2320 | 4 | PSYC area $A$ elective |  | Vacation | 0 | Co-op | 0 |
| PSYC area B elective | 4 | PSYC area elective | 4 |  |  |  |  |
| Elective |  | PSYC <br> interdiscipli <br> cluster | ary |  |  |  |  |
| 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 | 4 Elective | 4 Co-op | 0 |
|  | elective | 4 Elective | 4 |  |
|  | PSYC lab <br> elective | 4 |  |  |
|  | ENGW 3315 | 4 | 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 <br> interdiscip <br> cluster | ${ }^{4}$ |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 5

| Fall | HoursSpring <br> Co-op | Hours |
| :--- | :---: | ---: |
|  | PSYC <br> seminar <br> elective | 4 |
|  | PSYC <br> interdisciplina <br> cluster | 4 |
|  | PSYC <br> elective <br> 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 <br> PSYC area A <br> elective | 4 Vacation | 0 Vacation | 0 |
| ENGW 1111 | 4 <br> PSYC <br> elective | 4 |  |  |
| Math <br> requirement | 4 Elective | 4 |  |  |
| PSYC 1214 <br> (or other <br> PSYC <br> elective) | 4 Elective | 4 |  |  |
| PSYC 1000 | 1 | 17 | 16 | 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 <br> elective | 4 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
| EESC 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 | 8 |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| PSYC area A <br> elective | 4 Co-op | 0 Co-op | 0 | Elective |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| PSYC lab <br> elective | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| PSYC | 4 |  |  |  |
| elective |  |  |  |  |
| PSYC <br> interdisciplinary <br> cluster |  |  |  |  |


| Elective | 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 16 |  | 0 | 0 | 0 |
| Year 5 |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |
| PSYC lab elective |  |  | 4 |  |  |
| PSYC elective |  | PSYC elective | 4 |  |  |
| PSYC interdisciplina cluster | ry | PSYC interdisc 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

Year 2
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { PSYC } 2320 & \begin{array}{c}4 \text { PSYC area A } \\ \text { elective }\end{array} & \begin{array}{c}4 \text { Elective (or } \\ \text { AP credit, } \\ \text { etc.) }\end{array} & 4 \text { Co-op }\end{array}\right]$

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 |  | Elective (or AP credit, etc.) | 4 |  |  |
|  |  | PSYC <br> interdisciplin cluster | 4 |  |  |  |  |


|  | Elective |  | 4 |  | 8 |  | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 |  | 16 |  |  |  |  |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | PSYC lab elective |  | Elective |  | Vacation |  |
|  |  |  | 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
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { PSYC 1101 } & \begin{array}{c}4 \\ \text { PSYC area A } \\ \text { elective }\end{array} & \begin{array}{c}4 \text { PSYC } \\ \text { elective }\end{array} & 4 \text { Vacation }\end{array}\right]$

Year 2


Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PSYC area A <br> elective | 4 Co-op |  |  |  |$\quad$ Co-op | Elective (or |
| :--- |$\quad 4$


| 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 | Elective | 4 |  |  |
| interdisciplinary cluster |  |  |  |  |  |  |  |
| PSYC elective | 4 | Elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 8 |  | 0 |

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Business Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| 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 | 4 |
| MISM 2301 | Social Responsibility | 4 |
| or SCHM 2301 | Management Information Systems |  |
| MKTG 2201 | Supply Chain and Operations Management | 4 |
| ORGB 3201 | Introduction to Marketing | 4 |
| STRT 4501 | Organizational Behavior | 4 |

Supporting Courses for Business

| 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. Requirements for the concentrations are listed below (p. 233).

- Accounting (p. 233)
- Entrepreneurship and Innovation (p. 233)
- Finance (p. 233)
- Management (p. 234)
- Management Information Systems (p. 234)
- Marketing (p. 234)
- Supply Chain Management (p. 234)


## Psychology Requirements



Complete one of the following:

| 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:
$\quad$ PSYC 1001 to PSYC 5999

## Supporting Courses

| Code <br> Introduction to College | Hours |  |
| :--- | :--- | ---: |
| BUSN 1102 | Personal Skill Development for <br> Business | 1 |
| or PSYC 1000 | Psychology at Northeastern |  |
| Co-op Preparation |  | $1-5$ |
| Complete one of the following: <br> BUSN 1101 <br> and BUSN 1103 | Introduction to Business <br> and Professional Development for <br> Business Co-op |  |
| 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

| Business Concentration |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN ACCOUNTING |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 | 4 |
| Electives |  |  |
| Complete two of the following: |  | 8 |
| ACCT 3403 | Accounting Information Systems |  |
| ACCT 3416 | Strategic Cost Analysis for Decision Making |  |
| ACCT 4412 | Auditing and Other Assurance Services |  |
| ACCT 4414 | Income Tax Determination and Planning |  |
| CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION |  |  |
| Code | Title | Hours |
| Note: The following courses do not count toward this concentration: |  |  |
| ENTR 1201 | The Entrepreneurial Universe |  |
| ENTR 3308 | Business Economic History of South Africa |  |


| ENTR 3318 |  |  |
| :---: | :---: | :---: |
| ENTR 3328 |  |  |
| ENTR 3338 | Field Research in Sustainable Energy in Iceland |  |
| ENTR 3346 |  |  |
| ENTR 4510 | Management Consulting Abroad |  |
| ENTR 4514 | Development Practice and Global Citizenship in India |  |
| Introductory Course |  |  |
| ENTR 2301 or ENTR 2303 | Innovation! <br> Entrepreneurial Marketing and Selling | 4 |
| Capstone Course |  |  |
| Complete one of the following: |  | 4 |
| ENTR 4501 | Business Planning for Technology Ventures |  |
| ENTR 4503 | Business Planning for Small and Medium Enterprises |  |
| ENTR 4505 | Entrepreneurial Growth Strategy for Technology Ventures |  |
| ENTR 4506 | Advanced Studies in Social Enterprise |  |
| Electives |  |  |
| Note: Only one non-ENTR course may be used as an elective. |  |  |
| Complete two of the following: |  | 8 |
| ENTR 2206 | Global Social Enterprise |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 2301 | Innovation! (if not used as introductory course) |  |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |  |
| ENTR 3212 | Innovation for Social Change |  |
| ENTR 3217 | Global Family Business Leadership |  |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |  |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |  |
| ENTR 3306 | Global Entrepreneurship |  |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |  |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |  |
| ENTR 3403 | Managing Operations in a TechnologyBased Startup Firm |  |
| ENTR 3520 | Impact Investing and Social Finance |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| ENTR 4512 | Social Entrepreneurship and Sustainable Development in India |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |
| MGMT 3302 | Negotiating in Business |  |


| CONCENTRATION IN FINANCE |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Required Course |  |  |
| FINA 3301 <br> or FINA 3303 | Corporate Finance Investments | 4 |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| ENTR 3520 or FINA 2720 | Impact Investing and Social Finance <br> Sustainability in the Business Environment |  |
| 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 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 4983 | Special Topics in Finance |  |
| FINA 4602 | Turnaround Management |  |
| FINA 4604 | Fixed-Income Securities |  |
| FINA 4608 | Advanced Financial Strategy |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |

## CONCENTRATION IN MANAGEMENT

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Course |  |  |
| MGMT 4501 | Skills for Managerial Success | 4 |
| Electives |  |  |
| Note: Only one non-MGMT course may be used as an elective. |  |  |
| Complete three | following: | 12 |
| MGMT 3302 | Negotiating in Business |  |
| MGMT 3315 | Managing Organizational Change and Disruption |  |
| MGMT 3330 | Developing Leaders for Global Sustainability |  |
| MGMT 3340 | Managing Healthcare Organizations: Critical Challenges and New Approaches |  |
| MGMT 3350 | Managing a Diverse Workforce |  |
| MGMT 3360 | Law and the Legal Process |  |
| MGMT 3420 | Managing Human Capital |  |
| MGMT 3510 | Managing Global Teams Virtually and Locally |  |
| MGMT 3530 | Project Management |  |


| MGMT 4310 | The Management Practices of Great Organizations |  |
| :---: | :---: | :---: |
| MGMT 4410 | Human Resources and Workforce Analytics |  |
| ENTR 2215 | Understanding Family Enterprise |  |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |  |
| ENTR 4225 | Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances |  |
| CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| MISM 3403 | Data Management in the Enterprise | 4 |
| MISM 4501 | Business Systems Integration | 4 |
| Electives |  |  |
| Note: Only one non-MISM course may be used as an elective. |  |  |
| Complete two of | following: | 8 |
| MISM 2510 | Fundamentals of Information Analytics |  |
| MISM 3305 | Information Resource Management |  |
| MISM 3404 | Data Communications |  |
| MISM 3406 | Introduction to Web Design, Practices, and Standards |  |
| MISM 3501 | Information Visualization for Business |  |
| MISM 3515 | Data Mining for Business |  |
| MKTG 4508 | Digital Marketing |  |
| SCHM 3301 | Global Supply Chain Strategy |  |
| SCHM 3305 | Sourcing and Procurement |  |
| SCHM 3308 | Supply Chain Analytics |  |

## CONCENTRATION IN MARKETING

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| MKTG 3401 | Marketing Research | 4 |
| MKTG 3301 | Marketing Management |  |
| or MKTG 4506 | Consumer Behavior | 4 |
| Electives <br> Complete two of the following: | 8 |  |


| MKTG 2301 | Marketing and Society |
| :--- | :--- |
| MKTG 3301 | Marketing Management (if not selected <br> as a required course) |
| MKTG 3501 | Marketing Analytics |
| MKTG 4220 | Marketing in Asia |
| MKTG 4420 | Sales Management |
| MKTG 4502 | Marketing in the Service Sector |
| MKTG 4504 | Advertising and Brand Promotion |
| MKTG 4506 | Consumer Behavior (if not selected as a <br> required course) |
| MKTG 4508 | Digital Marketing |
| MKTG 4510 | New Product Development |
| MKTG 4512 | International Marketing |


| CONCENTRATION IN SUPPLY CHAIN MANAGEMENT |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Required Courses |  |  |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation Management | 4 |

## Elective

Complete one of the following: 4

| SCHM 3308 | Supply Chain Analytics |
| :--- | :--- |
| SCHM 3320 | Demand Planning and Forecasting |
| SCHM 3330 | Sustainability and Supply Chain <br> Management |
| SCHM 4401 | Advanced Problems in Supply Chain <br> Management |

## American Sign Language and Psychology, BS

The American Sign Language (ASL) 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.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## American Sign Language Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| American Sign Language |  |  |
| 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 | 4 |  |
| DEAF 1500 | Deaf People in Society | 4 |
| DEAF 2500 | Deaf History and Culture | 4 |
| Linguistics |  |  |


| LING 1150 | Introduction to Language and <br> Linguistics | 4 |
| :--- | :--- | ---: |
| DEAF 2700 | ASL Linguistics | 4 |
| Performance | Interpreting | 2 |
| INTP 3500 | The Interpreting Profession |  |
| Interpreting |  | 4 |
| INTP 3510 | Interpreting Inquiry Texts |  |

## Psychology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| 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 <br>  <br> PSYC 4991 499 |

Personal/Social Bases of Behavior (Area A)
Complete two of the following:

| 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:

| PSYC 3450 | Learning and Motivation |
| :--- | :--- |
| PSYC 3451 | Learning Principles and Behavior <br>  <br> Analysis |
| PSYC 3452 | Sensation and Perception |
| PSYC 3458 | Biological Psychology |

Psychology Elective
Complete one of the following: 4

| PSYC 4520 | Language and the Brain |
| :--- | :--- |
| 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 Practicum | 4 |
| PSYC 3464 | Psychology of Language | 4 |

## Combined-Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses

4 Minimum 2.500 overall GPA required

## Combined-Major Credit Requirement

Complete 82 semester hours in the major.
2 Program Requirement
128 total semester hours required

## Plan of Study <br> 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 |
| DEAF 1500 | 4 MATH 1215 | 4 |  |  |
| PSYC 1101 | 4 Elective | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  | 0 |
|  | 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 |  |  |
| DEAF 2500 | 4 PSYC 2320 | 4 |  |  |
| Elective | 4 PSYC 3464 | 4 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| AMSL 3101 | 4 PSYC 4524 | 4 Vacation | 0 Vacation | 0 |
| Psych Area | 4 Psych Area | 4 |  |  |
| A elective | B elective |  |  |  |
| ENGW 3315 | 4 Elective | 4 |  | 0 |
| INTP 3510 | 4 AMSL 3102 | 4 | 0 | 0 |
|  | 16 | 16 |  |  |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| INTP 4940 | 4 Psych lab <br> elective | 4 |
| PSYC 4658 | 4 Psych Area <br> A elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 128

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Criminal Justice Requirements

Code Title Hours

Criminal Justice Core Requirements

| CRIM 1100 | Introduction to Criminal Justice | 4 |
| :--- | :--- | :--- |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| CRIM 3600 | Criminal Justice Research Methods | 4 |

Thematic Elective
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 |

## Survey Elective

Complete one of the following:

| CRIM 3010 | Criminal Violence |
| :--- | :--- |
| CRIM 3030 | Global Criminology |
| CRIM 3050 | Organized Crime |
| CRIM 3100 | Criminal Law |
| CRIM 3200 | Youth Crime and Justice |
| CRIM 3300 | Punishment in the Age of Mass <br> Incarceration |
| CRIM 3400 | Corporate Security. Securing the Private <br> Sector |
| CRIM 3500 | Policing a Democratic Society |

System-Wide Elective
Complete one of the following:

| CRIM 4010 | Gender, Crime, and Justice |  |
| :--- | :--- | ---: |
| CRIM 4020 | Race, Crime, and Justice |  |
| CRIM 4040 | Crime Prevention |  |
| Computer Science |  | 4 |
| CS 1100 | Computer Science and Its Applications | 4 |
| Mathematics |  | 4 |
| Complete one of the following: |  |  |
| MATH 1215 | Mathematical Thinking |  |
| MATH 1231 | Calculus for Business and Economics |  |
| MATH 1241 | Calculus 1 |  |

## Electives

Complete three courses in the following range: 8
CRIM 4000 to CRIM 5999

## Psychology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introductory Course |  | 4 |
| PSYC 1101 | Foundations of Psychology | 4 |

Statistics
PSYC 2320 Statistics in Psychological Research 4
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:

| PSYC 4991 | Directed Study Research |
| :--- | :--- |
| 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 4650 | Seminar in Clinical Case Study |
| :--- | :--- |
| 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 | Hours |
| Code | Title |
| CRIM 3040 | Psychology of Crime |
| or CRIM 4710 | Law and Psychology |

## Criminal Justice and Psychology Combined-Major Credit Requirement

Complete 84 semester hours in the major.

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

Computer Science Courses
Code Title Hours

## Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |

Computer Science Fundamental Courses
A grade of C - or higher is required in computer science fundamental courses.

| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 4100 | Artificial Intelligence (Integrative course) | 4 |

CS $4500 \quad$ Software Development 4
and CS 4501

IS 4300

## Presentation Requirement

THTR 1170 The Eloquent Presenter 1

## Computer Science 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 twelve credits of CS, IS or DS classes that are not
already required. Choose courses within the following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Psychology Courses

Code Title Hours
Required Courses
PSYC 1101 Foundations of Psychology 4

PSYC 2320 Statistics in Psychological Research 4
PSYC $3464 \quad$ Psychology of Language 4
PSYC 3466 Cognition 4

Advanced Psychology
PSYC 3452 Sensation and Perception 4
or PSYC $3458 \quad$ Biological Psychology
Laboratory in Psychology
Complete one of the following: 4

| PSYC 4610 | Laboratory in Psycholinguistics |
| :--- | :--- |
| PSYC 4612 | Laboratory in Cognition |
| PSYC 4622 | Laboratory in Sensation and Perception |

Seminar in Psychology
Complete one of the following: 4
PSYC $4658 \quad$ 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:

| PSYC 3402 | Social Psychology |
| :--- | :--- |
| PSYC 3404 | Developmental Psychology |
| PSYC 3450 | Learning and Motivation |
| PSYC 3451 | Learning Principles and Behavior <br> Analysis |
| PSYC 3452 | Sensation and Perception |
| PSYC 3458 | Biological Psychology |
| PSYC 4512 | Neuropsychology |
| PSYC 4520 | Language and the Brain |
| 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 <br> 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 |
| :---: | :---: | :---: |
| Calculus |  |  |
| A grade of C - or higher is required: |  |  |
| MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| Computing and Social Issues |  |  |
| Complete one | following: | 4 |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| IA 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 21 st-Century Workplace |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 4528 | Computers and Society |  |

## Computer Science Writing Requirement Title

| College Writing |  |
| :--- | :--- |
| ENGW $1111 \quad$ First-Year Writing | 4 |

Advanced Writing in the Disciplines
ENGW $3302 \quad$ Advanced Writing in the Technical 4
or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

## Required General Electives

Code $\quad$ Title
Complete eight general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | PSYC 3466 | 4 | Elective | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | MATH 1341 | 4 |  |  |  |  |
| PSYC 1101 | 4 | Elective | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| PSYC 2320 | 4 CS elective | 4 Elective | 4 Co-op |  |
| CS 3000 | 4 IS 4300 | 4 Elective | 4 |  |
| Elective | 4 <br> PSYC <br> elective | 4 |  |  |
| PSYC 3464 | 4 PSYC 3452 <br> or 3458 | 4 |  |  |
|  | CS 1210 | 1 | 17 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Co-op | CS 4100 | 4 Elective | 4 Co-op |  |
|  | PSYC lab | 4 Elective | 4 |  |
|  | elective |  |  |  |
|  | CS elective | 4 |  |  |
|  | CS elective | 4 |  | 0 |
|  | THTR 1170 | 1 | 8 | 17 |

Hours 32

Year 4

| Fall | HoursSpring | Hours Summer 1 | Hours |
| :--- | :--- | :---: | ---: |
| Co-op | CS 4500 <br> and CS 4501 | 4 Elective | 4 |
|  | PSYC <br> elective | 4 ENGW 3302 | 4 |
|  | PSYC <br> seminar | 4 |  |
| Computing <br> and social <br> issues | 4 |  |  |

[^15]Five Years, Three Co-ops in Summer 2/Fall


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| CS 3500 | 4 PSYC 3464 | 4 | Vacation | 0 Co-op |$\quad 0$

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 <br> elective | 4 |  |  |  |  |
|  |  | CS elective | 4 |  |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |  |
|  | 0 |  | 17 |  | 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 |
|  | CS elective | 4 Elective | 4 |  |
|  | PSYC lab <br> elective | 4 |  |  |
| PSYC <br> elective | 4 |  | 0 |  |

## Year 5

| Fall | Hours | Spring | Hours |
| :---: | :---: | :---: | :---: |
| Co-op |  | $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 |
|  |  | PSYC <br> seminar | 4 |
|  |  | Computing and social issues | 4 |
|  |  | Elective | 4 |
| 0 16 |  |  |  |

[^16]Five Years, Three Co-ops in Spring/Summer 1
Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | ---: |
| CS 1800 <br> and CS 1802 | CS 2510 <br> and CS 2511 | 5 Vacation | 0 Vacation | 0 |
| CS 2500 <br> and CS 2501 | 5 PSYC 3466 | 4 |  |  |
| PSYC 1101 | 4 Elective | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  | 0 |
| CS 1200 | 1 |  | 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 1341 | 4 |  |  |  |
| PSYC 2320 | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
| CS 1210 | 1 | 0 | 0 |  |
|  | 17 |  |  |  |


| 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 |  |  |  |
| THTR 1170 | 1 |  |  | 8 |
| CS elective | 4 | 0 | 0 |  |
|  | 17 |  |  |  |

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 <br> elective | 4 |  |  |  |
| CS elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |


| Year 5 |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours |
| CS 4100 | 4 | $\begin{aligned} & \text { CS } 4500 \\ & \text { and CS } 4501 \end{aligned}$ | 4 |
| CS elective | 4 | PSYC <br> seminar | 4 |
| PSYC lab elective |  | Computing and social issues | 4 |
| PSYC elective | 4 | Elective | 4 |
|  | 16 |  | 16 |

Total Hours: 134

## Information Science and Cognitive Psychology, BS

The information science and cognitive psychology combined major provides a foundation in general psychology, psychology of language, cognition, and statistics. These are supplemented by an experimental
laboratory course, seminar course, and psychology electives. Information science combines concepts and skills from computer science, behavioral and social science, and system design to create an integrated, peoplecentered curriculum. 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Computer and Information Science Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Coop | 1 |
| Computer Science Fundamental Courses |  |  |
| A grade of C - or higher is required in computer science fundamental courses. |  |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | Discrete Structures and Seminar for CS 1800 | 5 |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 4100 | Artificial Intelligence (integrative course) | 4 |
| Information Science Required Courses |  |  |
| IS 2000 | Principles of Information Science | 4 |
| IS 3500 | Information System Design and Development | 4 |
| IS 4300 | Human Computer Interaction (integrative course) | 4 |
| IS 4800 | Empirical Research Methods | 4 |
| IS 4900 | Information Science Senior Project (integrative course) | 5 |

## Psychology Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| PSYC 1101 | Foundations of Psychology | 4 |
| PSYC 2320 | Statistics in Psychological Research | 4 |
| PSYC 3464 | Psychology of Language | 4 |
| PSYC 3466 | Cognition |  |

## Advanced Psychology

PSYC 3452 Sensation and Perception 4
or PSYC $3458 \quad$ Biological Psychology
Laboratory in Psychology
Complete one of the following:

| PSYC 4610 | Laboratory in Psycholinguistics |
| :--- | :--- |
| PSYC 4612 | Laboratory in Cognition |
| PSYC 4622 | Laboratory in Sensation and Perception |

Seminar in Psychology
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 |

## Supporting Courses <br> Code Title Hours

Calculus
A grade of C - or higher is required:
MATH 1341 Calculus 1 for Science and Engineering 4
Computing and Social Issues
Complete one of the following:

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |


| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| :--- | :--- |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |


| Computer Science Writing Requirement  <br> Code Title | Hours |  |
| :--- | :--- | ---: |
| College Writing |  | 4 |
| ENGW 1111 | First-Year Writing | 4 |
| Advanced Writing in the Disciplines |  |  |
| ENGW 3302 | Advanced Writing in the Technical <br> Professions <br> or ENGW 3315 | Interdisciplinary Advanced Writing in the <br> Disciplines |

## Required General Electives

Code $\quad$ Title
Complete eight general electives.
Hours

## 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.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS and IS courses

## 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | MATH 1341 | 4 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | PSYC 3466 | 4 | Elective | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | Elective | 4 |  |  |  |  |
| PSYC 1101 | 4 | Elective | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |

## Year 2

Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours

| CS 3500 | 4 CS 3000 | 4 Elective | 4 |  |
| :--- | :--- | :--- | :--- | :--- |
| PSYC 2320 | 4 IS 4300 | 4 |  |  |
| PSYC 3464 | 4 PSYC 3452 <br> or 3458 | 4 |  |  |
|  | CS 1210 | 1 | 8 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 IS 4800 | 4 Elective | 4 Co-op | 0 |
|  | Computing <br> and social <br> issues | 4 Elective | 4 |  |
|  | PSYC <br> elective | 4 |  |  |
|  | PSYC <br> seminar | 4 | 8 | 0 |
| 0 | 16 |  |  |  |

Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | CS 4100 | 4 | ENGW 3302 | 4 | Co-op | 0 |
|  |  | IS 4900 | 5 | Elective | 4 |  |  |
|  |  | PSYC lab elective | 4 |  |  |  |  |
|  |  | PSYC elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation | 0 | Vacation | 0 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | PSYC 3466 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Elective | 4 |  |  |  |  |
| PSYC 1101 | 4 | Elective | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 0 |  | 0 |

Year 2


## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | IS 3500 | 4 Elective | 4 Co-op |  |
|  | ENGW 3302 | 4 Elective | 4 |  |
|  | PSYC <br> elective | 4 |  |  |
|  |  |  |  |  |


| Elective | 4 |  |  |
| ---: | ---: | ---: | ---: |
| 0 | 16 | 8 | 0 |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | CS 4100 | 4 Elective | 4 Co-op |  |
|  | IS 4800 <br> PSYC <br> elective | 4 | 4 |  |
|  | PSYC lab <br> elective | 4 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :--- | ---: |
| Co-op | IS 4900 | 5 |
|  | PSYC <br> seminar | 4 |
|  | Computing <br> and social <br> issues | 4 |
|  | Elective | 4 |
| 0 | 17 |  |

Total Hours: 134

## Linguistics and Psychology, BS

This combined major educates 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Linguistics 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

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introductory Linguistics | 4 |  |
| LING 1150 | Introduction to Language and <br>  <br>  Linguistics | 4 |


| LING 2350 | Linguistic Analysis | 4 |
| :--- | :--- | ---: |
| LING 3412 | Language and Culture | 4 |
| LING 3422 | Phonology | 4 |
| LING 3450 | Syntax | 4 |
| Linguistics Electives |  | 12 |
| Complete three of the following: |  |  |
| DEAF 2700 | ASL Linguistics |  |
| LING 3420 | Phonetics |  |
| 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 4654 | Seminar in Linguistics | Research Seminar in Linguistics |
| LING 4891 | Junior/Senior Honors Project 1 <br> or LING 4970 <br> or LING 4971 <br> or LING 4991 | Junior/Senior Honors Project 2 <br> Directed Study Research |

## Psychology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introductory and Intermediate Psychology |  |  |
| PSYC 1101 | Foundations of Psychology | 4 |
| PSYC 2320 | Statistics in Psychological Research | 4 |

Advanced Psychology
PSYC 3402 Social Psychology 4
PSYC 3466 Cognition 4

Psychology Lab
Complete one of the laboratory courses or, with prior approval, 4 a directed study or honors project on a topic related to psycholinguistics or cognition:

| 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 |

## Psychology Seminar

Complete one of the following: 4

| PSYC 4658 | Seminar in Psycholinguistics |
| :--- | :--- |
| PSYC 4660 | Seminar in Cognition |
| PSYC 4674 | Seminar in Cognitive Neuroscience |
| sychology Electives |  |
| A directed study on a topic related to psycholinguistics or |  |
| cognition may be taken with prior approval. |  |
| Complete two of the following: |  |


| 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 4524 | Cognitive Development |
| PSYC 4610 | Laboratory in Psycholinguistics |


| PSYC 4612 | Laboratory in Cognition |
| :--- | :--- |
| PSYC 4628 | Laboratory in Developmental <br> 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 Requirement |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| PSYC 3464 | Psychology of Language | 4 |
| Complete a directed study, two junior/senior honors project courses, or a study abroad (not a Dialogue): |  | 4-8 |

courses, or a study abroad (not a Dialogue):

| LING 4991 | Directed Study Research |
| :---: | :---: |
| LING 4996 |  |
| LING 4970 and LING 4971 | Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2 |
| PSYC 4970 and PSYC 4971 | Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2 |
| PSYC 4991 | Directed Study Research |

## Linguistics and Psychology Combined-Major Credit Requirement

Complete 68 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 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Fall | 4 LING 2350 | 4 | Vacation | 0 Vacation |$\quad 0$

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| LING 3412 | 4 LING 3422 | 4 Vacation | 0 Co-op | 0 |
| PSYC 2320 | Linguistics <br> elective | 4 |  |  |
| PSYC 3466 | 4 PSYC 3402 | 4 |  |  |
| Foreign <br> language <br> course | 4 <br> esychology <br> elective | 4 |  |  |
|  | EESC 2000 | 1 | 0 | 0 |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | ---: | ---: | ---: |
| Co-op | 0 LING 3450 | 4 Elective | 4 Co-op | 0 |


|  | Linguistics <br> or <br> psychology <br> elective | 4 Elective | 4 |
| :--- | :--- | :---: | :--- |
| Psychology <br> laboratory | 4 |  |  |
| ENGW 3315 | 4 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> elective <br> Linguistics <br> or <br> psychology <br> elective | 4 Elective | 4 Co-op | 0 |
| Psychology <br> seminar | 4 | 4 |  |  |
|  | Elective | 4 | 8 | 0 |

Year 5

| Fall | Hours | Spring |
| :--- | ---: | ---: |
| Co-op | 0 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 <br> language <br> course | 4 |  |  |
| MATH 1215 | 4 Elective | 4 | 0 | 0 |
|  | 16 | 16 | 0 |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| LING 3412 | 4 LING 3422 | 4 Vacation | 0 Vacation | 0 |
| PSYC 2320 | 4 PSYC 3402 | 4 |  |  |
| PSYC 3466 | 4 Linguistics <br> elective | 4 |  |  |
| Foreign <br> language <br> course | 4 Psychology <br> elective | 4 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | :---: |
| Linguistics | 4 LING 3450 | 4 Vacation | Vacation |  |
| elective |  |  |  |  |


| Psychology <br> lab | 4 Linguistics <br> or <br> psychology <br> elective | 4 |  |  |
| :--- | :---: | :---: | :---: | :---: |
| ENGW 3315 | 4 Elective | 4 | 0 | 0 |

Year 4


Total Hours: 128

## 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.

## 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 |
| :---: | :---: | :---: |
| Required Course |  |  |
| PSYC 1101 | Foundations of Psychology | 4 |
| Personal/Social Bases of Behavior (Area A) |  |  |
| 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 |  |
| Biological/Cognitive Bases of Behavior (Area 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 $\quad$ Title | Hours |
| :--- | ---: |
| Complete two PSYC courses. | 8 |

## GPA Requirement

2.000 GPA required in the minor

## Accelerated Bachelor/Graduate Degree 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).

## Programs

## Behavioral Neuroscience

- Behavioral Neuroscience, BS/Bioinformatics, MS


## Biochemistry

- Biochemistry, BS/Bioinformatics, MS
- Biochemistry, BS/Biotechnology, MS
- Biochemistry, BS/Chemistry, MS


## Cell and Molecular Biology

- Cell and Molecular Biology, BS/Biotechnology, MS


## Biology

- Biology, BS/Biotechnology, MS
- Biology, BS/Bioinformatics, MS
- Biology, BS/Biology, PhD


## Chemistry

- Chemistry, BS/Chemistry, MS
- Chemistry, BS/Biotechnology, MS


## Mathematics

- Mathematics, BS/Applied Mathematics, MS
- Computer Science and Mathematics, BS/Mathematics, MS


## Psychology

- Psychology, BS/Applied Behavior Analysis, MS
- Psychology, BS/Master of Arts in Teaching


## Physics

- Physics, BS/Physics, MS
- Applied Physics, BS/Applied Physics and Engineering, MS
- Physics, BS/Physics, PhD


## College of Social Sciences and Humanities

Website (http://www.northeastern.edu/cssh)
Uta Poiger, PhD, Dean
Matthew Tobin, MBA, Associate Dean, Administration and Finance Ellen Cushman, PhD, Associate Dean, Academic Affairs, Diversity and Inclusion
Laura Green, PhD, Associate Dean, Teaching, Learning, and Experiential Education
Natasha Frost, PhD, Associate Dean, Graduate Studies
Alisa Lincoln, PhD, Associate Dean, Research, and Graduate Studies
Mary C. Mello, MA, Assistant Dean, Undergraduate Academic Affairs
Dean's Office
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Amelia Giordano, Administrative Assistant, a.giordano@northeastern.edu
Office of Student Academic Affairs
180 Renaissance Park
617.373 .3980
617.373 .7281 (fax)
csshadvising@northeastern.edu
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 16 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). Prelaw advising (http://www.northeastern.edu/prelaw) 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 universitywide academic progression standards described in the beginning of the catalog. 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, any CSSH service-learning course, or an ELAdesignated course:

| Code | Title | Hours |
| :--- | :--- | ---: |
| ANTH 2350 | Urban Anthropology | 4 |
| ANTH 3410 | Ethnographic Field Experience | 4 |
| ANTH 3415 |  |  |
| INTP 4995 | Interpreting Practicum | 4 |
| CRIM 3200 | Youth Crime and Justice | 4 |
| CRIM 4120 | Courts and Sentencing | 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 | 4 |
|  | Writing |  |
| ENGL 3382 | Publishing in the 21st Century | 4 |
| ENGL 4400 | Opening the Archive | 4 |
| HIST 1120 | Public History, Public Memory | 4 |


| HIST 2000 | Native American Resistance: Past and Present | 4 |
| :---: | :---: | :---: |
| HIST 2232 |  |  |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 3520 | Child Intervention and Treatment | 4 |
| INSH 2102 | Bostonography: The City through Data, Texts, Maps, and Networks | 4 |
| PHIL 1150 |  |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life | 4 |
| POLS 2357 | Growth and Decline of Cities and Suburbs | 4 |
| SOCL 1220 | Sociology of Boston | 4 |
| SOCL 2323 | Ethnographic Methods | 4 |
| SOCL 3485 | Environment, Technology, and Society | 4 |
| SPNS 3501 | Advanced Spanish Conversation: Global Communication | 4 |

Additional requirements 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 Major

- Politics, Philosophy, and Economics, BS (p. 623)


## Interdisciplinary Minors

- Computational Social Science, Minor (p. 625)
- Digital Methods in the Humanities, Minor (p. 626)
- Health, Humanities, and Society, Minor (p. 446)
- Latino/a, Latin American, and Caribbean Studies, Minor (p. 628)
- Law and Public Policy, Minor (p. 628)
- Urban Studies, Minor (p. 629)
- Women's, Gender, and Sexuality Studies, Minor (p. 630)


## Politics, Philosophy, and Economics, BS

Website (https://www.northeastern.edu/cssh/ppe)

## Serena Parekh

Associate Professor and Program Director
371 Holmes Hall
617.373.3636
617.373 .4359 (fax)

Serena Parekh, Associate Professor and Program Director, S.Parekh@northeastern.edu (r.sandler@northeastern.edu)

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
Politics, Philosophy, and Economics Major Requirements Code Title Hours

## Foundation Course

| PHIL 1160 | Introduction to Economic Justice | 4 |
| :--- | :--- | :--- |
| Core Courses |  |  |
| Philosophy |  | 4 |
| PHIL 2303 | Social and Political Philosophy | 4 |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL 3435 | Moral Philosophy |  |

or PHIL 2325 Ancient Philosophy and Political Thought

| Political Science |  | 4 |
| :--- | :--- | :--- |
| POLS 1160 | International Relations | 4 |
| POLS 3405 | International Political Economy | 4 |
| POLS 1150 | American Government | 4 |


| or POLS 1155 | Comparative Politics |  |
| :--- | :--- | ---: |
| Economics |  | 4 |
| ECON 1115 | Principles of Macroeconomics | 4 |
| ECON 1116 | Principles of Microeconomics | 4 |
| ECON 2315 | Macroeconomic Theory |  |
| or ECON 2316 <br> Capstone | Microeconomic Theory |  |
| Complete one of the following: | 4 |  |


| ECON 4692 | Senior Economics Seminar |
| :--- | :--- |
| PHIL 5001 | Global Justice |
| POLS 4701 | Political Science Senior Capstone |
| POLS 4703 | Senior Thesis |

## Major Electives

| Code Title | Hours |
| :--- | ---: |
| Complete two of the following: | $8-12$ |
| ECON 2000 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

Racial or Gender Justice
Complete one of the following:

## 4

| AFAM/POLS 2360 | Politics of Poverty |
| :---: | :---: |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| CRIM 4010 | Gender, Crime, and Justice |
| ECON 4916 | Advanced Selected Topics in Microeconomics |
| HIST 1225 | Gender, Race, and Medicine |
| HIST 2000 | Native American Resistance: Past and Present |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1281 | Islam, Gender, and Fashion |
| 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 2270 | 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/ANTH 2302 | Gender and Sexuality: A Cross-Cultural Perspective |
| 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 in Practice and Policy |

$\left.\begin{array}{lll}\text { WMNS 3100 } & \begin{array}{l}\text { Gender, Social Justice, and } \\ \text { Transnational Activism }\end{array} \\ \begin{array}{ll}\text { WMNS/COMM } \\ 3304\end{array} & \text { Communication and Inclusion }\end{array}\right]$

Experiential Learning Requirement
Complete one co-op, study abroad, qualifying Dialogue of 4
Civilizations, or one of the following:

| ECON 4996 | Experiential Education Directed Study |
| :--- | :--- |
| ECON 4970 | Junior/Senior Honors Project 1 |
| ECON 4971 | Junior/Senior Honors Project 2 |
| 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.

## Course Distribution Requirement

Complete at least four courses in each of the following subject areas:
ECON, PHIL, and POLS.

## Program Requirement

128 total semester hours required

## Concentrations

CONCENTRATION IN ENVIRONMENT AND ENERGY POLICY
Code Title Hours

| Complete two of the following: | 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: 8

| ECON 1290 | History of the Global Economy |
| :--- | :--- |
| ECON 1291 | Development Economics |
| ECON 2316 | Microeconomic Theory |
| ECON 3404 | International Food Economics and <br> Policy |
| ECON 4635 | International Economics |


| PHIL 1185 | The Ethics of Food |
| :--- | :--- |
| PHIL 1170 | Business Ethics |
| POLS 3406 | International Law |
| POLS 3487 | Politics of Developing Nations |
| PHIL 4545 | Religion and Politics in South Asia |
| Complete one of the following: |  |
| ECON 1292 | Economic History of the Middle East |
| ECON 1293 | European Economic History |
| HIST 2360 | History of Capitalism in East Asia |
| POLS 3435 | Politics and Governance of Europe and <br> the European Union |
| POLS 3465 | Government and Politics in the Middle <br> East |
| PHIL 4545 | Religion and Politics in South Asia |

## 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 2301 | Philosophical Problems of Law and Justice |  |
| PHIL 3500 | Sexuality, Gender, and the Law |  |
| PHIL 5001 | Global Justice |  |
| 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 |  |
| CONCENTRATION IN LOGIC AND GAME THEORY |  |  |
| Code | Title | Hours |
| Required Course |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| Electives |  |  |
| Complete two of the following: |  | 8 |
| ECON 4681 | Information Economics and Game Theory |  |
| PHIL 2001 | Ethics and Evolutionary Games |  |
| PHIL 4515 | Advanced Logic |  |
| TDB: Concep | Game Theory |  |

CONCENTRATION IN POLITICAL PHILOSOPHY
Code Title

Hours

## Politics Courses

Complete two of the following:
POLS 2328 Modern Political Thought

POLS 2330 American Political Thought
POLS 2332 Contemporary Political Thought

## Philosophy Course

Complete one of the following:

| PHIL 2301 | Philosophical Problems of Law and <br> Justice |
| :--- | :--- |
| PHIL 3435 | Moral Philosophy |
| PHIL 3500 | Sexuality, Gender, and the Law |
| PHIL 5001 | Global Justice |

CONCENTRATION IN PUBLIC AND ECONOMIC POLICY
Code Title Hours

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Course |  |  |
| POLS 3307 | Public Policy and Administration | 4 |

Elective Courses
Complete two of the following: 8

| ECON 1240 | Economics of Crime |
| :--- | :--- |
| ECON 1281 | Economics of the Creative Industries |
| ECON 3410 | Labor Economics |
| 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 3490 | Public Choice Economics |
| ECON 4680 | Competition Policy and Regulation |
| HIST 3800 | American Conservatism from the New |
|  | Deal to the Present |


| PHIL 1160 | Introduction to Economic Justice |
| :--- | :--- |
| PHIL 5001 | Global Justice |

POLS $2340 \quad$ Business and Government
POLS 2345 Urban Policies and Politics
POLS $2360 \quad$ Politics of Poverty
POLS 2390 Science, Technology, and Public Policy
POLS 2395 Environmental Politics and Policy
POLS 2334 Bureaucracy and Government
Organizations
POLS 2335 Budgeting and Taxation
POLS 2350 State and Local Politics
POLS 2357 Growth and Decline of Cities and
Suburbs
POLS 3425 U.S. Foreign Policy

## 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 | Criminal Justice Statistics |  |
| 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 <br> Humanities | 4 |
| or CS 2500 | Fundamentals of Computer Science 1 |  |

Applications of Computational Approaches in the Social Sciences

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete two courses from the following: |  |  |
| (Students may complete a capstone project under the direction of |  |  |
| a faculty member in lieu of an application course.) |  |  |

## Elective in Social Inquiry, Computation, and Logic <br> Code Title Hours

Complete one course from the following:

| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| CS 2800 | Logic and Computation |
| ECON 4681 | Information Economics and Game <br> 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 fro from either group. | $m$ each group and an additional course | 20 |
| Digital and Computational Methods |  |  |
| $\text { INSH } 1500$ | 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 |  |
| CRIM 4800 | Crime Mapping |  |
| 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 2730 | Digital Writing |  |
| ENGL 2850 | Writing for Social Media: Theory and Practice |  |
| ENGL 3340 | Technologies of Text |  |
| WMNS 2505 | Digital Feminisms |  |
| MSCR 1310 or MSCR 3420 | Introduction to Digital Media Culture Digital Media Culture |  |
| CLTR 2715 | New Media Narratives in Latin America: Local and Global Dimensions |  |
| CLTR 3418 | Nationalism |  |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital Rights |  |
| SOCL 1280 | The 21 st-Century Workplace |  |
| SOCL 4528 | Computers and Society |  |

## GPA Requirement

2.000 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 |
| :---: | :---: | :---: |
| Introductory Course |  |  |
| INSH 1300 | Introduction to Health and Humanities | 4 |
| Humanities Requirement |  |  |
| Complete two of the | following: | 8 |
| ENGL 2770 | Writing to Heal |  |
| ENGL 3700 | Narrative Medicine |  |
| ENGL 4710 | Capstone Seminar |  |
| ENGL 4040 | Topics in 19th-Century Literatures |  |
| HIST 3322 | The History of Medicine in North America |  |
| 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 |  |
| Social Sciences Requirement |  |  |
| Complete two of the f | 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/SOCL 1120 | Society and Health |  |
| PHTH 1270 | Introduction to Global Health |  |


| PHTH 2300 | Communication Skills for the Health <br> Professions |
| :--- | :--- |
| PHTH 4120 | Global Perspectives on Discrimination <br> and Health |
| PHTH 5202 | Introduction to Epidemiology |
| PHTH 5234 | Economic Perspectives on Health <br> Policy |
| SOCL 1295 | Drugs and Society |
| SOCL 2303 | Gender and Reproductive Justice |
| SOCL 3441 | Sociology of Health and Illness |

## 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.

For more information, contact the program director, Professor Christopher Bosso, 360K Renaissance Park, c.bosso@northeastern.edu.

## 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 16-17
must be upper-level (numbered 3000 or higher). Only one course can be from the major.

| Upper-Level Courses |  |
| :---: | :---: |
| ECON 3404 | International Food Economics and Policy |
| ENTR 4506 | Advanced Studies in Social Enterprise |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |
| ENVR 3150 | Food Security and Sustainability |
| ENVR 4515 | Sustainable Development |
| 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 |
| Additional Courses |  |
| EEMB 2420 | Fisheries Biology, Policy, and Conservation |
| ENTR 2206 | Global Social Enterprise |
| ENVR 1101 | Environmental Science |
| HSCI 1106 | Contemporary Issues in Nutrition |
| HUSV 2400 | Food Justice and Community Development |
| INSH 1102 | Food in Contemporary Context |
| PHIL 1185 | The Ethics of Food |

## 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.

For information about the minor, contact CSGS Administrative Coordinator Stefanie Rich at s.rich@northeastern.edu.

## 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 |
| HIST 1187 | Introduction to Latin American History |  |
| CLTR 1505 | Introduction to Latin American Culture |  |
| Culture and Literature Electives |  |  |
| Code | Title | Hours |
| Complete two of the following: |  | 8 |
| CLTR 1240 | Latin American Film |  |
| CLTR 1504 | Introduction to Spanish Culture |  |
| CLTR 1505 | Introduction to Latin American Culture |  |
| CLTR 3715 | New Narratives: Latin America after 1989 |  |
| CLTR 3725 | Representing Violence and Human Rights in Latin America |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| LITR 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 |
| :--- | ---: |
| Complete two of the following: | Hours |
|  | 8 |

Complete two of the following: 8

| ANTH 2365 | Sport, Culture, and Society |
| :--- | :--- |
| ANTH 4500 | Latin American Society and <br> Development |


| HIST 1206 | Drug Trade and Drug War. History, <br> Security, Culture |
| :--- | :--- |
| SOCL 2270 | Race and Ethnic Relations |

## GPA Requirement

2.000 GPA required in the minor

## Law and Public Policy, Minor

## Overview

The law and public policy minor offers students an opportunity to obtain a thorough understanding of the U.S. legal system and to use that knowledge to examine current law and policy debates. In the LPP minor core courses, students have the opportunity to watch a criminal and/ or civil trial, participate in a moot court before a panel of "judges," and listen to speakers from both the public and private sector (for example, a superior court judge and assistant attorney general). 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 facets of everyday life.

For more information, contact the program director,
Professor Dan Urman, 310 Renaissance Park, 617.373.6145, d.urman@northeastern.edu.

## 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 <br> Economic Perspective |  |
| LPSC 3303 | Topics in Law and Public Policy |  |
| LPSC 4304 | Advanced Debates in Law and Public <br> Policy |  |

## Elective Courses

Code Title Hours

Complete two of the following courses not used to satisfy the 8 requirements above:

| AFAM 2360 | Politics of Poverty |
| :--- | :--- |
| AFAM 2549 | Public Policy and Black America |
| ANTH 4580 | Special Topics in Anthropology |
| COMM 1331 | Legal Argumentation, Advocacy, and <br> Citizenship |
| COMM 2501 | Communication Law |
| COMM 2551 | Free Speech in Cyberspace |
| COMM 3501 | Free Speech: Law and Practice |
| CRIM 1300 | The Death Penalty |
| CRIM 1400 | Human Trafficking |


| CRIM 2100 | Criminal Due Process |
| :---: | :---: |
| CRIM 2200 | Criminology |
| CRIM 3030 | Global Criminology |
| CRIM 3040 | Psychology of Crime |
| CRIM 3100 | Criminal Law |
| CRIM 3200 | Youth Crime and Justice |
| CRIM 4010 | Gender, Crime, and Justice |
| CRIM 4020 | Race, Crime, and Justice |
| CRIM 4100 | Juvenile Law |
| CRIM 4500 | Police Strategy |
| CRIM 4630 | Political Crime and Terrorism |
| CRIM 4710 | Law and Psychology |
| CRIM 4900 | Advanced Seminar in Criminology and Criminal Justice |
| ECON 1240 | Economics of Crime |
| ECON 3404 | International Food Economics and Policy |
| ECON 3423 | Environmental Economics |
| ECON 3424 | Law and Economics |
| ENGL 3325 | Rhetoric of Law |
| ENGW 3311 | Advanced Writing for Prelaw |
| ENVR 5210 | Environmental Planning |
| FINA 4312 | Issues in Corporate Governance (for business students only) |
| HIST 2303 | Gender and Reproductive Justice |
| HIST 2308 | Law, Justice, and Society in Modern China |
| HIST 2360 | History of Capitalism in East Asia |
| HUSV 2800 | Sexual Orientation and Gender Expression in Practice and Policy |
| INTL 3400 | International Conflict and Negotiation |
| JRNL 3550 | The First Amendment and the Media |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| LPSC 3303 | Topics in Law and Public Policy |
| LPSC 4304 | Advanced Debates in Law and Public Policy |
| MUSI 3335 | Copyright Law for Musicians |
| PHIL 1160 | Introduction to Economic Justice |
| PHIL 2301 | Philosophical Problems of Law and Justice |
| PHIL 2303 | Social and Political Philosophy |
| POLS 3302 | Judicial Process and Behavior |
| POLS 3307 | Public Policy and Administration |
| POLS 3324 | Law and Society |
| POLS 3406 | International Law |
| POLS 4500 | U.S. Constitutional Law |
| POLS 4505 | U.S. Civil Liberties |
| PPUA 5264 | Energy Transitions and Climate Resilience: Technology, Policy, and Social Change |
| SOCL 1241 | Sociology of Violence |
| SOCL 1260 | Gender in a Changing Society |
| SOCL 2205 | Law and Social Justice |
| SOCL 2303 | Gender and Reproductive Justice |


| SOCL 4514 | "The Wire" and the Study of Urban <br> Inequalities |
| :--- | :--- |
| SOCL 4518 | Law and Society in a Digital World |
| WMNS 2303 | Gender and Reproductive Justice |
| WMNS 3100 | Gender, Social Justice, and <br> 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.

For more information, contact the program director, Professor Gavin Shatkin, 310 Renaissance Park, 617.373.3074, g.shatkin@northeastern.edu.

## 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 | 4 |
|  | Suburbs | 4 |
| SOCL 2358 | Current Issues in Cities and Suburbs | 4 |

## Elective Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete two of the following: |  | 8 |
| AFAM 2399 | Black Community and Social Change |  |
| ANTH 2305 | Global Markets and Local Culture |  |
| ANTH 2350 | Urban Anthropology |  |
| ARCH 2330 | Architecture, Modernity, and the City, 1800 to 1910 |  |
| ARCH 2340 | Architecture, Modernity, and the City, 1910 to 1980 |  |
| ARCH 2550 | Real Estate Development and Design |  |
| ECON 1240 | Economics of Crime |  |
| ECON 3420 | Urban Economic Issues |  |
| ECON 3422 | Economics of Transportation |  |
| HIST 3487 | Central European Capitals on the Eve of World War I |  |
| POLS 2345 | Urban Policies and Politics |  |
| POLS 2350 | State and Local Politics |  |


| POLS 2357 | Growth and Decline of Cities and <br> Suburbs |
| :--- | :--- |
| POLS 2360 | Politics of Poverty |
| POLS 3307 | Public Policy and Administration |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |
| SOCL 1220 | Sociology of Boston |
| SOCL 2358 | Current Issues in Cities and Suburbs <br> SOCL 4514"The Wire" and the Study of Urban <br> Inequalities |

## GPA Requirement

3.000 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), or contact the program coordinator, 263 Holmes Hall, 617.373.4984, 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 |
| :--- | :--- |
| WMNS 1103 | Introduction to Women's, Gender, and |
|  | Sexuality Studies |

Hours

## Hours

Complete three of the following:
At least one elective must be taken at the 2000 level or above and electives must be drawn from at least two different departments:

| WMNS 1101/ SOCL 1102 | Sex, Gender, and Popular Culture |
| :---: | :---: |
| WMNS/AFAM/ HIST 1225 | Gender, Race, and Medicine |
| WMNS 1441 | Topics in Women's, Gender, and Sexuality Studies |
| WMNS 1990 | Elective |
| WMNS/SOCL/ HIST 2303 | Gender and Reproductive Justice |
| WMNS/HIST 2373 | Gender and Sexuality in World History |
| WMNS 2441 | Topics in Women's, Gender, and Sexuality Studies |
| WMNS/AFAM/ ENGL 2455 | American Women Writers |
| WMNS/MSCR 2505 | Digital Feminisms |
| WMNS 2990 | Elective |
| WMNS/POLS/ SOCL 3100 | Gender, Social Justice, and Transnational Activism |
| WMNS/POLS/ PHIL 3500 | Sexuality, Gender, and the Law |
| WMNS 3990 | Elective |
| WMNS 4990 | Elective |
| WMNS 4992 | Directed Study |
| AFRS/WMNS 1185 | Gender in the African Diaspora |
| ANTH/WMNS $2302$ | Gender and Sexuality: A Cross-Cultural Perspective |
| CINE 3500 | Film Theory |
| CINE/WMNS 3392 | Gender and Film |
| COMM 1131 | Sex, Relationships, and Communication |
| COMM/WMNS 2304 | Communication and Gender |
| COMM/WMNS 3304 | Communication and Inclusion |
| COMM/WMNS $3530$ | Communication and Sexualities |
| COMM/WMNS $3610$ | Communication, Politics, and Social Change |
| CRIM/WMNS 4010 | Gender, Crime, and Justice |
| ENGL/WMNS $2451$ | Postcolonial Women Writers |
| ENGL/WMNS $3676$ | Representing Gender and Sexuality in Literature |
| ENGL/WMNS/ JWSS 3678 | Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity |
| HUSV/WMNS $2800$ | Sexual Orientation and Gender Expression in Practice and Policy |
| WMNS/HUSV $3580$ | Sexual Violence: Counseling, Programs, and Policy |
| INTL 2400 | Politics of Islam and Gender |
| INTL/WMNS 2480 | Women and World Politics |
| LING 3456 | Language and Gender |
| MUSC 1106 | Women in Music |
| MUSC 2340 | Divas, DJs, and Double Standards |


| NRSG 3302 | Nursing with Women and Families |
| :---: | :---: |
| PHIL 1104 | Goddesses, Witches, Saints, and Sinners: Women in Western Religions |
| PHIL/WMNS 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL/WMNS 1281 | Islam, Gender, and Fashion |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |
| PSYC 1200 | Psychology of Women |
| SOCL/WMNS $1255$ | Sociology of the Family |
| $\begin{aligned} & \text { SOCL/WMNS } \\ & 1260 \end{aligned}$ | Gender in a Changing Society |
| SOCL 2268 | Social Movements |
| SOCL/WMNS $4520$ | Race, Class, and Gender |
| SOCL/WMNS 4523 | Sexualities |
| THTR 2500/ WMNS 2501 | Breaking the Glass Ceiling: Women in Theatre |

## GPA Requirement

2.000 GPA required in the minor

## Asian Studies

Website (http://www.northeastern.edu/asianstudies)

## Gavin Shatkin, PhD

Director

## 310 Renaissance Park

617.373.3074

Gavin Shatkin, Director, g.shatkin@northeastern.edu
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. 31)."

## Preapproved Template Program in Asian Studies

Asian studies offers a preapproved template program that may be paired with another preapproved template program to create a combined major.

Programs<br>Bachelor of Arts (BA)<br>- Asian Studies (p. 631)<br>- History and Asian Studies (p. 632)<br>Minor<br>- East Asian Studies (p. 634)

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Asian Studies Requirements

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| ASNS 1150 | East Asian Studies | Origins of Today: Historical Roots of <br> Contemporary Issues |
| HIST 1215 | 4 |  |
| Asia in Global Context | 4 |  |
| Complete one of the following: |  |  |
| ECON 1290 | History of the Global Economy |  |
| ENGL 2450 | Postcolonial Literature | 4 |
| INTL 2240 | Global Population and Development |  |
| POLS 3487 | Politics of Developing Nations |  |
| Capstone |  | 4 |
| Complete one of the following: |  |  |

ASNS 4900 Asian Studies Capstone Directed Study
ASNS 4920 Asian Studies Capstone Seminar
International Experience
Complete a professional or academic experience abroad in consultation with your advisor.

## Language and Elective Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Language Courses |  |  |
| Complete the following courses in either Chinese or |  |  |
| Japanese: |  |  |
| Chinese |  |  |
| Select one of the following: |  |  |
| CHNS 1101 | Elementary Chinese 1 |  |
| CHNS 1301 | Elementary Chinese Immersion 1 |  |
| Select one of the following: |  |  |
| CHNS 1102 | Elementary Chinese 2 |  |
| CHNS 1302 | Elementary Chinese Immersion 2 |  |
| 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 |  |
| Japanese |  |  |
| 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:
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 <br> China |
| HIST 2351 | Modern Japan |
| Society and Politics Focus Area |  |

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 |  |
| ARCH 1320 | Architecture and Global Cultures, 1400 <br> to Present |
| CLTR 1260 | Japanese Film |
| CLTR 1700 | Introduction to Japanese Pop Culture |


| ENGL 2450 | Postcolonial Literature |
| :---: | :---: |
| MUSC 2130 | Music of Asia |
| PHIL 1130 | Ethics: East and West |
| Religious Studies Focus Area |  |
| PHIL 1231 | Image and Icon in South Asia |
| PHIL 1273 | Jainism |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4545 | Religion and Politics in South Asia |

## Asian Studies Major Credit Requirement

Complete 56 semester hours in the major.

## Program Requirements

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

History Requirements
Code Title Hours History Colloquium
HIST 1000 History at Northeastern 1
HIST 1200 Historical Research and Writing 1
HIST 1201 First-Year Seminar 4

Introductory Level

| Choose one course from the 1000 level except HIST 1215, |
| :--- |
| which is required by Asian studies. |
| History Seminar and Historical Writing 4 <br> HIST 2301 The History Seminar <br> HIST 2302 Historical Writing <br> Pre-1800 History Elective 4 <br> Choose one course from the following:  <br> HIST 2390 Africa and the World in Early Times <br> HIST 1218 Pirates, Planters, and Patriots: Making <br> the Americas, 1492-1804 <br> HIST 1252 Japanese Literature and Culture  <br> HIST 1270 Ancient Greece <br> HIST 1271 Ancient Rome <br> HIST 1285 Introduction to Russian Civilization <br> HIST 2330 Colonial and Revolutionary America |

Advanced History
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 |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| ASNS 1150 | East Asian Studies | 4 |
| HIST 1215 | Origins of Today: Historical Roots of <br> Contemporary Issues | 4 |


| Asia in Global Context |
| :--- |
| Complete one of the following: <br> ECON 1290$\quad$ History of the Global Economy |
| ENGL 2450 |
| Postcolonial Literature |
| POLS 2240 3487 |
| Complete a professional or academic experience abroad in |
| consultation with your advisor. |

Language and Elective Requirements
Code Title Hours
Language Courses
Complete the following courses in either Chinese or
Japanese:
Chinese
Select one of the following:

| CHNS 1101 | Elementary Chinese 1 |
| :--- | :--- |
| CHNS 1301 | Elementary Chinese Immersion 1 |

Select one of the following:

| CHNS 1102 | Elementary Chinese 2 |
| :--- | :--- |
| CHNS 1302 | Elementary Chinese Immersion 2 |

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 |
| Japanese |  |
| 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
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

| ARCH 1320 | Architecture and Global Cultures, 1400 <br> to Present |
| :--- | :--- |
| CLTR 1260 | Japanese Film |
| CLTR 1700 | Introduction to Japanese Pop Culture |
| ENGL 2450 | Postcolonial Literature |
| MUSC 2130 | Music of Asia |
| PHIL 1130 | Ethics: East and West |

Religious Studies Focus Area

| PHIL 1231 | Image and Icon in South Asia |
| :--- | :--- |
| PHIL 1273 | Jainism |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: <br> Eastern Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4545 | Religion and Politics in South Asia |

## Capstone

Code Title Hours

Complete one of the following: 4

| HIST 4701 | Capstone Seminar |
| :--- | :--- |
| ASNS 4900 | Asian Studies Capstone Directed Study |
| ASNS 4920 | Asian Studies Capstone Seminar |

## Integrative Requirement

Note: Public history concentrators satisfy this requirement within the concentration with Fieldwork in History 1 (HIST 4903) and (HIST 4904).

| Code | Title | Hours |
| :--- | :--- | ---: |
| HIST 2351 | Modern Japan | 4 |

# History and Asian Studies Major Credit Requirement <br> Complete 82 semester hours in the major. <br> <br> Program Requirements 

 <br> <br> 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 |
| :---: | :---: | :---: |
| Core Course |  |  |
| ASNS 1150 | East Asian Studies | 4 |
| Elective Courses |  |  |
| Complete four of the following. They may include up to two courses taken as part of an approved study-abroad program: |  | 16 |
| ENGL 2470 | Asian-American Literature |  |
| 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 1231 | Image and Icon in South Asia |  |
| PHIL 1273 | Jainism |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 1276 | Indian Religions |  |
| PHIL 2394 | Chinese Buddhism |  |


| PHIL 2395 | Japanese Buddhism |
| :--- | :--- |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4545 | Religion and Politics in South Asia |

## Language Track

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Course |  |  |
| ASNS 1150 | East Asian Studies | 4 |

## Required Courses

Complete the following two courses in either Chinese or 8
Japanese:
Chinese

| CHNS 1101 | Elementary Chinese 1 |
| :--- | :--- |
| and CHNS 1102 | and Elementary Chinese 2 |

Japanese
JPNS 1101 Elementary Japanese 1
and JPNS 1102 and Elementary Japanese 2

## Elective Courses

Complete two of the following. They may include up to two 8
courses taken as part of an approved study-abroad program:

| ASNS 2245 | The Asian-American Experience |
| :--- | :--- |
| ENGL 2470 | Asian-American Literature |
| HIST 1253 | History of Vietnam Wars |
| HIST 1252 | Japanese Literature and Culture |
| HIST 2308 | Law, Justice, and Society in Modern <br> 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 1231 | Image and Icon in South Asia |
| PHIL 1273 | Jainism |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: <br> PHIL 1276 |
| Indian Religions |  |
| PHIL 2394 2395 | Chinese Buddhism |
| PHIL 2398 | Japanese Buddhism  <br> PHIL 4393 Religion and Culture in Indian Cinema Religions in the United States <br> PHIL 4545 Religion and Politics in South Asia |

## GPA Requirement

2.000 GPA required in the minor

## School of Criminology and Criminal Justice

Website (http://www.northeastern.edu/sccj)

## Anthony Braga, PhD

Distinguished Professor and Director

## Amy Farrell, PhD

## Associate Professor and Associate Director

## Kevin Drakulich, PhD

Associate Professor and Undergraduate Program Director

## Gregory Zimmerman, PhD

Associate Professor and Graduate Program Director
204 Churchill Hall
617.373.3327
617.373 .8723 (fax)
sccj@northeastern.edu
The School of Criminology and Criminal Justice was established in 1967 as one of the first schools of its kind devoted to matters of crime and justice. The school is a leading force in education, research, and policymaking in both the public and the private sectors of the criminal justice field.

The School of Criminology and Criminal Justice seeks to prepare students for professional and research careers in criminology, criminal justice, and related fields by applying multidisciplinary and comparative social science to understand, predict, and explain crime as well as to contribute to the development of public policy on crime and justice issues. The school seeks to develop its students intellectually and ethically, while providing them with a keen appreciation of the complexities of crime and of the public and private efforts to make communities safer and to ensure justice.

The world of criminal justice is much more than police officers, corrections officials, criminal defense lawyers, or security and loss prevention personnel. At the School of Criminology and Criminal Justice, the boundaries of criminal justice have expanded beyond traditional views of the field to include emphases on law and justice, organizations and leadership, global criminology, and crime policy. Criminal justice education today is about more than the criminal; it involves understanding the victim and the community: repairing harm, reducing fear, rebuilding safe communities, and assuring justice in spirit and act.

The School of Criminology and Criminal Justice has had a long-standing attachment and commitment to improving a wide range of justice system agencies. The school actively engages external partners in an ongoing conversation about research, community service, and salient policy questions. Part of this dialogue is supported by an ongoing program of applied and social science research. Much of this research focuses on evaluating existing government crime-control programs and policies to determine whether they work, as well as inquiries about the etiology and prevention of crime. In addition, much of our research examines the unintended consequences of policy: institutionalized racism, differential impact of justice policy on certain groups, and the like. Research conducted at Northeastern on these topics is approached with ethical sensitivity and scientific rigor.

Criminology and criminal justice, as a social science, began in the early part of the 20th century. Nearly 100 years old, the field has blossomed in large part through the ingenuity of several notable scholars. The School of Criminology and Criminal Justice is pleased to be home to many of the country's preeminent contemporary scholars. School of Criminology and Criminal Justice faculty members regularly present at scholarly conferences, national and international seminars, and to policymakers worldwide.

## Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 31)."

## Programs

Bachelor of Science (BS)

- Criminal Justice (p. 635)
- Computer Science and Criminal Justice (p. 307)
- Criminal Justice and Philosophy (p. 640)
- Criminal Justice and Political Science (p. 641)
- Criminal Justice and Psychology (p. 612)
- Cybersecurity and Criminal Justice (p. 351)
- Human Services and Criminal Justice (p. 646)


## Minor

- Criminal Justice (p. 648)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 944)

## Criminal Justice, BS

The BS 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 within urban communities. 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
Criminal Justice Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Criminal Justice Core Requirements |  |  |
| CRIM 1100 | Introduction to Criminal Justice | 4 |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |


| CRIM 3600 | Criminal Justice Research Methods | 4 |
| :---: | :---: | :---: |
| CRIM 3700 | Criminal Justice Statistics | 4 |
| Criminal Justice Integrated Learning Core |  |  |
| Code | Title | Hours |
| Introduction to College |  |  |
| CRIM 1000 | Criminal Justice at Northeastern | 1 |
| Co-op Integration Seminars |  |  |
| Co-op students | d complete at least two of the following: | 2 |
| CRIM 2000 | Co-op Integration Seminar 1 (required for the first co-op) |  |
| CRIM 3000 | Co-op Integration Seminar 2 (required for the first co-op) |  |
| CRIM 4000 | Co-op Integration Seminar 3 (required if a second co-op is taken) |  |
| Non-co-op students should complete one additional criminal justice elective with credit of at least 4 semester hours. |  |  |
| Senior Capstone |  |  |
| CRIM 4949 | Senior Capstone Seminar | 4 |
| Criminal Justice Electives |  |  |
| Code | Title | Hours |
| Thematic Elective |  |  |
| 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 |  |
| Survey Electives |  |  |
| Complete two of the following: |  | 8 |
| CRIM 3010 | Criminal Violence |  |
| CRIM 3030 | Global Criminology |  |
| CRIM 3040 | Psychology of Crime |  |
| CRIM 3050 | Organized Crime |  |
| CRIM 3100 | Criminal Law |  |
| CRIM 3200 | Youth Crime and Justice |  |
| CRIM 3300 | Punishment in the Age of Mass Incarceration |  |
| CRIM 3400 | Corporate Security: Securing the Private Sector |  |
| CRIM 3500 | Policing a Democratic Society |  |
| System-Wide Elective |  |  |
| Complete one of the following: |  | 4 |
| CRIM 4010 | Gender, Crime, and Justice |  |
| CRIM 4020 | Race, Crime, and Justice |  |
| CRIM 4040 | Crime Prevention |  |
| Criminal Justice Open Electives |  |  |
| Complete four courses from the following range: |  | 16 |
| CRIM 4001 to CRIM 7999 |  |  |
| Supporting Courses |  |  |
| Code | Title | Hours |
| Computer Science |  |  |
| CS 1100 | Computer Science and Its Applications | 4 |

Mathematics

| Complete one of the following: |
| :--- |
| MATH 1215 Mathematical Thinking <br> MATH 1231 Calculus for Business and Economics <br> MATH 1241 Calculus 1 <br> MATH 1242 Calculus 2 <br> MATH 1251 Calculus and Differential Equations for <br> Biology 1 <br> MATH 1252 Calculus and Differential Equations for <br> Biology 2 <br> MATH 1340 Intensive Calculus for Engineers <br> MATH 1341 Calculus 1 for Science and Engineering <br> MATH 1342 Calculus 2 for Science and Engineering |

## 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 59 credit 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 |  |
| CRIM 1000 | 1 CRIM 1200 | 4 | Vacation | 0 |  |
| CRIM 1100 | 4 PSYC 1101 | 4 |  |  |  |
| SOCL 1101 | 4 MATH 1215 | 4 |  |  |  |
| CS 1100 | 4 Elective | 4 |  | 0 |  |
| ENGW 1111 | 4 | 16 | 0 | 0 |  |
|  | 17 |  |  |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CRIM 2100 | 4 <br> Criminal <br> justice <br> concentration <br> elective | 4 Vacation | 0 Co-op | 0 |

Year 3

| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 CRIM 3600 |  | Criminal justice advanced elective | 4 | Co-op | 0 |
|  | CRIM 3000 |  | Outside-criminaljustice elective or sequence | 4 |  |  |
|  | Criminal justice system-wide elective | 4 |  |  |  |  |
|  | ENGW 3305 | 4 |  |  |  |  |
|  | Outside-criminaljustice elective or sequence | 4 |  |  |  |  |
|  | 0 | 17 |  | 8 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 CRIM 3700 | 4 Outside-criminaljustice elective or sequence | 4 Co-op | 0 |
|  | CRIM 4000 | 1 Outside-criminaljustice elective or sequence | 4 |  |
|  | Criminal justice advanced elective | 4 |  |  |
|  | Outside-criminaljustice elective or sequence | 4 |  |  |
|  | Outside-criminaljustice elective or sequence | 4 |  |  |
|  | 0 | 17 | 8 | 0 |


| Year 5 | Hours | Spring |
| :--- | :--- | ---: |
| Fall | Hours |  |
| Co-op | Criminal 4949 <br> justice <br> advanced <br> elective | 4 |
|  | Criminal <br> justice <br> advanced <br> elective | 4 |


|  | Outside- <br> criminal- <br> justice <br> elective or <br> sequence | 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 |
| CRIM 1000 | 1 CRIM 1200 | 4 Vacation | 0 |  |
| CRIM 1100 | 4 PSYC 1101 | 4 |  |  |
| ENGW 1111 | 4 MATH 1215 | 4 |  |  |
| SOCL 1101 | 4 Elective | 4 |  | 0 |
| CS 1100 | 4 |  | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| CRIM 2100 | 4 Co-op | 0 Co-op | 0 Outside-criminaljustice elective or sequence | 4 |
| CRIM 2200 | 4 |  | Outside-criminaljustice elective or sequence | 4 |
| CRIM 2000 | 1 |  |  |  |
| Outside-criminaljustice elective or sequence | 4 |  |  |  |
| Outside-criminaljustice elective or sequence | 4 |  |  |  |
|  | 17 | 0 | 0 | 8 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CRIM 3600 | 4 | Co-op | 0 | Co-op | 0 | Criminal justice advanced elective | 4 |
| Criminal justice concentration elective | 4 |  |  |  |  | Outside-criminaljustice elective or sequence | 4 |
| Criminal justice concentration elective | 4 |  |  |  |  |  |  |
| ENGW 3305 | 4 |  |  |  |  |  |  |
| CRIM 3000 | 1 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 8 |



## Year 5



Total Hours: 132

## 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. 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |
| or CRIM 2000 | Co-op Integration Seminar 1 |  |

Computer Science Fundamental Courses
A grade of C - or higher is required in computer science fundamental courses:

| $\text { CS } 1800$ <br> and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 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 | Object-Oriented Design | 4 |
| IS 2000 | Principles of Information Science | 4 |

## Presentation Requirement

THTR 1170 The Eloquent Presenter 1
Computer Science Elective Courses
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, IS, or DS courses 16
that are not already required. Choose courses within the
following ranges:
CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Criminal Justice Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Criminal Justice Required Courses |  |  |
| CRIM 1100 | Introduction to Criminal Justice | 4 |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| CRIM 3600 | Criminal Justice Research Methods | 4 |
| CRIM 3700 | Criminal Justice Statistics | 4 |

Criminal Justice Required Capstone
CRIM $4949 \quad$ Senior Capstone Seminar

| Thematic Elective |  |  |
| :---: | :---: | :---: |
| Complete one cour | from the following: | 4 |
| CRIM 1300 | The Death Penalty |  |
| CRIM 1400 | Human Trafficking |  |
| CRIM 1500 | Corruption, Integrity, and Accountability |  |
| CRIM 1700 | Crime, Media, and Politics |  |
| Survey Elective |  |  |
| Complete one course from the following: |  | 4 |
| CRIM 3010 | Criminal Violence |  |
| CRIM 3030 | Global Criminology |  |
| CRIM 3040 | Psychology of Crime |  |
| CRIM 3050 | Organized Crime |  |
| CRIM 3100 | Criminal Law |  |
| CRIM 3200 | Youth Crime and Justice |  |
| CRIM 3300 | Punishment in the Age of Mass Incarceration |  |
| CRIM 3400 | Corporate Security: Securing the Private Sector |  |
| CRIM 3500 | Policing a Democratic Society |  |
| System-Wide Elective |  |  |
| Complete one course from the following: |  | 4 |
| CRIM 4010 | Gender, Crime, and Justice |  |
| CRIM 4020 | Race, Crime, and Justice |  |
| Criminal Justice Elective |  |  |
| Complete one additional CRIM elective. |  | 4 |
| Integrative Course Requirement |  |  |
| Code | Title | Hours |
| Complete one course from the following: |  | 4 |
| CRIM 4040 | Crime Prevention |  |
| CRIM 4630 | Political Crime and Terrorism |  |
| CRIM 4800 | Crime Mapping |  |
| CRIM 4900 | Advanced Seminar in Criminology and Criminal Justice |  |
| Supporting Course |  |  |
| Code | Title | Hours |
| Computing and Social Issues |  |  |
| Complete one of th | following: | 4 |
| SOCL 4528 | Computers and Society |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 1280 | The 21 st-Century Workplace |  |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| PHIL 1145 | Technology and Human Values |  |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital Rights |  |
| INSH 2102 | Bostonography: The City through Data, Texts, Maps, and Networks |  |
| Computer Science English Requirement |  |  |
| Code | Title | Hours |
| College Writing |  |  |
| ENGW 1111 or ENGW 1102 | First-Year Writing <br> First-Year Writing for Multilingual Writers | 4 |


| Year 3 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| CS elective 1 | 4 | Co-op | Co-op | Elective | 4 |
| CRIM 3700 | 4 |  | Elective | 4 |  |
| CJ survey <br> elective | 4 |  |  |  |  |
| CS elective 2 | 4 |  |  | 8 |  |
| THTR 1170 | 1 | 0 | 0 | 8 |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | ---: | ---: |
| CS elective 3 | 4 CS elective 4 | 4 Elective | 4 |
| CJ system- <br> wide elective | 4 CRIM 4949 | 4 Elective | 4 |
| CJ elective | 4 Elective | 4 |  |
| Computing <br> and social <br> issues | 4 <br> CJ <br> integrative <br> course | 4 | 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 <br> Vacation <br> and CS 2511 |  |  |  |
| CS 1800 <br> and CS 1802 | 5 IS 2000 | 4 |  |  |
| CS 2500 <br> and CS 2501 | 5 CRIM 2100 | 4 |  |  |
| CRIM 1100 | 4 CRIM 2200 | 4 |  |  |
| ENGW 1111 | 4 |  |  | 0 |
|  | 19 | 17 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| CS 1210 or | 1 Co-op | Co-op | Vacation |  |
| CRIM 2000 |  |  |  |  |
| CS 3000 | 4 |  |  |  |
| CS 3200 | 4 |  |  |  |
| CS 3500 | 4 |  | 0 | 0 |
| CRIM 3600 | 4 | 0 | 0 |  |
|  | 17 |  |  |  |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CRIM 3700 |  | Co-op |  | Co-op |  | ENGW 3302, 3308, or 3315 | 4 |
| CS elective 1 | 4 |  |  |  |  | Elective | 4 |
| CJ thematic elective | 4 |  |  |  |  |  |  |
| CJ survey elective | 4 |  |  |  |  |  |  |
| THTR 1170 | 1 |  |  |  |  |  |  |
|  | 17 |  | 0 |  | 0 |  | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: | ---: |
| CS elective 2 | 4 Co-op | Co-op | Elective | 4 |
| CJ system- <br> wide elective | 4 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Computing <br> and social <br> issues | 4 |  |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| CJ | 4 CS elective 4 | 4 |
| integrative |  |  |
| course |  | 4 |
| CJ elective | 4 CRIM 4949 | 4 |
| Elective | 4 Elective | 4 |
| CS elective 3 | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 134

## Criminal Justice and Philosophy, 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Criminal Justice Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Criminal Justice Required Courses |  |  |
| CRIM 1100 | Introduction to Criminal Justice | 4 |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| CRIM 3600 | Criminal Justice Research Methods | 4 |
| CRIM 3700 | Criminal Justice Statistics | 4 |

Co-op Integration Seminar
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.

| CRIM 2000 | Co-op Integration Seminar 1 |  |
| :---: | :---: | :---: |
| CRIM 3000 | Co-op Integration Seminar 2 |  |
| CRIM 4000 | Co-op Integration Seminar 3 |  |
| Capstone |  |  |
| CRIM 4949 | Senior Capstone Seminar | 4 |
| Major Electives |  |  |
| Thematic Elective |  |  |
| Complete one of the following: |  | 4 |
| CRIM 1300 | The Death Penalty |  |
| CRIM 1400 | Human Trafficking |  |
| CRIM 1500 | Corruption, Integrity, and Accountability |  |
| Survey Elective |  |  |
| Complete one of the following: |  | 4 |
| CRIM 3010 | Criminal Violence |  |
| CRIM 3030 | Global Criminology |  |
| CRIM 3040 | Psychology of Crime |  |
| CRIM 3050 | Organized Crime |  |
| CRIM 3100 | Criminal Law |  |
| CRIM 3200 | Youth Crime and Justice |  |
| CRIM 3300 | Punishment in the Age of Mass Incarceration |  |
| CRIM 3400 | Corporate Security: Securing the Private Sector |  |
| CRIM 3500 | Policing a Democratic Society |  |
| System-Wide Electives |  |  |
| CRIM 4010 | Gender, Crime, and Justice |  |
| CRIM 4020 | Race, Crime, and Justice |  |
| Criminal Justice Elective |  |  |
| Complete one | nal CRIM course. | 4 |

## Philosophy Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL/POLS 2325 | Ancient Philosophy and Political Thought | 4 |
| PHIL 2303 | Social and Political Philosophy | 4 |
| PHIL 2330 | Modern Philosophy | 4 |

Intermediate/Advanced Electives
Complete two of the following:

| PHIL 3343 | Existentialism |
| :--- | :--- |
| PHIL 3435 | Moral Philosophy |
| PHIL 3460 | Philosophy and Literature |
| PHIL 4390 | Cults and Sects |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4515 | Advanced Logic |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar: Theories and Methods in <br> RHIL 4903 |

Philosophy ElectivesComplete two additional PHIL courses.8

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Philosophy Integrative Course |  |  |
| PHIL 2301 | Philosophical Problems of Law and | 4 |
|  | Justice |  |

## Criminal Justice Integrative Course

CRIM $1400 \quad 4$

## Criminal Justice and Philosophy Major Credit Requirement

Complete 80 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Criminal Justice Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Criminal Justice Core Requirements |  |  |
| CRIM 1100 | Introduction to Criminal Justice | 4 |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| Thematic Electives |  | 4 |
| Complete one of the following: |  |  |
| CRIM 1300 | The Death Penalty |  |
| CRIM 1400 | Human Trafficking |  |
| CRIM 1500 | Corruption, Integrity, and Accountability |  |
| CRIM 1700 | Crime, Media, and Politics |  |

Survey Elective
Complete one of the following:

CRIM 3010 to CRIM 3500
System-Wide Elective
Complete one of the following: 4

| CRIM 4010 | Gender, Crime, and Justice |
| :---: | :--- |
| CRIM 4020 | Race, Crime, and Justice |
| Computer Science |  |
| CS 1100 | Computer Science and Its Applications |

Mathematics
Complete one of the following:

| MATH 1215 | Mathematical Thinking |
| :--- | :--- |
| MATH 1231 | Calculus for Business and Economics |
| MATH 1241 | Calculus 1 |


| Political Science Requirements |  |  |
| :--- | ---: | ---: |
| Code Title | Hours |  |
| Political Science Requirements | 4 |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |

Political Theory
Complete one of the following: 4

| 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
Research Methods
CRIM $3600 \quad$ Criminal Justice Research Methods 4
CRIM $3700 \quad$ Criminal Justice Statistics 4
Criminal Justice Electives
Complete two courses in the following range: 8
CRIM 4001 to CRIM 4999
Political Science Electives
Complete five courses in the following range: 20
POLS 2300 to POLS 5999
OPTION B

| Code | Title | Hours |
| :--- | :--- | ---: |
| Research Methods |  |  |
| POLS 2399 | Research Methods in Political Science | 4 |
| POLS 2400 | Quantitative Techniques | 4 |
| Criminal Justice Electives | 12 |  |
| Complete three courses in the following range: |  |  |
| CRIM 4001 to CRIM 4999 |  |  |
| Political Science Electives | 20 |  |

POLS 2300 to POLS 5999
OPTION C
Code Title Hours
Research Methods
Complete one of the following sequences: 8
CRIM 3600 Criminal Justice Research Methods
and POLS 2400 and Quantitative Techniques
CRIM $3700 \quad$ Criminal Justice Statistics
and POLS 2399 and Research Methods in Political Science
Criminal Justice Electives
Complete two courses in the following range: 8
CRIM 4001 to CRIM 4999
Political Science Electives
Complete four courses in the following range: 20
POLS 2300 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. 643).

- American Political Institutions (p. 643)
- Campaigns and Elections (p. 643)
- Identity, Culture, and Politics (p. 643)
- Law and Legal Studies (p. 643)
- Security Studies (p. 643)


## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Senior Capstone Requirement |  |  |
| CRIM 4949 | Senior Capstone Seminar | 4 |
| or POLS 4701 | Political Science Senior Capstone |  |
| Due Process |  |  |


| CRIM 2100 | Criminal Due Process |
| :--- | :--- |
| Integrative Elective Courses | 4 |
| Complete two of the following: | 8 |
| CRIM 3100 | Criminal Law |
| CRIM 4100 | Juvenile Law |
| 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.

## 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 3305 | The American Presidency |  |
| POLS 3307 | Public Policy and Administration |  |
| POLS 3310 | Public Opinion, Voting, and Elections |  |

CONCENTRATION IN CAMPAIGNS AND ELECTIONS
Code Title Hours

## Required Courses

With advisor approval, a co-op or internship may be substituted in place of POLS 4947:
POLS $3160 \quad 4$
POLS 49474

## 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 2355
POLS $3310 \quad$ Public Opinion, Voting, and Elections
POLS 3162 Local Campaigns and Elections
POLS 3320 Politics and Mass Media
POLS 3402
POLS 3304

## CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Course |  | 4 |
| POLS 3418 | Nationalism | 4 |
| Electives |  | 12 |

POLS $2360 \quad$ Politics of Poverty

| POLS 2368 | Music and Politics in America and <br> Abroad |
| :---: | :--- |
| POLS 2370 | Religion and Politics <br> POLS 3309 |
| Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |  |
| POLS 3324 | Law and Society |$\quad$ Hours

## 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 3427 | Civil-Military Relations |  |
| POLS 3430 | Revolution, Civil War, and Insurrection |  |
| POLS 3470 | Arab-Israeli Conflict |  |
| POLS 3487 | Politics of Developing Nations |  |
| POLS 4918 | Model NATO |  |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Criminal Justice Requirements

| Code | Title | Hours |
| :--- | :--- | :---: |
| Criminal Justice Core Requirements |  |  |
| CRIM 1100 | Introduction to Criminal Justice | 4 |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| CRIM 3600 | Criminal Justice Research Methods | 4 |

Thematic Elective
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 |

Survey Elective
Complete one of the following:

| CRIM 3010 | Criminal Violence |
| :--- | :--- |
| CRIM 3030 | Global Criminology |
| CRIM 3050 | Organized Crime |
| CRIM 3100 | Criminal Law |
| CRIM 3200 | Youth Crime and Justice |
| CRIM 3300 | Punishment in the Age of Mass <br> Incarceration |
| CRIM 3400 | Corporate Security: Securing the Private <br> Sector |
| CRIM 3500 | Policing a Democratic Society |

System-Wide Elective
Complete one of the following: 4

| CRIM 4010 | Gender, Crime, and Justice |
| :--- | :--- |
| CRIM 4020 | Race, Crime, and Justice |
| 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 three courses in the following range:

## CRIM 4000 to CRIM 5999

## Psychology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introductory Course |  |  |
| PSYC 1101 | Foundations of Psychology | 4 |

## Statistics

PSYC 2320
Statistics in Psychological Research
4
Personality/Social Bases of Behavior
Complete two of the following:
PSYC $3400 \quad$ Personality
PSYC 3402 Social Psychology
PSYC 3404 Developmental Psychology
PSYC 3406 Abnormal Psychology
Biological/Cognitive Bases of Behavior
Complete two of the following:

| 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:

| PSYC 4991 | Directed Study Research |
| :--- | :--- |
| 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 4650 | Seminar in Clinical Case Study |
| :--- | :--- |
| 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. |  |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| CRIM 3040 | Psychology of Crime | 4 |
| or CRIM 4710 | Law and Psychology |  |

## Criminal Justice and Psychology Combined-Major Credit Requirement

Complete 84 semester hours in the major.

## Program Requirement

128 total semester hours required

## Cybersecurity and Criminal Justice, 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Cybersecurity Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science | Overview |  |
| CS 1200 | Leadership Skill Development |  |
| or CRIM 1000 | Criminal Justice at Northeastern |  |
| CS 1210 | Professional Development for CCIS Co- <br> op |  |

## Discrete Structures

A grade of C - or higher is required:

| CS 1800 | Discrete Structures | 5 |
| :--- | :--- | :--- |
| and CS 1802 | and Seminar for CS 1800 |  |

## Computer Science Fundamentals Courses

A grade of C - or higher is required in each course:

| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| :--- | :--- | ---: |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :---: | :---: | :---: |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3650 | Computer Systems | 4 |
| CS 3700 | Networks and Distributed Systems | 4 |
| Cybersecurity Required Courses |  |  |
| CS 2550 | Foundations of Cybersecurity | 4 |
| CS 3740 | Systems Security | 4 |
| CS 4740 | Network Security | 4 |
| Cybersecurity Elective |  |  |
| Complete one of the following: |  | 4 |
| CS 2800 | Logic and Computation |  |
| $\begin{aligned} & \text { CS } 4710 \\ & \text { or CS } 6710 \end{aligned}$ | Mobile and Wireless Systems Wireless Network |  |
| CS 5770 | Software Vulnerabilities and Security |  |
| CS 4770 | Cryptography |  |
| CS 4400 | Programming Languages |  |
| CS 4500 | Software Development |  |
| CS 4240 | Large-Scale Parallel Data Processing |  |


| DS 4300 | Large-Scale Information Storage and <br> Retrieval |
| :--- | :--- |
| DS 4400 | Machine Learning and Data Mining 1 |
| IA 5200 | Security Risk Management and <br> Assessment |
| IA 5210 | Information System Forensics |
| and IA 5211 | and Lab for IA 5210 |

THTR 1170 The Eloquent Presenter ..... 1
Supporting Courses
Code Title Hours

Hours 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:

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :--- | :--- |
| ENGW 3308 | Advanced Writing in the Social <br> Sciences |
| ENGW 3311 | Advanced Writing for Prelaw <br> ENGW 3315Interdisciplinary Advanced Writing in <br> the Disciplines |


| Criminal Justice Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Core Requirements |  |  |
| CRIM 1100 | Introduction to Criminal Justice | 4 |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| CRIM 3600 | Criminal Justice Research Methods | 4 |
| CRIM 3700 | Criminal Justice Statistics | 4 |
| Thematic Elective |  |  |
| 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 |  |
| Survey Elective |  |  |
| Complete one of the following: |  | 4 |
| CRIM 3010 | Criminal Violence |  |
| CRIM 3030 | Global Criminology |  |
| CRIM 3040 | Psychology of Crime |  |
| CRIM 3100 | Criminal Law |  |
| CRIM 3200 | Youth Crime and Justice |  |
| CRIM 3300 | Punishment in the Age of Mass Incarceration |  |


| System-Wide Elective |  |  |
| :---: | :---: | :---: |
| Complete one of the following: |  | 4 |
| CRIM 4010 | Gender, Crime, and Justice |  |
| CRIM 4020 | Race, Crime, and Justice |  |
| Criminal Justice Elective |  |  |
| Complete one CRIM course. |  | 4 |
| Criminal Justice Capstone |  |  |
| Complete one of the following: |  | 4 |
| CRIM 4949 | Senior Capstone Seminar |  |
| CS 4930 | Cybersecurity Capstone |  |
| CS 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 |
| Cybersecurity Integrative Course |  |  |
| $\text { CS } 4170$ | The Law, Ethics, and Policy of Data and Digital Technologies | 4 |
| or IA 5240 | Cyberlaw: Privacy, Ethics, and Digital Rights |  |
| Criminal Justice Integrative Course |  |  |
| Complete one | following: | 4 |
| CRIM 4040 | Crime Prevention |  |
| CRIM 4630 | Political Crime and Terrorism |  |
| CRIM 3050 | Organized Crime |  |


| CRIM 3400 | Corporate Security: Securing the Private <br> Sector |
| :--- | :--- |
| CRIM 3500 | Policing a Democratic Society |
| CRIM 5900 | Topics in Criminal Justice and <br> Criminology |

Required General Electives<br>Code Title Hours<br>Complete six general electives. 24

## Cybersecurity GPA Requirement

Minimum 2.000 GPA required in all computer and information science courses.

## Program Requirement

133 total semester hours required.

## 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 skillbased 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Foundation Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introduction to the Major |  |  |
| CRIM 1000 | Criminal Justice at Northeastern | 1 |
| or HUSV 1000 | Human Services at Northeastern |  |


| CRIM 1100 | Introduction to Criminal Justice | 4 |
| :---: | :---: | :---: |
| CRIM 1300 | The Death Penalty | 4 |
| or CRIM 1400 | Human Trafficking |  |
| or CRIM 1500 | Corruption, Integrity, and Accountability |  |
| or CRIM 1700 | Crime, Media, and Politics |  |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| CS 1100 | Computer Science and Its Applications | 4 |
| Human Services Foundation Courses |  |  |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and Social Change | 4 |

## Upper-Level Courses

| Code <br> Policy Course | Title | Hours |
| :--- | :--- | ---: |
| HUSV 3900 | Introduction to Social Policy | 4 |
| Organization Course |  | 4 |
| SOCL 3440 | Sociology of Human Service <br> Organizations | 4 |

## Survey Electives

Complete two of the following:

## 8

| CRIM 3010 | Criminal Violence |  |
| :---: | :--- | :--- |
| CRIM 3030 | Global Criminology |  |
| CRIM 3040 | Psychology of Crime |  |
| CRIM 3050 | Organized Crime |  |
| CRIM 3100 | Criminal Law |  |
| CRIM 3200 | Youth Crime and Justice |  |
| CRIM 3300 | Punishment in the Age of Mass <br> Incarceration |  |
| CRIM 3400 | Corporate Security: Securing the Private <br> Sector |  |
| CRIM 3500 | Policing a Democratic Society |  |
| Research Methods | Criminal Justice Research Methods | 4 |
| CRIM 3600 | Research Methods for Human Services |  |

Criminal Justice Elective

| Complete one of the following: |  |
| :--- | :--- |
| CRIM 4010 | Gender, Crime, and Justice |
| CRIM 4020 | Race, Crime, and Justice |
| CRIM 4040 | Crime Prevention |

## Statistics

Complete one of the following:

| CRIM 3700 | Criminal Justice Statistics |
| :--- | :--- |
| PSYC 2320 | Statistics in Psychological Research |
| SOCL 2320 | Statistical Analysis in Sociology |

## Human Services Internship

Code Title
Hours
HUSV 4994 Human Services Internship
6

## Integrative Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| CRIM 4949 | Senior Capstone Seminar | 4 |
| or HUSV 4700 | Senior Seminar in Human Services |  |

## Open Electives

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Complete seven courses. Two of these courses must be in | 28 |
| criminal justice and four must be in human services. |  |

## Cooperative Education for Criminal Justice <br> Code Title Hours

Co-op Integration Seminar 1/Professional Development
All students should complete one of the following:

| CRIM 2000 | Co-op Integration Seminar 1 |  |
| :--- | :--- | :--- |
| EESH 2000 | Professional Development for Co-op |  |
| Co-op Integration Seminars 2 and 3 | 1 |  |
| Co-op students should complete the following: | 1 |  |
| CRIM 3000 | Co-op Integration Seminar 2 | 1 |
| CRIM 4000 | Co-op Integration Seminar 3 |  |
| Non-co-op students should complete an additional 2 |  |  |
| semester hours of open elective credit. |  |  |

## 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 1200 | 4 Vacation | 0 Vacation | 0 |
| CRIM 1100 | 4 HUSV 2300 | 4 |  |  |
| HUSV 1101 | 4 CS 1100 | 4 |  |  |
| ENGW 1111 | 4 HSVC <br> elective | 4 |  | 0 |
| MATH 1215 | 4 | 16 | 0 |  |
|  | 17 |  |  |  |

Year 2

| Fall H | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CRIM 2100 | 4 | CRIM 2000 | 1 | Vacation | 0 | Co-op | 0 |
| CRIM 2200 |  | CJ concentration elective | 4 |  |  |  |  |
| HSVC intermediate/ advanced undergraduate elective | 4 | CJ concentration elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 16 |  | 17 |  | 0 |  | 0 |


| HSVC <br> organization <br> course | 4 |  | 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- <br> wide elective  | 4 Elective | 4 |  |
|  | ENGW 3315 | 4 |  |  |
|  | Elective | 4 |  | 0 |
|  | CRIM 3700 | 4 | 8 |  |

## Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: |
| Co-op | 0 HUSV 4994 | 6 |
|  | Elective | 4 |
|  | CRIM 4949 |  |
| or HUSV |  |  |
| 4700 |  |  |
|  | Elective | 4 |
| 0 | 4 |  |

Total Hours: 130

## 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 1200 | 4 Vacation | 0 Vacation | 0 |
| CRIM 1100 | 4 HUSV 2300 | 4 |  |  |
| HUSV 1101 | 4 CS 1100 | 4 |  |  |
| ENGW 1111 | 4 <br> HSVC <br> elective | 4 |  | 0 |
| MATH 1215 | 4 | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| CRIM 2100 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| CRIM 2200 | 4 |  | Elective | 4 |
| CRIM 2000 | 1 |  |  |  |
| HUSV 2300 | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 8 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| CJ <br> 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 <br> organization <br> course | 4 |  |  |  |
| CJ system- <br> wide elective | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
| CRIM 4000 | 1 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| CRIM 3700 | 4 Elective | 4 |
| HUSV 4994 | 6 Elective | 4 |
| ENGW 3315 | 4 CRIM 4949 <br> or HUSV <br> 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 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |

## Criminal Justice Electives

| Code <br> Complete two of the following: | Hours |  |
| :--- | :--- | ---: |
| CRIM 3010 | Criminal Violence | 8 |
| CRIM 3030 | Global Criminology |  |
| CRIM 3040 | Psychology of Crime |  |
| CRIM 3050 | Organized Crime |  |
| CRIM 3100 | Criminal Law |  |
| CRIM 3200 | Youth Crime and Justice <br> CRIM 3300Punishment in the Age of Mass <br> Incarceration |  |
| CRIM 3400 | Corporate Security: Securing the Private <br> Sector |  |


| CRIM 3500 | Policing a Democratic Society |
| :--- | :--- |
| CRIM 4010 | Gender, Crime, and Justice |
| CRIM 4020 | Race, Crime, and Justice |
| CRIM 4040 | Crime Prevention |
| CRIM 4100 | Juvenile Law |
| CRIM 4120 | Courts and Sentencing |
| CRIM 4500 | Police Strategy |
| CRIM 4630 | Political Crime and Terrorism |
| 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. Indeed, we are your gateway to the languages and peoples of the world and we have the broadest selection of majors (https://www.northeastern.edu/cssh/csgs/majorscsgs) and minors (https://www.northeastern.edu/cssh/csgs/minorscsgs) in Northeastern!

## Programs

## Bachelor of Arts (BA)

- African-American Studies (p. 649)
- Spanish (p. 653)
- Spanish and International Affairs (p. 654)
- Religious Studies and African-American Studies (p. 651)


## Bachelor of Science (BS)

- African-American Studies (p. 658)
- American Sign Language (p. 660)
- American Sign Language and Human Services (p. 661)
- American Sign Language and Linguistics (p. 504)
- American Sign Language and Psychology (p. 611)
- American Sign Language and Theatre (p. 208)


## Minors

- African Studies (p. 666)
- African-American Studies (p. 666)
- American Sign Language (p. 667)
- Arabic (p. 667)
- Chinese (p. 667)
- Film and International Cultures (p. 668)
- French (p. 669)
- Italian (p. 669)
- Japanese (p. 669)
- Portuguese (p. 670)
- Russian (p. 670)
- Spanish (p. 671)


## African-American Studies, BA

African-American 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. Because African-American studies relates to numerous other fields, the number of required courses for the major is relatively small to allow maximum flexibility. Our students often pursue a double major, a combined degree, or a minor in another subject. By combining study in African-American studies with experiential learning through co-op, study abroad, and/or Dialogues of Civilizations programs, you have an opportunity to obtain practical experience that will give you greater flexibility upon graduation. Moreover, the reading, writing, and analytical skills you will develop will prove useful and valuable in any profession.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
African-American Studies Major Requirements
Code Title Hours

Introductory Courses

| AFAM 1101 | Introduction to African-American <br> Studies | 4 |
| :--- | :--- | :--- |
| AFAM 1109 | Foundations of Black Culture 1 | 4 |
| AFRS 1185 | Gender in the African Diaspora | 4 |
| Literature | 4 |  |
| AFAM 4663 | 4 |  |
| Research and Seminar | 4 |  |


| AFAM 4700 | 4 |
| :--- | :---: |
| Electives | 24 |
| Complete six African-American studies courses at the |  |
| intermediate and advanced level from the following: |  |
| AFAM 2000 to AFAM 5999 |  |

## African-American Studies Major Credit Requirement

Complete 48 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

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 |
| AFAM 1101 | 4 AFRS 1185 | 4 Vacation | 0 Vacation | 0 |
| AFAM 1109 | 4 AFAM 4663 | 4 |  |  |
| MATH 1215 | 4 AFRS 3310 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  | 0 |
|  | 16 | 16 | 0 |  |

Year 2

| Fall H | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AFAM intermediate/ advanced undergraduate elective |  | AFAM intermediate/ advanced undergraduate elective | 4 Vacation | 0 Co-op | 0 |
| Foreign language course |  | Foreign language course | 4 |  |  |
| AFAM intermediate/ advanced undergraduate elective |  | AFAM intermediate/ advanced undergraduate elective | 4 |  |  |
| Elective | 4 | Elective | 4 |  |  |
|  |  | EESH 2000 | 1 |  |  |
|  | 16 |  | 17 | 0 | 0 |

## Year 3

| Fall Co-op | Hours 0 | Spring <br> AFAM 4700 | Hours | Summer 1 <br> Elective | Hours 4 | Summer 2 <br> Co-op | Hours 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ENGW 3315 |  | Upper- <br> division <br> elective | 4 |  |  |
|  |  | AFAM intermediate/ advanced undergraduate elective | 4 |  |  |  |  |
|  |  | Foreign language course | 4 |  |  |  |  |


| Year 4 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Fall | O Elective | 4 Elective | 4 Co-op | 0 |
| Co-op | $\begin{array}{l}\text { Elective }\end{array}$ | 4 Elective | 4 |  |
| $\begin{array}{l}\text { AFAM } \\ \text { intermediate/ } \\ \text { advanced } \\ \text { undergraduate } \\ \text { elective }\end{array}$ | 4 |  |  |  |
| $\begin{array}{l}\text { Upper- } \\ \text { division } \\ \text { elective }\end{array}$ | 4 | 8 | 0 |  |

Year 5

| Fall | Hours | Spring |
| :--- | ---: | ---: |
| Co-op | 0 Elective | 4 |
|  | Elective | 4 |
|  | Upper- <br> division <br> 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 |
| :--- | :---: | :---: | :---: | ---: |
| AFAM 1101 | 4 AFRS 1185 | 4 Vacation | 0 Vacation | 0 |
| AFAM 1109 | 4 AFAM 4663 | 4 |  |  |
| MATH 1215 | 4 AFRS 3310 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  | 0 |
|  | 16 | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| AFAM <br> intermediate/ <br> advanced <br> undergraduate elective | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Foreign language course | 4 |  | Elective | 4 |
| AFAM <br> intermediate/ <br> advanced <br> undergraduate elective | 4 <br> e |  |  |  |
| Elective | 4 |  |  |  |
| EESH 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| AFAM | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| intermediate/ |  |  |  |  |
| advanced |  |  |  |  |
| undergraduate |  |  |  |  |
| elective |  |  |  |  |


| Foreign <br> language <br> course | 4 | Elective | 4 |  |
| :--- | :--- | :--- | :--- | :--- |
| AFAM <br> intermediate/ <br> advanced <br> undergraduate <br> elective | 4 |  |  |  |
| Upper- <br> division <br> elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |



Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| AFAM <br> intermediate/ <br> advanced <br> undergraduate <br> elective | Upper- <br> division <br> elective | 4 |
| Upper- <br> division <br> elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 129

## Religious Studies and African-American Studies, BA

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Religious Studies Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Comparative Religion |  |  |
| Complete two of the following: |  | 8 |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1130 | Ethics: East and West |  |
| PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 2300 | Mysticism |  |
| PHIL 2315 | Adam and Eve and Their Interpreters |  |
| PHIL 4390 | Cults and Sects |  |

Ancient Mediterranean and African World Traditions
Complete one of the following:

| PHIL 1111 | Introduction to World Religions |
| :--- | :--- |
| PHIL 1120 | Understanding the Bible |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1280 | Encountering Islam: Traditions, <br> Debates, and Crosscultural Diversity <br> Jewish Religion and Culture |
| PHIL 1285 | Jewish Religion and Culture |
| JWSS 1285 | Modern Judaism |

Complete one of the following:
PHIL $1111 \quad$ Introduction to World Religions

| PHIL 1111 | Introduction to World Religions |
| :--- | :--- |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: <br>  <br> EHIL 1276 |
| PHIL 1290 | Chinern Religions Philosophy and Religion |


| PHIL 4545 | Religion and Politics in South Asia |  |
| :---: | :---: | :---: |
| PHIL 4393 | Asian Religions in the United States |  |
| Religion and Culture |  |  |
| Complete one of the following: |  | 4 |
| PHIL 1104 | Goddesses, Witches, Saints, and Sinners: Women in Western Religions |  |
| PHIL 1666 | The Problem of Evil in Film |  |
| PHIL 1667 | Science Fiction and Film: Moral Dilemmas and Ethical Analysis |  |
| PHIL 1220 | The Meaning of Death |  |
| PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1260 | Apocalypticism in Film |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1285 | Jewish Religion and Culture |  |
| JWSS 1285 | Jewish Religion and Culture |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 2315 | Adam and Eve and Their Interpreters |  |
| PHIL 2316 | Interpreting the Bible |  |
| PHIL 2398 | Religion and Culture in Indian Cinema |  |
| PHIL 4390 | Cults and Sects |  |
| Ethics |  |  |
| Complete one of the following: |  | 4 |
| PHIL 1130 | Ethics: East and West |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1666 | The Problem of Evil in Film |  |
| PHIL 1667 | Science Fiction and Film: Moral Dilemmas and Ethical Analysis |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Religious Studies Electives |  |  |
| Complete three religious studies electives, two of which must be above the 2000 level: |  | 12 |
| PHIL 1104 | Goddesses, Witches, Saints, and Sinners: Women in Western Religions |  |
| PHIL 1110 | Introduction to Religion |  |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1120 | Understanding the Bible |  |
| PHIL 1130 | Ethics: East and West |  |
| PHIL 1220 | The Meaning of Death |  |
| PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1231 | Image and Icon in South Asia |  |
| PHIL 1250 | Jesus in the Gospels, American Culture, and the Movies |  |
| PHIL 1260 | Apocalypticism in Film |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1273 | Jainism |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |


| PHIL 1276 | Indian Religions |
| :---: | :---: |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1281 | Islam, Gender, and Fashion |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1286 | American Judaism |
| PHIL 1287 | Modern Judaism |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 1295 | Religious Perspectives on Health and Healing |
| PHIL 1410 | From Vodou and the Rastas to AfroIslam: African Religions in the Americas |
| PHIL 1666 | The Problem of Evil in Film |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| PHIL 4547 | Seminar. Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 4992 | Directed Study |
| PHIL 5011 | Comparative Religious Ethics |
| Advanced Elective |  |
| Complete one of the following: |  |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |


| PHIL 4547 | Seminar: Apocalypticism |
| :--- | :--- |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 5011 | Comparative Religious Ethics |

African-American Studies Requirements
Code Title Hours

## Introductory Courses

| AFAM 1101 | Introduction to African-American <br> Studies | 4 |
| :--- | :--- | :--- |
| AFAM 1109 | Foundations of Black Culture 1 | 4 |
| AFRS 1185 | Gender in the African Diaspora | 4 |

CLTR 1509
Research
AFRS 3310
Senior Capstone
AFAM 4700

## Electives

Complete three AFAM or AFRS courses at the 2000 level or above.
Note: Electives may not double count for other AFAM or HIST combined-major requirements.

AFAM 2000 to AFAM 5999
AFRS 2000 to AFRS 5999

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | 4 |  |
| PHIL 1410 | From Vodou and the Rastas to Afro- <br> Islam: African Religions in the Americas |  |
| PHIL 3410 | Religion and Spirituality in the African <br> Diaspora |  |
| PHIL 4390 | Cults and Sects |  |

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Spanish Major Requirements

Code Title Hours
Language Requirements

| SPNS 2102 | Intermediate Spanish 2 | 4 |
| :---: | :--- | :---: |
| or SPNS 2302 | Intermediate Spanish Immersion 2 |  |
| SPNS 3101 | Advanced Spanish 1 | 4 |
| or SPNS 3301 | Advanced Spanish Immersion 1 | 4 |
| SPNS 3102 | Advanced Spanish 2 |  |
| or SPNS 3302 | Advanced Spanish Immersion 2 |  |

Language and Linguistics

| CLTR 1120 | Introduction to Languages, Literature, <br> and Culture | 4 |
| :--- | :--- | ---: |
| LING 1150 | Introduction to Language and <br> Linguistics | 4 |
| Culture |  | 16 |
| Complete four of the following: |  |  |
| CLTR 1240 | Latin American Film |  |
| CLTR 1504 | Introduction to Spanish Culture |  |
| CLTR 1505 | Introduction to Latin American Culture |  |
| CLTR 3725 | Representing Violence and Human <br> Rights in Latin America |  |

## Literature

| Complete three of the following: |  | 12 |
| :---: | :---: | :---: |
| CLTR 3715 | New Narratives: Latin America after 1989 |  |
| LITR 4561 | Masterpieces of Spanish Literature: 12th-17th Century |  |
| LITR 4560 | Masterpieces of Spanish Literature: 18th-20th Century |  |
| LITR 4655 | Latin American Literature |  |
| Spanish Seminar |  |  |
| LANG 4800 | Special Topics in Language | 4 |

## Study Abroad/Experiential Learning

See department for details.
Capstone
LANG 4700

## Spanish Major Credit Requirement

Complete 53 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 | ENGW 1111 | 4 CLTR 1120 | 4 Vacation | 0 Vacation |$\quad 0$

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| SPNS 3101 | 4 CLTR 1505 | 4 Vacation | 0 Co-op | 0 |
| CLTR 1240 | 4 LITR 3502 | 4 |  |  |
| LING 1150 | 4 NUpath <br> course or <br> elective | 4 |  |  |
| NUpath <br> course or <br> elective | 4 SPNS 3102 | 4 |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 Study <br> abroad | 16 ENGW 3315 |  |  | | 4 Co-op |
| :--- |$\quad 0$

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 LITR 4655 | 4 <br> NUpath <br> course or <br> elective | 4 Co-op | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 LANG 4700 | 4 |
|  | LITR 4561 | 4 |
|  | LANG 4800 | $1-4$ |
|  | NUpath <br> course or <br> elective | 4 |
|  | NUpath <br> course or <br> elective | 4 |
| 0 | $17-20$ |  |

Total Hours: 131-134

## Spanish and International Affairs, BA

Through this combined major, successful undergraduates will 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Spanish Language Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Spanish LanguageRequirements |  |  |
| SPNS 2101 | Intermediate Spanish 1 |  |
| SPNS 2102 | Intermediate Spanish 2 |  |
| SPNS 3101 | Advanced Spanish 1 |  |
| Spanish Culture |  | 4 |
| CLTR 1120 | Introduction to Languages, Literature, <br> and Culture | 4 |

## Spanish Literature

Complete one of the following courses in the language of your 4 major.

| LITR 4560 | Masterpieces of Spanish Literature: <br> 18th-20th Century |
| :--- | :--- |
| LITR 4561 | Masterpieces of Spanish Literature: <br> 12th-17th Century |

## Advanced Spanish Language

Complete two of the following courses in the appropriate
language while on study abroad:
SPNS 2101 to SPNS 5999

| LITR 4560 | Masterpieces of Spanish Literature: <br> 18th-20th Century |
| :---: | :--- |
| LITR 4561 | Masterpieces of Spanish Literature: <br> 12th-17th Century |
| LITR 4655 | Latin American Literature |
| Spanish Language Electives |  |

Complete three of the following courses in the language of
your major with course numbers 2990 or above:
SPNS 2990 to SPNS 3990
\(\left.\begin{array}{ll}LITR 4560 \& Masterpieces of Spanish Literature: <br>

18th-20th Century\end{array}\right]\)| Masterpieces of Spanish Literature: |  |
| :--- | :--- |
| LITR 4561 | 12th-17th Century |

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| 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 |  |

Global Dynamics
Complete three 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.

Environment

| ENVR 1110 | Global Climate Change |
| :---: | :---: |
| ENVR 4515 | Sustainable Development |
| SOCL 1246 | Environment and Society |
| Law, Diplomacy, and Global Governance |  |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| COMM 2303 | Global and Intercultural Communication |
| POLS 1155 | Comparative Politics |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |


| POLS 3407 | International Organizations |
| :---: | :---: |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |
| Human Rights and Social Justice |  |
| INTL 2400 | Politics of Islam and Gender |
| INTL 2480 or INTL 2480 | Women and World Politics Women and World Politics |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| HIST 3330 | The Global Cold War |
| JRNL 3300 or INTL 3300 | Covering Conflicts: Peace, War, and the Media <br> Covering Conflicts: Peace, War, and the Media |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| POLS 3420 | U.S. National Security Policy |
| Globalization |  |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of Human Societies |

Human Rights and Social Justice

Population, Migration, and Diaspora

| INTL 2240 | Global Population and Development |
| :---: | :---: |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| Development |  |
| INTL 2240 | Global Population and Development |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 or INTB 1209 | International Business and Global Social Responsibility <br> International Business and Global Social Responsibility |
| 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 <br> Business |
| JRNL 3300 | Covering Conflicts: Peace, War, and the <br> Media |
| or INTL 3300 | Covering Conflicts: Peace, War, and the Media |

## International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

## 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 advisor. See department for additional courses:

| Code | Title | Hours |
| :--- | :--- | :--- |
| Africa |  |  |
| AFRS 2307 | Africa Today |  |


| AFRS 2465 | The Scope and Dynamics of Conflicts in <br> Africa |
| :--- | :--- |
| AFRS 2900 | Swahili, Culture, and Politics in Kenya |
| AFRS 3460 | Contemporary Government and Politics <br> in Africa |
| AFRS 4939 | Community Health, Culture, and <br> Development in Kenya |
| ANTH 4510 | Anthropology of Africa |
| ENTR 3308 | Business Economic History of South <br> Africa |
| HIST 1180 | African History |
| HIST 2390 | Africa and the World in Early Times |

Asia

| $\begin{aligned} & \text { ANTH } 4350 \\ & \text { or INTL } 4350 \end{aligned}$ | Ethnography of Southeast Asia Ethnography of Southeast Asia |
| :---: | :---: |
| ASNS 1150 or HIST 1150 | East Asian Studies 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 |
| HIST 2360 | History of Capitalism in East Asia |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |

Europe

| CLTR 1501 | Introduction to French Culture |
| :--- | :--- |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and <br> Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| HIST 2376 | Britain and the British Empire |
| HIST 4946 | Independent Field Research Abroad: <br> Central Europe |

POLS $3435 \quad$ Politics and Governance of Europe and the European Union
Latin America

| ANTH 4500 | Latin American Society and |
| :--- | :--- |
| or INTL 4500 | Levelopment |
| Latin American Society and Development |  |
| CLTR 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |


| LACS 1220 | Latino, Latin American, and Caribbean Studies |  |
| :---: | :---: | :---: |
| LITR 4655 | Latin American Literature |  |
| 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 2400 | Politics of Islam and Gender |  |
| 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 |  |
| POLS 3465 | Government and Politics in the Middle East |  |
| POLS 3470 | Arab-Israeli Conflict |  |
| POLS 4915 | Model Arab League |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  |
| PHIL 1285 | Jewish Religion and Culture |  |
| PHIL 1287 | Modern Judaism |  |
| Russia |  |  |
| HIST 1285 | Introduction to Russian Civilization |  |
| HIST 1286 | History of the Soviet Union |  |
| SOCL 1215 | Society and Culture in Russia |  |
| Integrative Courses |  |  |
| Code | Title | Hours |
| Capstone |  |  |
| LITR 3500 | International Perspectives | 4 |
| 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.

## 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 |  | ECON 1115 <br> 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 | Spanish elective 3000-5000 | 4 |  |  |  |  |
| SPNS 3101 | 4 |  |  |  |  |  |  |
|  | 16 |  | 12 |  | 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 |  | 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 |  |  |  |  |
|  |  | LITR 3500 | 4 |  |  |  |  |
|  |  | Spanish elective 3000-5000 | 4 |  |  |  |  |
|  | 0 |  | 16 |  |  |  |  |

Total Hours: 125

## 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 |$\quad 0$

$\left.\begin{array}{lcccr}\text { SPNS 2101 } & 4 & & & \\ \hline & 17 & 16 & 0 & 0 \\ \text { Year 2 } & & & & \\ \text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Elective } & 4 \text { Co-op } & 0 \text { Co-op } & 0 & \text { INTL elective }\end{array}\right) 4$

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 <br> elective <br> $3000-5000$ | 4 |  | 0 | 0 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| INTL elective | 4 INTL elective | 4 |
| Upper <br> division <br> elective | 4 INTL 4700 | 4 |
| Elective | 4 <br> Upper <br> division <br> elective | 4 |
| Spanish <br> elective <br> $3000-5000$ | 4 LITR 3500 | 4 |

Total Hours: 125

## African-American Studies, BS

African-American 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. Because African-American studies relates to numerous other fields, the number of required courses for the major is relatively small
to allow maximum flexibility. Our students often pursue a double major, a combined degree, or a minor in another subject. By combining study in African-American studies with experiential learning through co-op, study abroad, and/or Dialogues of Civilizations programs, you have an opportunity to obtain practical experience that will give you greater flexibility upon graduation. Moreover, the reading, writing, and analytical skills you will develop will prove useful and valuable in any profession.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## African-American Studies Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introductory Courses |  |  |$\quad$| Introduction to African-American |
| :--- |
| AFAM 1101 |

## Research and Seminar

AFRS 33104
AFAM 4700 4

Electives
Complete six African-American studies courses at the 24 intermediate and advanced level from the following:

```
AFAM 2000 to AFAM 5999
AFRS 2000 to AFRS 5999
```


## African-American Studies Major Credit Requirement

Complete 48 semester hours in the major.
Upper-Division Electives
Code Title Hours

Complete three general electives numbered 3000 or above 12
that do not double-count with the major or NUpath.

## 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 |
| :--- | :---: | :---: | :---: | ---: |
| AFAM 1101 | 4 AFRS 1185 | 4 Vacation | 0 Vacation | 0 |
| AFAM 1109 | 4 AFAM 4663 | 4 |  |  |
| MATH 1215 | 4 AFRS 3310 | 4 |  |  |


| ENGW 1111 | 4 Elective | 4 |  |  |
| :--- | :---: | ---: | :--- | ---: |
|  | 16 | 16 | 0 | 0 |


| Year 2 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| AFAM intermediate/ advanced undergraduate elective | e | AFAM <br> interme <br> advance <br> undergr <br> elective | 4 | Vacation | 0 | Co-op | 0 |
| Elective | 4 | Elective | 4 |  |  |  |  |
| AFAM intermediate/ advanced undergraduate elective |  | AFAM <br> interme <br> advance <br> undergr <br> elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  |  | EESH 20 | 1 |  |  |  |  |
| 16 |  |  | 17 |  | 0 |  | 0 |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 AFAM 4700 | 4 Elective | 4 Co-op | 0 |
|  | ENGW 3315 | 4 Elective | 4 |  |
| AFAM <br> intermediate/ <br> advanced <br> undergraduate <br> elective | 4 |  |  |  |
|  | Elective | 4 | 8 | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 AFAM <br> intermediate/ <br> advanced <br> undergraduate <br> elective | 4 Elective | 4 Co-op | 0 |
| Upper- <br> division <br> elective | 4 Elective | 4 |  |  |
|  | Elective | 4 | 8 | 0 |
|  | Elective | 4 | 16 | 8 |

## Year 5

| Fall | Hours | Spring |
| :--- | ---: | ---: |
| Co-op | Upper- <br> division <br> elective | 4 |
|  | Upper- <br> division <br> elective | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
| 0 | 16 |  |

[^17]
## Five Years, Three Co-ops in Spring/Summer 1

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| AFAM 1101 | 4 AFRS 1185 | 4 Vacation | 0 Vacation | 0 |
| AFAM 1109 | 4 AFAM 4663 | 4 |  |  |
| MATH 1215 | 4 AFRS 3310 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  | 0 |
|  | 16 | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| AFAM | 4 Co-op | 0 Co-op | 0 Elective | 4 |

intermediate/
advanced
undergraduate
elective

| Elective | 4 |  | Elective | 4 |
| :--- | :---: | :--- | :--- | :--- |
| AFAM <br> intermediate/ <br> advanced <br> undergraduate <br> elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| EESH 2000 | 1 | 0 | 0 | 8 |
|  | 17 |  |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| AFAM <br> intermediate/ <br> advanced <br> undergraduate <br> elective | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| AFAM <br> intermediate/ <br> advanced <br> undergraduat <br> elective | 4 |  |  | 4 |
|  |  |  |  |  |
| Year 4 |  |  |  |  |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Upper- <br> division | 4 <br> Upper- <br> division <br> elective | 4 |
| AFAM | 4Upper- <br> division <br> undergraduatı | 4 |
| elective | elective |  |


| Elective | 4 Elective | 4 |
| :--- | :---: | :---: |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 129

## American Sign Language, BS

The American Sign Language (ASL) 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 ASL Program offers a wide array of courses as well as volunteer, internship, and practicum opportunities. For students wishing to pursue a degree in ASL/English Interpretation, 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 socio-cultural knowledge necessary to serve as professional ASL/English interpreters. Students pursuing a combined major in Psychology, Theater, or Human Services integrate their foundation in ASL and the Deaf Community with these academic disciplines.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| American Sign Language Major Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| American Sign Language |  |  |
| 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 |
| 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 <br> Linguistics | 4 |
| :--- | :--- | :--- |
| DEAF 2700 | ASL Linguistics | 4 |
| Performance Interpreting | Performance Interpreting-Interpreting |  |
| INTP 3550 for the Theatre | 4 |  |
| Intrepreting | The Interpreting Profession | 4 |
| INTP 3500 | Interpreting Inquiry Texts | 4 |
| INTP 3510 | Interpreting Narrative Texts | 4 |
| INTP 3515 | Interpreting Expository Texts | 4 |
| INTP 4510 | Interpreting Persuasive Texts | 4 |
| INTP 4515 | Interpreting Practicum | 4 |
| Interpreting Practicum | 4 |  |
| INTP 4995 | Ethical Decision Making | 4 |
| Ethics | Ethical Fieldwork | 2 |
| INTP 4650 | Interpreting Research Practicum | 4 |
| INTP 4651 |  | 4 |

## American Sign Language Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses
Minimum 2.500 overall GPA required

## American Sign Language Credit Requirement

Complete 76 semester hours in the major.

## 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 |
| :--- | :---: | :---: | :---: | ---: |
| DEAF 1500 | 4 AMSL 1102 | 4 Vacation | 0 | Vacation |$\quad 0$

Year 2
$\left.\begin{array}{lcccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { DEAF 2500 } & 4 \text { AMSL 2102 } & 4 & \text { Vacation } & 0 \text { Vacation }\end{array}\right) 0$

Year 4

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| INTP 4650 | 4 INTP 4515 | 4 |
| INTP 4510 | 4 INTP 4995 | 4 |
| INTP 4651 | 2 Elective | 4 |
| INTP 4940 | 4 Elective | 4 |
| Elective | 4 |  |
|  | 18 | 16 |

Total Hours: 129

## American Sign Language and Human Services, BS

The American Sign Language (ASL) 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 ASL Program offers a wide array of courses as well as volunteer, internship, and practicum opportunities. 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
American Sign Language Requirements

| Code | Title | Hours |
| :--- | :--- | :--- |
| American Sign Language |  |  |
| 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 |

## 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 <br> Linguistics | 4 |
| :--- | :--- | :---: |
| DEAF 2700 | ASL Linguistics | 4 |
| Performance Interpreting | 2 |  |
| INTP 3500 | The Interpreting Profession | 4 |
| Interpreting |  | 4 |
| INTP 3510 | Interpreting Inquiry Texts |  |

## Human Services Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Human Services |  |  |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and <br> Social Change | 4 |
| HUSV 4700 | Senior Seminar in Human Services | 4 |
| Research Research Methods for Human Services | 4 |  |
| HUSV 3700 | Introduction to Social Policy | 4 |
| HUSV 3900 |  | 4 |
| Organizations | Sociology of Human Service | 4 |

Human Services Elective

Complete one course in HUSV subject area.

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| INTP 4940 | Interpreting Research Practicum | 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.

## Program Requirements

128 total semester hours required

## Plan of Study <br> 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 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 | 0 | 0 |
|  | 16 | 16 |  |  |
| Year 2 |  |  |  |  |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| AMSL 2101 | 4 AMSL 2102 | 4 Vacation | 0 | 0 |
| LING 1150 | 4 DEAF 2700 | 4 |  |  |


| INTP 4560 | 4 HUSV 2300 | 4 |  |  |
| :--- | :---: | ---: | :--- | :--- |
| Elective | 4 Elective | 4 |  |  |
|  | 16 | 16 | 0 | 0 |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| DEAF 2500 | 4 HUSV 3700 | 4 Vacation | 0 Vacation | 0 |
| SOCL 3440 | 4 Elective | 4 |  |  |
| INTP 3510 | 4 ENGW 3315 | 4 |  |  |
| AMSL 3101 | 4 AMSL 3102 | 4 |  | 0 |
|  | 16 | 16 | 0 | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| INTP 4940 | 4 HUSV 4700 | 4 |
| HUSV 3900 | 4 Elective | 4 |
| HUSV 4994 | 6 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 18 | 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| 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 |
| Interpreting |  | 2 |
| INTP 3500 | The Interpreting Profession | 4 |
| INTP 3510 | Interpreting Inquiry Texts |  |

## Linguistics Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Linguistics Requirements |  |  |
| LING 1150 | Introduction to Language and <br> Linguistics | 4 |
| LING 2350 | Linguistic Analysis | 4 |
| LING 3422 | Phonology | 4 |
| LING 3424 | Morphology | 4 |
| or LING 3452 | Semantics | 4 |
| LING 3450 | Syntax | 4 |
| Psychology of Language | 4 |  |
| PSYC 1101 | Foundations of Psychology | 4 |
| PSYC 2320 | Statistics in Psychological Research | 4 |
| PSYC 3464 | Psychology of Language | 4 |
| Electives |  | 8 |

Complete two courses from the following: 8

| 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 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 |
| PSYC 4520 | Language and the Brain |
| PSYC 4610 | Laboratory in Psycholinguistics |
| PSYC 4658 | Seminar in Psycholinguistics |
| PSYC 4991 | Directed Study Research |

## Seminar Requirement

Complete one course (not counted elsewhere) from the 4 following:

| LING 4654 | Seminar in Linguistics |
| :--- | :--- |
| LING 4891 | Research Seminar in Linguistics |
| PSYC 4658 | Seminar in Psycholinguistics |

American Sign Language Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Language Requirement |  |  |
| AMSL 1101 | Elementary ASL 1 | 4 |

## Integrative Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| DEAF 2700 | ASL Linguistics | 4 |
| INTP 4940 | Interpreting Research Practicum | 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 92 semester hours in the major.

## Program Requirements

128 total semester hours required
Plan of Study
Sample, Four Years

| Year 1 | Hours Spring | Hours |
| :--- | :---: | ---: |
| Fall | 4 AMSL 1102 | 4 |
| AMSL 1101 | 4 LING 2350 | 4 |
| DEAF 1500 | 4 LING 3412 | 4 |
| LING 1150 | 4 NUpath/Elective | 4 |
| NUpath/Elective | 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 LING 3450 | 4 |
| INTP 3500 | 2 LING 3424 or 3452 | 4 |
| INTP 3510 | 4 PSYC 3464 | 4 |
| LING 3422 | 4 NUpath/Elective | 4 |
| NUpath/Elective | 4 | 16 |
|  | 18 | 4 |

## Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| INTP 4940 | 4 Linguistics Seminar | 4 |
| Linguistics Elective | 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

The American Sign Language (ASL) 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.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## American Sign Language Requirements

Code Title Hours

American Sign Language

| 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 |
| Performance Interpreting |  |  |
| INTP 3500 | The Interpreting Profession | 2 |
| Interpreting |  |  |
| INTP 3510 | Interpreting Inquiry Texts | 4 |

Psychology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| 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 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 |  |
| Psychology Elective |  |  |
| Complete one of the following: |  | 4 |
| PSYC 4520 | Language and the Brain |  |
| 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 Practicum | 4 |
| PSYC 3464 | Psychology of Language | 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 82 semester hours in the major.

## 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 |
| :--- | :---: | :---: | :---: | ---: |
| AMSL 1101 | 4 AMSL 1102 | 4 Vacation | 0 Vacation | 0 |
| DEAF 1500 | 4 MATH 1215 | 4 |  |  |
| PSYC 1101 | 4 Elective | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  | 0 |
|  | 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 |  |  |
| :--- | :---: | :---: | :---: | :---: |
| DEAF 2500 | 4 PSYC 2320 | 4 |  |  |
| Elective | 4 PSYC 3464 | 4 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| AMSL 3101 | 4 PSYC 4524 | 4 Vacation | 0 Vacation | 0 |
| Psych Area | 4 Psych Area | 4 |  |  |
| A elective | B elective |  |  |  |
| ENGW 3315 | 4 Elective | 4 |  |  |
| INTP 3510 | 4 AMSL 3102 | 4 | 0 | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| INTP 4940 | 4 <br> Psych lab <br> elective | 4 |
| PSYC 4658 | 4 Psych Area <br> A elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 128

## American Sign Language and Theatre, BS

The American Sign Language (ASL) 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p.622).

## American Sign Language Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| American Sign Language |  |  |
| 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 | 4 |  |
| :--- | :--- | :---: |
| DEAF 1500 | Deaf People in Society | 4 |
| DEAF 2500 | Deaf History and Culture | 4 |
| Linguistics | Introduction to Language and <br> LING 1150 | 4 |
| DEAF 2700 | ASL Linguistics |  |

Performance Interpreting

| INTP 3550 | Performance Interpreting-Interpreting <br> for the Theatre | 4 |
| :--- | :--- | ---: |
| Interpreting The Interpreting Profession |  |  |
| INTP 3500 | 2 |  |

## Theatre Requirements

| Code | Title | Hours |
| :--- | :--- | :--- |
| 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

| Choose one of the following: |  |
| :--- | :--- |
| THTR 2300 | Classics of Global Theatre |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the <br> Dream |
| THTR 2340 | Theatre and Society |

## Making Theatre

| THTR 1100 | Production Experience 1 | 1 |
| :--- | :--- | :--- |
| THTR 2000 | Production Experience 2 | 1 |


| Intermediate or Advanced Technique |
| :--- |
| Choose two of the following: |


| THTR 2300 | Classics of Global Theatre |
| :--- | :--- |
| THTR 2310 | History of Musical Theatre |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the <br>  <br> Dream |
| 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 3450 | Acting 3-Playing Shakespeare |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| INTP 4940 | Interpreting Research Practicum | 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.

## 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 |
| :--- | :---: | :---: | :---: | ---: |
| AMSL 1101 | 4 AMSL 1102 | 4 Vacation | 0 Vacation | 0 |
| DEAF 1500 | 4 THTR 1120 | 4 |  |  |
| THTR 1101 | 4 MATH 1215 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 | 0 | 0 |
|  | 16 | 16 |  |  |
| 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 |  | 0 |
| THTR 1270 | 4 Elective | 4 | 0 | 0 |

Year 3
$\left.\begin{array}{lcccr|}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { INTP 4560 } & 4 \text { THTR 1260 } & 4 & \text { Vacation } & 0 \text { Vacation }\end{array}\right) 0$

Year 4

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| THTR 1100 | 1 Elective | 4 |
| ENGW 3315 | 4 Elective | 4 |
| THTR 3550 | 4 INTP 4940 | 4 |


| Elective | 4 THTR 2000 | 1 |
| :--- | :---: | :---: |
| Elective | 4 Elective | 4 |
|  | 17 | 17 |

Total Hours: 130

## 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 AfricanAmerican 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 useinspired 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)

Hours

## Social Sciences

| Code | Title <br> Complete two of the following: | Hours |
| :--- | :--- | ---: |
| AFRS 1185 | Gender in the African Diaspora |  |
| AFRS 2307 | Africa Today |  |
| AFRS 2414 | Global Revolution |  |
| AFRS 2465 | The Scope and Dynamics of Conflicts in <br> Africa |  |
| AFRS 3424 | Epidemiology of Pandemic Diseases <br> and Health Disparities in the African <br> Diaspora |  |
| AFRS 3460 | Contemporary Government and Politics <br> in Africa <br> AFRS 4939 | Community Health, Culture, and <br> Development in Kenya |
| ANTH 4510 | Anthropology of Africa <br> INTL 3565 | Morocco: History, Cultures, and <br> Economic Development in the <br> Mediterranean Basin |
| POLS 3487 | Politics of Developing Nations |  |

## Humanities

Code

| AFAM 1109 | Foundations of Black Culture 1 | 4 |
| :--- | :--- | :--- |
| AFRS 1180 | African History | 4 |

## GPA Requirement

2.000 GPA required in the minor

## African-American Studies, Minor

African-American 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 and African-Americans throughout the hemisphere, and peoples of African descent around the world. Because African-American studies relates to numerous other fields, our minor affords you maximum flexibility. By combining study in African-American studies with experiential learning through co-op, study abroad, and/or Dialogues of Civilizations programs you can get practical experience that will give you greater flexibility upon graduation. Moreover, the reading, writing and analytical skills you will develop will prove useful and valuable in any profession.

## 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

AFAM 1101 Introduction to African-American 4 Studies

## Electives

| Code Title | Hours |  |
| :--- | :--- | ---: |
| Social Sciences |  | 8 |
| Complete two of the following: | 8 |  |


| AFAM 1140 | Introduction to African-American <br> History |
| :--- | :--- |
| AFAM 1225 | Gender, Race, and Medicine |
| AFAM 2360 | Politics of Poverty |
| AFAM 2399 | Black Community and Social Change |


| AFAM 1104 | The African-American Experience <br> through Music |
| :--- | :--- |
| AFAM 1109 | Foundations of Black Culture 1 |
| AFAM 1113 | Black Popular Culture: Music, Movies, <br> and More |

## GPA Requirement

2.000 GPA required in the minor

## American Sign Language, Minor

The American Sign Language (ASL) 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 ASL 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 decisionmaking 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, | 4 |
|  | and Culture |  |
| DEAF 1500 | Deaf People in Society | 4 |

## Required Language Courses

## Code Title

Hours
Students with prior skills in American Sign Language are allowed to waive up to four AMSL courses:

| 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 |
| :--- | ---: |
| Complete one of the following: | 4 |

Complete one of the following:

| 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. Our minor certifies that you have attained intermediate to 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.

## 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
CLTR 1120

Title
Hours
Introduction to Languages, Literature, and Culture

## Required Language Courses

Students may waive any of these courses by taking the language exam in the Wold Languages Center.

| Code | Title | Hours |
| :--- | :--- | ---: |
| ARAB 2101 | Intermediate Arabic 1 | 4 |
| or ARAB 2301 | Intermediate Arabic Immersion 1 |  |
| ARAB 2102 | Intermediate Arabic 2 | 4 |
| or ARAB 2302 | Intermediate Arabic Immersion 2 |  |

## Electives

| Code <br> ARAB 3301 | Title |
| :--- | :--- |
| ARAB 3302 | Advanced Arabic Immersion 1 |
| ARAB 3800 | Special Topics in Arabic |
| ARAB 4800 | Special Topics in Arabic |
| ARAB 4992 | Directed Study |
| 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 |
| INTL 2400 | Politics of Islam and Gender |
| LITR 1150 | Muslim Writers and the Qur'an (in |
| POLS 4915 | English Translations) |

## GPA Requirement

2.000 GPA required in the minor

## Chinese, 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 Chinese will help you become a truly global citizen. Our minor certifies that you have attained intermediate to 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.

## 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 |
| :--- | :--- |
| CLTR 1120 | Introduction to Languages, Literature, |
|  | and Culture |

Hours

## Required Language Courses

Students may waive any of these courses by taking the language exam in the World Language 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 |
| 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 |  |
| 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 in a sustained and in-depth manner 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. In this sense, our minor is a most valuable asset in a multi-disciplinary portfolio for anyone interested in 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, | 4 |
|  | 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 Introduction to Latin American Culture |  |
| CLTR 1260 and CLTR 1700 | Japanese Film and Introduction to Japanese Pop Culture |  |
| CLTR 1265 and CLTR 1504 | and Introduction to Spanish Culture |  |
| CLTR 1280 and CLTR 1501 | French Film and Culture and Introduction to French Culture |  |
| CLTR 1508 and CLTR 1509 | and |  |
| CLTR 2501 and CLTR 1500 | and Modern Chinese History and Culture |  |
| CLTR 3450 and CLTR 1502 | Israeli and Palestinian Film and Introduction to Arabic Culture |  |

## Elective

Note: Courses taken for this requirement cannot be double-counted with courses taken to fulfill the film and culture study requirement.

| Code Title <br> Complete one of the following:  | Hours |
| :--- | :--- |
| CLTR 1240 | Latin American Film |
| CLTR 1260 | Japanese Film |
| CLTR 1265 |  |
| CLTR 1280 | French Film and Culture |
| CLTR 1508 |  |
| CLTR 2504 |  |
| CLTR 2510 |  |
| CLTR 2501 |  |
| CLTR 3930 |  |
| CLTR 3450 |  |
| CLTR 3500 | French Culture and the Arts |
| CLTR 4508 |  |

## 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. Our minor certifies that you have attained intermediate to 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.

## 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 |
| :--- | :--- |
| CLTR 1120 | Introduction to Languages, Literature, <br> and Culture |

## 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 |
| or ITLN 2301 | Intermediate Italian Immersion 1 |  |
| ITLN 2102 | Intermediate Italian 2 | 4 |
| or ITLN 2302 | Intermediate Italian Immersion 2 |  |
| Electives |  |  |
| Code | Title | Hours |
| CLTR 1503 | Introduction to Italian Culture |  |
| CLTR 4944 | Cultural Engagement Abroad |  |
| ITLN 3101 | Advanced Italian 1 |  |
| or ITLN 3301 | Advanced Italian Immersion 1 |  |
| ITLN 4992 | Directed Study |  |
| LITR 1250 | Dante's Inferno and Medieval Italian Culture |  |

## 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. Our minor certifies that you have attained intermediate to 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.

## 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.

## Required Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| CLTR 1120 | Introduction to Languages, Literature, | 4 |
|  | and Culture |  |

## 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 <br> CLTR 1260 | Title | Hours |
| :--- | :--- | :--- |
| 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 |  |
| or JPNS 3301 | Advanced Japanese Immersion 1 |  |
| JPNS 3102 | Advanced Japanese 2 |  |
| or JPNS 3302 | Advanced Japanese Immersion 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. Our minor certifies that you have attained intermediate to 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.

## 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

Code
CLTR 1120

Title
Introduction to Languages, Literature, and Culture

Hours

## Required Language Courses

Students may waive any of these courses by taking the language exam in the World Language Center.

| Code | Title | Hours |
| :--- | :--- | ---: |
| FRNH 2101 | Intermediate French 1 | 4 |
| $\quad$ or FRNH 2301 | Intermediate French Immersion 1 |  |
| FRNH 2102 | Intermediate French 2 | 4 |
| or FRNH 2302 | Intermediate French Immersion 2 |  |

## Electives

| Code <br> CLTR 1501 | Title | Hours |
| :---: | :--- | :--- |
| CLTR 3500 | French Culture and the Arts |  |
| FRNH 3102 | Advanced French 2 |  |
| or FRNH 3302 | Advanced French Immersion 2 |  |

## 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. Our minor certifies that you have attained intermediate to 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.

## 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 |
| CLTR 1120 | Introduction to Languages, Literature, |
|  | and Culture |

Hours
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 |  |  |
| Code | Title | Hours |
| ANTH 4500 | Latin American Society and Development |  |
| or INTL 4500 | Latin American Society and Development |  |
| CLTR 1240 | Latin American Film |  |
| CLTR 2715 | New Media Narratives in Latin America: Local and Global Dimensions |  |
| CLTR 4944 | Cultural Engagement Abroad |  |
| HIST 1187 | Introduction to Latin American History |  |
| PORT 3900 | Specialized Instruction in Portuguese |  |
| PORT 4992 | Directed Study |  |

## 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. Our minor certifies that you have attained intermediate to 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.

## 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, | 4 |
|  | and Culture |  |

## 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 |
| or RSSN 2301 | Intermediate Russian Immersion 1 |  |


| RSSN 2102 <br> or RSSN 2302 | Intermediate Russian 2 <br> Intermediate Russian Immersion 2 | 4 |
| :--- | :--- | :--- |
| Electives |  |  |
| Code |  |  |
| CLTR 4944 | Title | Cultural Engagement Abroad | Hours

## 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. Our Spanish minor certifies that you have attained intermediate to 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.

## 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 <br> Code Title <br> CLTR 1120 Introduction to Languages, Literature, and Culture

## Required Language Requirement

Students may waive any of these courses by taking the language exam in the World Language Center.

| Code | Title | Hours |
| :--- | :--- | ---: |
| SPNS 2101 | Intermediate Spanish 1 | 4 |
| or SPNS 2301 | Intermediate Spanish Immersion 1 |  |
| SPNS 2102 | Intermediate Spanish 2 | 4 |
| or SPNS 2302 | Intermediate Spanish Immersion 2 |  |

## Electives

| Code | Title | Hours |
| :---: | :---: | :---: |
| ANTH 4500 | Latin American Society and |  |
|  | Development |  |
| or INTL 4500 | Latin American Society and Development |  |
| CLTR 1240 | Latin American Film |  |
| CLTR 1504 | Introduction to Spanish Culture |  |
| CLTR 1505 | Introduction to Latin American 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 4944 | Cultural Engagement Abroad |  |
| HIST 1187 | Introduction to Latin American History |  |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |  |
| LANG 4800 | Special Topics in Language |  |
| LITR 4560 | Masterpieces of Spanish Literature: 18th-20th Century |  |
| LITR 4561 | Masterpieces of Spanish Literature: 12th-17th Century |  |
| LITR 4655 | Latin American Literature |  |
| SPNS 3101 or SPNS 3301 | Advanced Spanish 1 <br> Advanced Spanish Immersion 1 |  |
| SPNS 3102 or SPNS 3302 | Advanced Spanish 2 <br> Advanced Spanish Immersion 2 |  |
| SPNS 3501 | Advanced Spanish Conversation: Global Communication |  |

## GPA Requirement

2.000 GPA required in the minor

## Economics

Website (http://www.northeastern.edu/cssh/economics)
William T. Dickens, PhD
University Distinguished Professor and Interim Chair
301 Lake Hall
617.373.2882

Hours 617.373 .3640 (fax)

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 master's degree in economics (requires an additional 16 semester hours of course work). The department also offers combined majors with business administration, environmental studies, international affairs, mathematics, philosophy, computer science, and political science.

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

| The following three core courses should be completed first: | Hours |  |
| :--- | :--- | ---: |
| ECON 1115 | Principles of Macroeconomics | 12 |
| 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 (ECON 2560 required for BS majors only):

| ECON 2315 | Macroeconomic Theory |
| :--- | :--- |
| ECON 2316 | Microeconomic Theory |
| ECON 2350 | Statistics |
| ECON 2560 | Applied Econometrics |

Within two semesters of completing the above courses, BA
majors should complete:
ECON 3520 History of Economic Thought
For BA/BS majors, grades earned in the following five core courses must average to a 2.000 grade-point average (GPA) or better.

| Code | Title | Hours |
| :--- | :--- | ---: |
| 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 |

After admission to the major, all required economics courses must be taken in the day college.

## PlusOne Program (MA) in Economics

The PlusOne program in economics offers an opportunity for the best of Northeastern's undergraduate economics majors to complete both
the undergraduate degree program ( BS or BA ) and the professional program (MA) in economics in less time than if the programs were completed sequentially. Students apply no later than junior year, after all core economics classes have been completed, and begin taking master's course work in their senior year. 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. 672)
- International Affairs and Economics (p. 676)
- Political Science and Economics (p. 680)


## Bachelor of Science (BS)

- Economics (p. 674)
- Computer Science and Economics (p. 312)
- Cybersecurity and Economics (p. 352)
- Economics and Business Administration (p. 243)
- Economics and Mathematics (p. 563)
- Economics and Philosophy (p. 692)
- Environmental Studies and Economics (p. 549)
- Political Science and Economics (p. 686)
- Politics, Philosophy, and Economics (p. 623)


## Minor

- Economics (p. 694)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 944)

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Economics Major Requirements for BA

| Code | Title | Hours |
| :--- | :--- | :--- |
| Required Economics Courses |  |  |
| Grades in the required economics courses must average a |  |  |
| minimum of 2.000 with no course below a C-. | 4 |  |
| 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 |


| Senior Seminar |  |
| :--- | :--- | :--- |
| ECON 4692 | Senior Economics Seminar |

## Economics Electives for BA

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete five of the following with no more than one at the introductory level: |  | 20 |
| Introductory |  |  |
| ECON 1200 to ECON 1990 |  |  |
| Intermediate |  |  |
| ECON 2990 to ECON 3499 |  |  |
| ECON 3915 | Intermediate Selected Topics in Macroeconomics |  |
| ECON 3916 | Intermediate Selected Topics in Microeconomics |  |
| Advanced |  |  |
| ECON 3990 | Elective |  |
| ECON 4600 to ECON 4681 |  |  |
| ECON 4915 | Advanced Selected Topics in Macroeconomics |  |
| ECON 4916 | Advanced Selected Topics in Microeconomics |  |
| ECON 4970 to ECON 4990 |  |  |
| ECON 4991 | Research |  |
| ECON 4992 | Directed Study |  |
| ECON 4994 | Internship |  |
| ECON 4996 | Experiential Education Directed Study |  |
| ECON 5200 | N 5299 |  |

## Breadth Courses for Economics Major

| Code | Title | Hours |
| :--- | :--- | ---: |
| Calculus |  |  |
| MATH 1231 | Calculus for Business and Economics | 4 |
| Computer Science |  | 4 |
| CS 1100 | Computer Science and Its Applications | 4 |

## Experiential Learning Requirement for Economics

Note: ECON 4992 or ECON 4996 can double-count for an economics elective in the major.
Code Title Hours

Complete one of the following courses, or complete study 4
abroad or co-op:

| ECON 4992 | Directed Study |
| :--- | :--- |
| ECON 4996 | Experiential Education Directed Study |
| ECON 4970 | Junior/Senior Honors Project 1 |
| ECON 4971 | Junior/Senior Honors Project 2 |

## Economics Major Credit Requirement

Complete 56 semester hours in the major.
Program Requirement
128 total semester hours required

## Plan of Study

Five Years, Three Co-ops in Summer 2/Fall

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ECON 1000 | 1 | ECON 1116 | 4 | Vacation | 0 | Vacation | 0 |
| ECON 1115 |  | Foreign language core course | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| MATH 1231 | 4 | CS 1100 | 4 |  |  |  |  |
| Foreign language core course | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 0 |  | 0 |

## Year 2

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ECON 3520 | 4 | ECON 2316 | 4 | Vacation | 0 | Co-op | 0 |
| ECON 2350 |  | ECON undergraduat elective | 4 |  |  |  |  |
| Foreign language core 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 | 0 | ENGW 3308 |  | ECON <br> undergraduat elective | 4 | Co-op | 0 |
|  |  | ECON 2315 | 4 | Elective | 4 |  |  |
|  |  | ECON undergraduate elective | $e^{4}$ |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |



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 econometrics, 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.
Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ECON 2315 | 4 Co-op | 0 Co-op | 0 ECON <br> undergraduate <br> elective | 4 |
| ECON 3520 | 4 | Elective | 4 |  |
| Foreign <br> language <br> core course | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
| EESH 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 | 8 |

## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 3308 | 4 Co-op | 0 Co-op | 0 ECON <br> undergraduate <br> elective | 4 |
| ECON 2316 | 4 | Elective | 4 |  |
| ECON 2350 | 4 |  | 8 |  |
| Elective | 4 |  | 0 | 8 |
|  | 16 | 0 |  |  |

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Economics Major Requirements for BS

Code Title
Required Economics Courses
Grades in the required economics courses must average a
minimum of 2.000:

| 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 |
| Senior Seminar |  |  |
| ECON 4692 | Senior Economics Seminar | 4 |
| Electives for BS in Economics |  |  |
| Code | Title | Hours |
| Complete seve introductory le | e following with no more than two at the | 28 |
| Introductory |  |  |
| ECON 1200 to ECON 1990 |  |  |
| Intermediate |  |  |
| ECON 2990 to ECON 3499 |  |  |
| ECON 3915 | Intermediate Selected Topics in Macroeconomics |  |
| ECON 3916 | Intermediate Selected Topics in Microeconomics |  |
| Advanced |  |  |
| ECON 3520 | History of Economic Thought |  |
| ECON 3990 | Elective |  |
| ECON 4600 to ECON 4681 |  |  |
| ECON 4915 | Advanced Selected Topics in Macroeconomics |  |
| ECON 4916 | Advanced Selected Topics in Microeconomics |  |
| ECON 4970 to ECON 4990 |  |  |
| ECON 4991 | Research |  |
| ECON 4992 | Directed Study |  |
| ECON 4994 | Internship |  |
| ECON 4996 | Experiential Education Directed Study |  |

Breadth Courses for Economics Major

| Code | Title | Hours |
| :--- | :--- | ---: |
| Calculus |  |  |
| MATH 1231 | Calculus for Business and Economics | 4 |
| Computer Science |  | 4 |
| CS 1100 | Computer Science and Its Applications | 4 |

## Experiential Learning Requirement for Economics

Note: ECON 4992 or ECON 4996 can double-count for an economics elective in the major.

| Code <br> Complete one of the following courses, or complete study <br> abroad or co-op: | Hours |
| :--- | :--- | ---: |
| ECON 4992 | Directed Study |
| ECON 4996 | Experiential Education Directed Study |
| ECON 4970 | Junior/Senior Honors Project 1 |
| ECON 4971 | Junior/Senior Honors Project 2 |

## 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 |
| :--- | :---: | :---: | :---: | ---: |
| ECON 1115 | 4 ECON 1116 | 4 Vacation | 0 Vacation | 0 |
| ENGW 1111 | 4 CS 1100 | 4 |  |  |
| MATH 1231 | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
| ECON 1000 | 1 |  | 0 | 0 |
|  | 17 | 16 | 0 |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ECON 2315 | 4 ECON 2316 | 4 | Vacation | 0 Co-op |$\quad 0$

Year 3
Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours
Co-op 0 ENGW $3308 \quad 4$ ECON 4 Co-op 0

| ECON <br> undergraduatı <br> elective | 4 Elective | 4 |  |
| :--- | :--- | :--- | :--- |
| ECON <br> undergraduate <br> elective | 4 |  |  |
| Elective | 4 | 8 | 0 |
| 0 | 16 |  | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | ECON <br> undergraduate <br> elective | ECON <br> undergraduate <br> elective | 4 Co-op |  |$\quad 0$

## Economics Major Credit Requirement

Complete 64 semester hours in the major.

| 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 |
| ECON 1115 | 4 ECON 1116 | 4 Vacation | 0 |  |
| ENGW 1111 | 4 CS 1100 | 4 |  |  |
| MATH 1231 | 4 Elective | 4 |  |  |
| ECON 1000 | 1 Elective | 4 |  | 0 |
| Elective | 4 | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ECON 2315 | 4 Co-op | 0 Co-op | 0 ECON 2560 |  |$\quad 4$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENGW 3308 | 4 Co-op | 0 Co-op | 0 | ECON <br> undergraduate elective | - 4 |
| ECON undergraduat elective | 4 |  |  | Elective | 4 |
| Elective | 4 |  |  |  |  |
| ECON 2316 | 4 |  |  |  |  |
|  | 16 | 0 | 0 |  | 8 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ECON | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| undergraduate <br> elective |  |  |  |  |
| ECON <br> undergraduat <br> elective | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
| Elective | 4 | 0 | 0 |  |
|  | 16 |  |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| ECON <br> undergraduate <br> elective | 4 ECON 4692 | 4 |
| Elective | 4 ECON <br> undergraduatı <br> elective | 4 |
| Elective | 4 Elective | 4 |


| Elective | 4 Elective | 4 |
| :--- | :---: | ---: |
|  | 16 | 16 |

Total Hours: 130

## International Affairs and Economics, BA

Through this combined major, successful undergraduates will develop 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211 ), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| International Affairs/Economics at Northeastern |  |  |
| INTL 1000 or ECON 1000 | International Affairs at Northeastern 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 or HIST 2211 | Peoples and Cultures <br> The World Since 1945 | 4 |
| Global Dynamics |  |  |
| Complete three of 2000 or above. C aid students in de bearing on major | following with one course numbered es are divided into thematic groups to ng which courses to take and have no uirements: | 12 |


| Environment |  |
| :---: | :---: |
| ENVR 1110 | Global Climate Change |
| ENVR 4515 | Sustainable Development |
| SOCL 1246 | Environment and Society |
| Law, Diplomacy, and Global Governance |  |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| COMM 2303 | Global and Intercultural Communication |
| POLS 1155 | Comparative Politics |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |
| Human Rights and Social Justice |  |
| INTL 2400 | Politics of Islam and Gender |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| 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 |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| Globalization |  |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |


| ECON 4635 | International Economics |
| :---: | :---: |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of Human Societies |
| Population, Migration | nd Diaspora |
| INTL 2240 | Global Population and Development |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| Development |  |
| INTL 2240 | Global Population and Development |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 or INTB 1209 | International Business and Global Social Responsibility International Business and Global Social Responsibility |
| 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 <br> or INTL 3300 | Covering Conflicts: Peace, War, and the Media <br> Covering Conflicts: Peace, War, and the Media |
| JRNL 5360 | Global Reporting |
| MSCR 2325 | Global Media |
| MUSC 1140 | Global Pop Music |

## International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

## Regional Analysis Requirement

| Code Title | Hours |
| :--- | ---: |
| Complete three of the following, two of which must be in | 12 |
| 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: |  |

## Africa

| AFRS 2307 | Africa Today |
| :---: | :---: |
| AFRS 2465 | The Scope and Dynamics of Conflicts in Africa |
| 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 | Africa and the World in Early Times |
| Asia |  |
| ANTH 4350 or INTL 4350 | Ethnography of Southeast Asia Ethnography of Southeast Asia |
| ASNS 1150 or HIST 1150 | East Asian Studies 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 |
| HIST 2360 | History of Capitalism in East Asia |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |
| Europe |  |
| CLTR 1501 | Introduction to French Culture |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |


| HIST 2280 | Hitler, Germany, and the Holocaust |
| :---: | :---: |
| HIST 2370 | Renaissance to Enlightenment |
| 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 <br> or INTL 4500 | Latin American Society and Development <br> Latin American Society and Development |
| CLTR 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |
| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| SOCL 1215 | Society and Culture in Russia |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel two. Note: Completing this requirement satisfies the language requirement for the BA degree.

## Economics Requirements

Code Title Hours

## Required Economics Courses

Grades in the following courses must average a minimum of 2.000 with no grade lower than C-.

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 three economics electives with a minimum of
one numbered 3000 or above. Courses used to satisfy
international affairs requirements may not be used as
economics electives.

## Supporting Courses <br> Code Title Hours

MATH $1231 \quad$ Calculus for Business and Economics 4

| Computer Science |  |
| :--- | :--- | :--- |
| CS 1100 | Computer Science and Its Applications |

## Integrative Requirements

Code Title Hours
Development Economics
ECON $1291 \quad$ Development Economics
Senior Seminar
Complete one of the following with a thesis or project that
integrates both international affairs and economics:
ECON 4692

| or INTL 4700 |
| :--- |
| Senior Economics Seminar |

Senior Capstone Seminar in International Affairs

## International Affairs and Economics Combined-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 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| INTL 1000 | 1 | MATH 1231 | 4 | Vacation | 0 | Vacation | 0 |
| INTL 1101 | 4 | ECON 1116 | 4 |  |  |  |  |
| ECON 1115 | 4 | POLS 1160 | 4 |  |  |  |  |
| ENGW 1111 | 4 | POLS 1161 | 0 |  |  |  |  |
| Foreign language core course | 4 | HIST 2211 | 4 |  |  |  |  |
|  | 17 |  | 16 |  | 0 |  | 0 |
| Year 2 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| ECON 3520 | 4 | ECON 2350 | 4 | Vacation | 0 | Co-op | 0 |
| CS 1100 | 4 | INTL elective | 4 |  |  |  |  |
| INTL elective | 4 | Foreign language core course | 4 |  |  |  |  |



Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Co-op | 0 INTL 3400 | 4 INTL elective | 4 Co-op | 0 |
|  | ECON 2315 | 4 INTL elective | 4 |  |
|  | Elective | 4 |  | 0 |
|  | Elective | 4 | 8 | 0 |

Year 4

| Fall | Hours | Spring H | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | ECON <br> undergraduate elective | - 4 | Elective | 4 | Co-op | 0 |
|  |  | ECON <br> undergraduatı <br> elective | 4 | Elective | 4 |  |  |
|  |  | INTL elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |


| Year 5 |  |  |
| :--- | :---: | ---: |
| Fall | HoursSpring | Hours |
| Co-op | ECON <br> undergraduate <br> elective | 4 |
|  | INTL 4700 | 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 MATH 1231 | 4 Vacation | 0 Vacation | 0 |
| INTL 1101 | 4 ECON 1116 | 4 |  |  |
| ECON 1115 | 4 POLS 1160 | 4 |  |  |
| ENGW 1111 | 4 POLS 1161 | 0 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: |
| ECON 3520 | 4 Co-op | 0 Co-op | 0 | INTL elective | 4 |
| CS 1100 | 4 |  | INTL elective | 4 |  |
| INTL elective | 4 |  |  |  |  |
| Foreign <br> language <br> core course | 4 |  |  | 8 |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| ECON 2350 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| INTL elective | 4 |  | Elective | 4 |
| Foreign language core course | 4 |  |  |  |
| ECON 2316 | 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 |
| ECON 2315 | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ECON | 4 ECON | 4 |
| undergraduate <br> elective | undergraduate <br> elective |  |
| ECON <br> undergraduat <br> elective | 4 INTL 4700 | 4 |
| INTL elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 |  |
| Political Science Restricted Electives |  |  |
| Complete two | following: | 8 |
| POLS 3307 | Public Policy and Administration |  |
| POLS 2335 | Budgeting and Taxation |  |
| POLS 2340 | Business and Government |  |
| POLS 2345 | Urban Policies and Politics |  |
| POLS 2357 | Growth and Decline of Cities and Suburbs |  |
| POLS 2360 | Politics of Poverty |  |
| POLS 3405 | International Political Economy |  |
| POLS 3487 | Politics of Developing Nations |  |

Political Science Electives
Complete two courses in the following range, or complete a 8 concentration as outlined below:

POLS 3300 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. 681).

- American Political Institutions (p. 681)
- Campaigns and Elections (p. 681)
- International Relations and Diplomacy (p. 681)
- Public Policy (p. 681)


## Economics Requirements for BA

Code Title Hours
Breadth Courses

| MATH 1231 | Calculus for Business and Economics | 4 |
| :--- | :--- | :--- |
| CS 1100 | Computer Science and Its Applications | 4 |

## Required Economics Courses

Grades in the required economics courses and in Quantitative
Techniques (POLS 2400) or Statistics (ECON 2350) must
average a minimum of 2.000:

| 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 three economics electives with no more than one below 2990. |  | 12 |
| Supporting Courses |  |  |
| Complete either of the statistics and departmental elective combinations listed below: |  |  |
| COMBINATION A |  |  |
| Code | Title | Hours |
| Statistics |  |  |
| POLS 2400 | Quantitative Techniques | 4 |
| Economics |  |  |
| Complete one of the following: |  | 4 |
| ECON 3404 | International Food Economics and Policy |  |
| ECON 3420 | Urban Economic Issues |  |
| ECON 3423 | Environmental Economics |  |
| ECON 3425 | Energy Economics |  |
| ECON 3440 | Public Finance |  |
| ECON 3490 | Public Choice Economics |  |
| ECON 4634 | Comparative Economics |  |
| ECON 4635 | International Economics |  |
| COMBINATION B |  |  |
| Code | Title | Hours |
| Statistics |  |  |
| ECON 2350 | Statistics | 4 |
| Political Science |  |  |
| Complete one course in the following range: |  | 4 |
| POLS 2401 to POLS 5999 |  |  |
| Integrative Requirements |  |  |
| Code | Title | Hours |
| Senior Seminar/Capstone |  |  |
| Complete one of the following: |  | 4 |
| ECON 4692 | Senior Economics Seminar |  |
| POLS 4701 | Political Science Senior Capstone |  |
| POLS 4703 | Senior Thesis |  |

## Program Requirement

128 total semester hours required

| Concentrations |  |  |
| :--- | :--- | ---: |
| CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS |  |  |
| Coders | Title | 16 |
| Complete four of the following: |  |  |
| POLS 2350 | State and Local Politics |  |
| POLS 3300 | The U.S. Congress |  |
| POLS 3302 | Judicial Process and Behavior |  |
| POLS 3305 | The American Presidency |  |
| POLS 3307 | Public Policy and Administration |  |
| POLS 3310 | Public Opinion, Voting, and Elections |  |

## CONCENTRATION IN CAMPAIGNS AND ELECTIONS Code Title Hours

Required Courses
With advisor approval, a co-op or internship may be substituted in place of POLS 4947:
POLS $3160 \quad$ Campaign Strategy 4
POLS 4947 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 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |

$\begin{array}{lll}\text { CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY } \\ \text { Code } & \text { Title } & \\ & \text { Hours }\end{array}$
Experiential/Practicum Requirement
Complete one of the following:

| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International <br>  |

## Core Courses

Complete three of the following: 12

| POLS 3405 | International Political Economy |
| :--- | :--- |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> the European Union |
| POLS 3470 | Arab-Israeli Conflict |

CONCENTRATION IN PUBLIC POLICY
Code Title Hours

## Core Requirement

POLS 3307 Public Policy and Administration 4

## Electives

Complete three of the following: 12

| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> Suburbs |
| POLS 2390 | Science Technology, and Public Policy |


| POLS 2395 | Environmental Politics and Policy |
| :--- | :--- |
| POLS 3425 | U.S. Foreign Policy |

## Plan of Study

## Four Years, No Co-op

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 1111 | 4 MATH 1231 | 4 | Vacation | 0 Vacation | 00

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| POLS 1160 | 4 POLS 2400 | 4 Vacation | 0 Vacation | 0 |
| POLS 1161 | 0 ECON 2315 | 4 |  |  |
| ECON <br> undergraduate <br> elective | 4 <br> POLS <br> undergraduate <br> elective | 4 |  |  |
| POLS <br> undergraduat <br> elective | 4 Elective | 4 |  |  |
| Elective | 4 | 16 | 0 | 0 |


| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGW 3315 | 4 | Elective | 4 | Vacation | 0 Vacation | 0 |
| ECON 2316 |  | POLS <br> intermediate/ <br> advanced <br> undergraduat <br> elective | 4 |  |  |  |
| Political <br> Theory course | 4 | Elective | 4 |  |  |  |
| ECON undergraduat elective | 4 | Elective | 4 |  |  |  |
|  | 16 |  | 16 |  | 0 | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ECON 2560 | 4 POLS 4701 | 4 |
| POLS <br> intermediate/ <br> advanced <br> undergraduatı <br> elective | 4 ECON <br> intermediate/ <br> advanced <br> undergraduatı <br> elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

[^18]
## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science $\mathbf{O v e r v i e w ~}$ |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| or ECON 1000 | Economics at Northeastern | 1 |
| CS 1210 | Professional Development for CCIS Co- <br>  <br>  <br> op | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 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 | Object-Oriented Design | 4 |
| IS 2000 | Principles of Information Science | 4 |

Presentation Requirement
THTR 1170 The Eloquent Presenter 1

## Computer Science Elective Courses

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.
Complete 12 credits of CS, IS, or DS classes that are not

| CS 2500 or higher, except CS 5010 |  |  |
| :---: | :---: | :---: |
| IS 2000 or higher, except IS 4900 |  |  |
| DS 2000 or higher, except DS 4900 |  |  |
| Economics Requirements |  |  |
| Code | Title | Hours |
| 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 2350 | Statistics | 4 |
| ECON 2560 | Applied Econometrics | 4 |
| Economics Electives |  |  |
| Complete four economics electives with no more than two below 3000: |  | 16 |
| ECON 1230 | Healthcare and Medical Economics |  |
| ECON 1240 | Economics of Crime |  |
| ECON 1290 | History of the Global Economy |  |
| ECON 3420 | Urban Economic Issues |  |
| ECON 3423 | Environmental Economics |  |
| ECON 3424 | Law and Economics |  |
| ECON 3425 | Energy Economics |  |
| ECON 3440 | Public Finance |  |
| ECON 4635 | International Economics |  |
| ECON 4681 | Information Economics and Game Theory |  |
| Economics Capstone |  |  |
| ECON 4692 | Senior Economics Seminar | 4 |

## Integrative Course Requirement <br> Code Title

| The following courses are used in other areas of the major. |
| :--- | :--- | :--- |
| IS 2000 Principles of Information Science 4 <br> ECON 2560 Applied Econometrics 4 |

## Supporting Courses

Code Title

## Hours

## Mathematics

| MATH 1231 or MATH 1341 | Calculus for Business and Economics Calculus 1 for Science and Engineering | 4 |
| :---: | :---: | :---: |
| Computing and Social Issues |  |  |
| Complete one of t | ollowing: | 4 |
| SOCL 4528 | Computers and Society |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 1280 | The 21 st-Century Workplace |  |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| PHIL 1145 | Technology and Human Values |  |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital Rights |  |
| INSH 2102 | Bostonography: The City through Data, Texts, Maps, and Networks |  |

## Computer Science English Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  | 4 |
| 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:

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :--- | :--- |
| ENGW 3308 | Advanced Writing in the Social <br> Sciences |
| ENGW 3315 | Interdisciplinary Advanced Writing in <br> the Disciplines |


| Required General Electives |  |
| :--- | ---: |
| Code $\quad$ Title | Hours |
| Complete six general electives. | 24 |

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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.

## Program Requirement

133 total semester hours required

## 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 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3200 | 4 | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | IS 2000 | 4 | CS 3500 | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | ECON 1116 | 4 |  |  |  |  |
| ECON 1115 | 4 | MATH 1231 or 1341 | 4 |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | :---: |
| CS 2800 | 5 CS 1210 | 1 ENGW 3302, | 4 Co-op |  |
| and CS 2801 |  | 3308,3311, |  |  |
|  |  | or 3315 |  |  |



## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :--- | :---: | :---: |
| Co-op | CS elective 3 | 4 |  |
|  | ECON 4692 | 4 Elective | 4 |
|  | ECON |  |  |
| elective 3 | 4 Elective | 4 |  |
|  | ECON <br> elective 4 | 4 |  |
| 0 | 16 | 8 |  |

Total Hours: 135

## Five Year, Three Co-ops in Summer 2/Fall

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | IS 2000 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | ECON 1116 | 4 |  |  |  |  |
| ECON 1115 | 4 | MATH 1231 or 1341 | 4 |  |  |  |  |
| ENGW 1111 | 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 | 4 | $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | 5 |  |  |  |  |
| ECON 2315 | 4 | CS 3200 | 4 |  |  |  |  |
| ECON 2350 | 4 | ECON 2316 | 4 |  |  |  |  |
|  |  | ECON <br> elective 1 | 4 |  |  |  |  |
|  | 16 |  | 18 |  | 0 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | CS elective 2 | 4 Elective | 4 Co-op |  |
|  | ECON <br> elective 3 | 4 Elective | 4 |  |
|  | ECON <br> elective 4 <br> Elective | 4 |  |  |
|  | 0 | 16 | 8 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | CS elective 3 | 4 |
|  | ECON 4692 | 4 |
|  | Elective | 4 |
|  | Elective | 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

| Cybersecurity Major Requirements |  |  | MATH 3527 | Number Theory 1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Title | Hours | MATH 4575 | Introduction to Cryptography |  |
| Computer Science Overview |  |  | COMM 2551 | Free Speech in Cyberspace |  |
| CS 1200 | Leadership Skill Development | 1 | CRIM 2200 | Criminology |  |
| or ECON 1000 | Economics at Northeastern |  | CRIM 3030 | Global Criminology |  |
| CS 1210 | Professional Development for CCIS Coop | 1 | CRIM 4040 | Crime Prevention |  |
|  |  |  | CRIM 3400 | Corporate Security: Securing the Private |  |
| Discrete Structures |  |  |  | Sector |  |
| A grade of C - or higher is required: |  |  | LPSC 1101 | Introduction to Law |  |
| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 | LPSC 2301 | Introduction to Law, Policy, and Society |  |
|  |  |  | LPSC 3303 | Topics in Law and Public Policy |  |
| Computer Science Fundamentals Courses |  |  | PHIL 1145 | Technology and Human Values |  |
| A grade of C - or higher is required in each course: |  |  | POLS 2390 | Science, Technology, and Public Policy |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 | POLS 3307 | Public Policy and Administration |  |
|  |  |  | POLS 3324 | Law and Society |  |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | Fundamentals of Computer Science 2 and Lab for CS 2510 | 5 | POLS 3406 | International Law |  |
|  |  |  | POLS 3408 | International Security |  |
| Computer Science Required Courses |  |  | POLS 3420 | U.S. National Security Policy |  |
| CS 3000 | Algorithms and Data | 4 | POLS 3423 | Terrorism and Counterterrorism |  |
| CS 3500 | Object-Oriented Design | 4 | Computer Science Senior Seminar |  |  |
| CS 3650 | Computer Systems | 4 | THTR 1170 | The Eloquent Presenter | 1 |
| CS 3700 | Networks and Distributed Systems | 4 |  |  |  |
| Cybersecurity Required Courses |  |  | Supporting Course |  |  |
| CS 2550 | Foundations of Cybersecurity | 4 | Code | Title | Hours |
| CS 3740 | Systems Security | 4 | MATH 1341 | Calculus 1 for Science and Engineering |  |
| CS 4740 | Network Security | 4 | or MATH 1231 | Calculus for Business and Economics |  |
| CS 4170 | The Law, Ethics, and Policy of Data and Digital Technologies |  | Computer Science Writing Requirement |  |  |
| or IA 5240 | Cyberlaw: Privacy, Ethics, and Digital Rights |  | Code | Title | Hours |
| Cybersecurity Elective |  |  | College Writing |  |  |
| Complete one of the following: |  | 4 | Complete one of the following: |  | 4 |
| CS 2800 CS 4710 | Logic and Computation |  | ENGW 1111 | First-Year Writing |  |
| $\begin{aligned} & \text { CS } 4710 \\ & \text { or CS } 6710 \end{aligned}$ | Mobile and Wireless Systems Wireless Network |  | ENGW 1102 | First-Year Writing for Multilingual Writers |  |
| CS 5770 | Software Vulnerabilities and Security |  | Advanced Writing in the Disciplines |  |  |
| CS 4770 | Cryptography |  | Complete one of the following: |  | 4 |
| CS 4400 | Programming Languages |  | ENGW 3302 | Advanced Writing in the Technical Professions |  |
| CS 4500 | Software Development |  |  |  |  |
| CS 4240 | Large-Scale Parallel Data Processing |  | ENGW 3308 | Advanced Writing in the Social Sciences |  |
| DS 4300 | Large-Scale Information Storage and Retrieval |  | ENGW 3311 | Advanced Writing for Prelaw |  |
| DS 4400 | Machine Learning and Data Mining 1 |  | ENGW 3315 | Interdisciplinary Advanced Writing in the Disciplines |  |
| IA 5200 | Security Risk Management and Assessment |  |  |  |  |
|  |  |  | Economics Requirements |  |  |
| IA 5210 and IA 5211 | Information System Forensics and Lab for IA 5210 |  | Code <br> Required Courses | Title | Hours |
| IS 4300 | Human Computer Interaction |  |  | Required Courses |  |
| EECE 2160 | Embedded Design: Enabling Robotics |  | A cumulative 2.0 GPA is required. |  |  |
| EECE 2322 <br> and EECE 2323 | Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322 |  | ECON 11116 | Principles of Macroeconomics | 4 |
|  |  |  | ECON 2315 | Macroeconomic Theory | 4 |
| EECE 3324 | Computer Architecture and Organization |  | ECON 2316 | Microeconomic Theory | 4 |
|  |  |  | ECON 2350 | Statistics | 4 |
| EECE 4534 <br> and EECE 4535 | Microprocessor-Based Design and Lab for EECE 4534 |  | ECON 2560 | Applied Econometrics | 4 |
|  |  |  | Electives |  |  |


| Complete four ECON electives with at least two numbered at ECON 3000 or above. | 16 |
| :---: | :---: |
| ECON 1001 to ECON 2999 |  |
| ECON 3000 to ECON 5999 |  |
| Integrative Requirement |  |
| Code Title | Hours |
| Capstone |  |
| Complete one of the following: | 4 |
| ECON 4692 Senior Economics Seminar |  |
| CS 4930 Cybersecurity Capstone |  |
| CS 4940 Research Projects on National Security |  |
| Integrative Requirement |  |
| ECON 2560 Applied Econometrics | 4 |
| Required General Electives |  |
| Code Title | Hours |
| Complete six general electives. | 24 |

## Cybersecurity GPA Requirement

Minimum 2.000 GPA required in all computer and information science courses.

## Program Requirement

133 total semester hours required.
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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Political Science Requirements |  |
| :--- | ---: | ---: |
| Code Title <br> Political Science Requirements Hours <br> 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 |  |
| Political Science Restricted Electives |  |  |
| Complete two of the following: |  | 8 |
| POLS 3307 | Public Policy and Administration |  |
| POLS 2335 | Budgeting and Taxation |  |
| POLS 2340 | Business and Government |  |
| POLS 2345 | Urban Policies and Politics |  |
| POLS 2357 | Growth and Decline of Cities and Suburbs |  |
| POLS 2360 | Politics of Poverty |  |
| POLS 3405 | International Political Economy |  |
| POLS 3487 | Politics of Developing Nations |  |
| Political Science Electives |  |  |
| Complete two a concentratio | s from the following range, or complete utlined below: | 8 |

## POLS 3300 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. 687).

- American Political Institutions (p. 687)
- Campaigns and Elections (p. 687)
- International Relations and Diplomacy (p. 687)
- Public Policy (p. 687)


## Economics Requirements for BS

Code Title Hours
Breadth Courses

| MATH 1231 | Calculus for Business and Economics | 4 |
| :--- | :--- | :--- |
| CS 1100 | Computer Science and Its Applications | 4 |

## Required Economics Courses

Grades in the required economics courses and in Quantitative
Techniques (POLS 2400) or Statistics (ECON 2350) must
average a minimum of 2.000 :

| 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 three economics electives with no more than one <br> below 2990. |  |  |

## Supporting Courses

Complete either of the statistics and departmental elective combinations listed below:

| COMBINATION A |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Statistics |  |  |
| POLS 2400 | Quantitative Techniques | 4 |
| Economics |  |  |
| Complete one of the following: |  | 4 |
| ECON 3404 | International Food Economics and Policy |  |
| ECON 3420 | Urban Economic Issues |  |
| ECON 3423 | Environmental Economics |  |
| ECON 3425 | Energy Economics |  |
| ECON 3440 | Public Finance |  |
| ECON 3490 | Public Choice Economics |  |
| ECON 4634 | Comparative Economics |  |
| ECON 4635 | International Economics |  |
| COMBINATION B |  |  |
| Code | Title | Hours |
| Statistics |  |  |
| ECON 2350 | Statistics | 4 |
| Political Science |  |  |
| Complete one course in the following range: |  | 4 |
| POLS 2401 to POLS 5999 |  |  |
| Integrative Requirements |  |  |
| Code | Title | Hours |
| Senior Seminar/Capstone |  |  |
| Complete one of | following: | 4 |
| ECON 4692 | Senior Economics Seminar |  |
| POLS 4701 | Political Science Senior Capstone |  |
| POLS 4703 | Senior Thesis |  |

## Program Requirement

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 3305 | The American Presidency |
| POLS 3307 | Public Policy and Administration |
| POLS 3310 | Public Opinion, Voting, and Elections |

CONCENTRATION IN CAMPAIGNS AND ELECTIONS
Code Title Hours

| Required Courses |  |
| :--- | :--- |
| With advisor approval, a co-op or internship may be |  |
| substituted in place of POLS 4947: | 4 |
| POLS $3160 \quad$ Campaign Strategy | 4 |
| POLS 4947 |  |
| 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:

| POLS 2345 | Urban Policies and Politics |
| :--- | :--- |
| POLS 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |


| CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY |  |  |
| :--- | :--- | :--- |
| Code | Title |  |
| Hours |  |  |

## Experiential/Practicum Requirement

Complete one of the following: 4

| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International <br> Politics Abroad |

## Core Courses

Complete three of the following: 12

| POLS 3405 | International Political Economy |
| :--- | :--- |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> the European Union |
| POLS 3470 | Arab-Israeli Conflict |

Code Title Hours

| Core Requirement |  | 4 |
| :--- | :--- | :--- |
| POLS 3307 | Public Policy and Administration |  |


| Electives | 12 |
| :--- | :--- |
| Complete three of the following: | 12 |


| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br>  <br> POLS 2390 |
| POLS 2395 | Science, Technology, and Public Policy |
| POLS 3425 | U.S. Foreign Policy |

## Plan of Study <br> Four Years, No Co-op

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 1111 | 4 MATH 1231 | 4 Vacation | 0 Vacation | 0 |
| POLS 1155 | 4 POLS 1150 | 4 |  |  |


| POLS 1156 | 0 POLS 1151 | 0 |  |  |
| :--- | :--- | ---: | :--- | :--- |
| ECON 1115 | 4 CS 1100 | 4 |  |  |
| Elective | 4 ECON 1116 | 4 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| POLS 1160 | 4 POLS 2400 | 4 Vacation | 0 Vacation | 0 |
| POLS 1161 | 0 ECON 2315 | 4 |  |  |
| ECON <br> undergraduate <br> elective | 4 POLS <br> undergraduate <br> elective | 4 |  |  |
| POLS <br> undergraduat <br> elective | 4 Elective | 4 |  |  |
| Elective | 4 | 16 | 0 | 0 |

Year 3


Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ECON 2560 | 4 POLS 4701 | 4 |
| POLS <br> intermediate/ <br> advanced <br> undergraduat, <br> elective | ECON <br> intermediate/ <br> advanced <br> undergraduatı <br> elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 128

## Economics and Business Administration, BS

The combined major with business administration is our most popular combined major, combining 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Economics Requirements

Grades in required economics courses must average a minimum GPA of 2.000 with no grade lower than C-

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| ECON 1000 | Economics at Northeastern | 1 |
| or BUSN 1102 | Personal Skill Development for Business |  |


| 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 |
| $\begin{aligned} & \text { ECON } 2350 \\ & \text { or MGSC } 2301 \end{aligned}$ | Statistics <br> Business Statistics | 4 |
| ECON 2560 | Applied Econometrics | 4 |
| Economics Electives |  |  |
| Complete four courses from the following lists with no more than one at the introductory level: |  | 16 |
| Introductory |  |  |
| ECON 1200 to ECON 1990 |  |  |
| Intermediate/Advanced |  |  |
| ECON 2990 to ECON 3499 |  |  |
| ECON 3520 | History of Economic Thought |  |
| ECON 3915 | Intermediate Selected Topics in Macroeconomics |  |
| ECON 3916 | Intermediate Selected Topics in Microeconomics |  |
| ECON 3990 | Elective |  |
| ECON 4600 to ECON 4681 |  |  |
| ECON 4915 to ECON 4916 |  |  |
| ECON 4965 | Undergraduate Teaching Experience 1 |  |
| ECON 4970 to ECON 4990 |  |  |
| ECON 4992 | Directed Study |  |

## Business Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Accounting |  | 4 |
| ACCT 1201 | Financial Accounting and Reporting | 4 |
| ACCT 2301 | Managerial Accounting | 4 |
| Finance |  | 4 |
| FINA 2201 | Financial Management |  |


| Marketing |  |  |
| :---: | :---: | :---: |
| MKTG 2201 | Introduction to Marketing | 4 |
| Organizational Behavior |  |  |
| ORGB 3201 | Organizational Behavior | 4 |
| International Business/Social Responsibility |  |  |
| INTB 1203 | International Business and Global Social Responsibility | 4 |

## Business Concentration

Complete one of the following business concentrations. Requirements for the concentrations are listed below (p. ).

- Accounting (p. 244)
- Entrepreneurship and Innovation (p. 244)
- Finance (p. 245)
- Management (p. 245)
- Management Information Systems (p. 245)
- Marketing (p. 246)
- Supply Chain Management (p. 246)


## Business Cooperative Education Requirement

Complete one six-month co-op experience.
Supporting Courses
Code Title Hours

| Mathematics | Calculus for Business and Economics | 4 |
| :--- | :--- | ---: |
| MATH 1231 <br> or MATH 1341 | Calculus 1 for Science and Engineering | 4 |
| Computer Science | Computer Science and Its Applications | 4 |
| CS 1100 | Professional Development for Business | 1 |
| Co-op Preparation | Co-op |  |
| BUSN 1103 | Professional Development for Co-op |  |
| or EESH 2000 |  |  |


| Capstone Requirement | 4 |  |
| :--- | :--- | :--- |
| ECON 4692 | Senior Economics Seminar | 4 |
| STRT 4501 | Strategy in Action | 4 |

## Economics GPA Requirement

Minimum 2.000 GPA required in all economics courses

## Business GPA Requirement

Minimum 2.000 GPA required in business courses

## Program Requirement

128 total semester hours required

| Concentrations |  |  |
| :--- | :--- | ---: |
| CONCENTRATION IN ACCOUNTING |  |  |
| Code | Title | Hours |
| Required Courses |  | 4 |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 |  |
| Electives |  | 8 |
| Complete two of the following: |  |  |

ACCT 3403 Accounting Information Systems

| ACCT 3416 | Strategic Cost Analysis for Decision <br> Making |
| :--- | :--- |
| ACCT 4412 | Auditing and Other Assurance Services |
| ACCT 4414 | Income Tax Determination and <br> Planning |

## CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION Hours Code Title

Note: The following courses do not count toward this


| ENTR 2206 | Global Social Enterprise |
| :---: | :---: |
| ENTR 2215 | Understanding Family Enterprise |
| ENTR 2414 | Social Responsibility of Business in an Age of Inequality |
| ENTR 2301 | Innovation! (if not used as introductory course) |
| ENTR 2303 | Entrepreneurial Marketing and Selling (if not used for introductory course) |
| ENTR 3212 | Innovation for Social Change |
| ENTR 3217 | Global Family Business Leadership |
| ENTR 3220 | International Entrepreneurship and Innovation Consulting |
| ENTR 3305 | Entrepreneurial Strategy and Business Model Design |
| ENTR 3306 | Global Entrepreneurship |
| ENTR 3330 | Lean Design and Development for Entrepreneurs |
| ENTR 3401 | Management of Operations and Growth in Small- and Medium-Sized Enterprises |


| ENTR 3403 | Managing Operations in a Technology- |
| :--- | :--- |
|  | Based Startup Firm |
| ENTR 3520 | Impact Investing and Social Finance |
| ENTR 4225 | Corporate Entrepreneurship through <br> Global Growth, Acquisitions, and |
|  | Alliances |

CONCENTRATION IN MANAGEMENT
Code Title Hours

| Required Course |  |  |
| :--- | :--- | :--- |
| MGMT 4501 | Skills for Managerial Success | 4 |

## Electives

Note: Only one non-MGMT course may be used as an elective.
Complete three of the following:

| MGMT 3302 | Negotiating in Business |
| :--- | :--- |
| MGMT 3315 | Managing Organizational Change and <br> Disruption |


| MGMT 3330 | Developing Leaders for Global <br> Sustainability |
| :--- | :--- |
| MGMT 3340 | Managing Healthcare Organizations: <br> Critical Challenges and New <br> Approaches |
| MGMT 3350 | Managing a Diverse Workforce |
| MGMT 3360 | Law and the Legal Process |
| MGMT 3420 | Managing Human Capital |
| MGMT 3510 | Managing Global Teams Virtually and <br> Locally |
| MGMT 3530 | Project Management |
| MGMT 4310 | The Management Practices of Great <br> Muman Resources and Workforce |
| MGMT 4410 | Analytics |
| ENTR 2215 | Understanding Family Enterprise <br> Social Responsibility of Business in an <br> Age of Inequality |
| ENTR 2414 | Corporate Entrepreneurship through <br> Global Growth, Acquisitions, and <br> Alliances |

CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS
Code Title Hours
Code Title Hours

Required Courses
MISM 3403 Data Management in the Enterprise 4
MISM 4501 Business Systems Integration 4

## Electives

Note: Only one non-MISM course may be used as an elective.
Complete two of the following: 8

| MISM 2510 | Fundamentals of Information Analytics |
| :--- | :--- |
| MISM 3305 | Information Resource Management |
| MISM 3404 | Data Communications |
| MISM 3406 | Introduction to Web Design, Practices, <br> and Standards |
| MISM 3501 | Information Visualization for Business |
| MISM 3515 | Data Mining for Business |
| MKTG 4508 | Digital Marketing |
| SCHM 3301 | Global Supply Chain Strategy |
| SCHM 3305 | Sourcing and Procurement |
| SCHM 3308 | Supply Chain Analytics |

## CONCENTRATION IN MARKETING

Code Title Hours

## Required Courses

| MKTG 3401 | Marketing Research | 4 |
| :---: | :--- | :--- |
| MKTG 3301 | Marketing Management | 4 | or MKTG 4506 Consumer Behavior

## Electives

Complete two of the following: 8

| MKTG 2301 | Marketing and Society |
| :--- | :--- |
| MKTG 3301 | Marketing Management (if not selected <br> as a required course) |
| MKTG 3501 | Marketing Analytics |
| MKTG 4220 | Marketing in Asia |


| MKTG 4420 | Sales Management |
| :--- | :--- |
| MKTG 4502 | Marketing in the Service Sector |
| MKTG 4504 | Advertising and Brand Promotion |
| MKTG 4506 | Consumer Behavior (if not selected as a <br> required course) |
| MKTG 4508 | Digital Marketing |
| MKTG 4510 | New Product Development |
| MKTG 4512 | International Marketing |


| CONCENTRATION IN SUPPLY CHAIN MANAGEMENT  <br> Code Title | Hours |  |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation <br>  Management | 4 |

Elective

| Complete one of the following: |  |
| :--- | :--- |
| SCHM 3308 | Supply Chain Analytics |
| SCHM 3320 | Demand Planning and Forecasting |
| SCHM 3330 | Sustainability and Supply Chain <br> Management |
| SCHM 4401 | Advanced Problems in Supply Chain <br> Management |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

Economics Requirements
Code Title Hours
Introduction to College
ECON 1000 Economics at Northeastern 1

| or MATH 1000 | Mathematics at Northeastern |  |
| :--- | :--- | :--- |
| Required Economics |  | 4 |
| ECON 1115 | Principles of Macroeconomics | 4 |
| ECON 1116 | Principles of Microeconomics | 4 |
| ECON 2315 | Macroeconomic Theory | 4 |
| ECON 2316 | Microeconomic Theory | 4 |

## Economics Electives

Complete four economics electives with not more than two at 16
the introductory level:

| Introductory |  |
| :---: | :---: |
| ECON 1200 to ECON 1990 |  |
| Intermediate/Advanced |  |
| ECON 2990 to ECON 3499 |  |
| ECON 3915 | Intermediate Selected Topics in Macroeconomics |
| ECON 3916 | Intermediate Selected Topics in Microeconomics |
| ECON 3990 | Elective |
| ECON 4600 to ECON 4681 |  |
| ECON 4915 to ECON 4916 |  |
| ECON 4965 | Undergraduate Teaching Experience 1 |
| ECON 4970 to ECON 4990 |  |
| ECON 4992 | Directed Study |
| ECON 4994 | Internship |

Mathematics Requirements
Code Title Hours
Required Mathematics

| MATH 1365 | Introduction to Mathematical <br> 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 | 4 |
| MATH 2331 | Algebra for Engineering | 4 |
| MATH 3081 | Linear Algebra | 4 |

## Mathematics Electives

Complete two courses in the following range

## 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 |
| :--- | :--- | ---: |
| Computer Science |  |  |
| CS 1100 | Computer Science and Its Applications | 4 |

## Integrative Requirements

Code Title Hours
Advanced Writing in the Disciplines

| ENGW 3308 | Advanced Writing in the Social <br> Sciences |
| :--- | :--- |


| 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 |
| A GPA of 2.000 is required in the following six courses with no grade lower than C- |  |  |
| ECON 1115 | Principles of Macroeconomics |  |
| ECON 1116 | Principles of Microeconomics |  |
| 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. Complete 76 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Economics Requirements

Code Title Hours
Introduction to College
Complete one of the following:

| ECON 1000 | Economics at Northeastern |  |
| :---: | :---: | :---: |
| PHIL 1000 | Philosophy at Northeastern |  |
| Required Economics Courses |  |  |
| Grades in the following must average a minimum of 2.000: |  |  |
| 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 |
| MATH 1231 | Calculus for Business and Economics | 4 |

Economics Electives
Complete two economics electives with not more than one 8
below the 3000 level.

## Philosophy Requirements

Code Title Hours

Philosophy Required Courses

| PHIL 1115 | Introduction to Logic | 4 |
| :--- | :--- | :--- |
| PHIL 2325 | Ancient Philosophy and Political | 4 |
|  | Thought | 4 |

Advanced Philosophy Elective
Complete one of the following: 4

| PHIL 3343 | Existentialism |
| :--- | :--- |
| PHIL 3435 | Moral Philosophy |
| PHIL 3460 | Philosophy and Literature |
| PHIL 4390 | Cults and Sects |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4515 | Advanced Logic |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in |
| PHIL 4903 | Religious Studies |
| PHIL 4906 | Seminar in Religion |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious 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 two of the following that have not been used in 8
above requirements:

| PHIL 3435 | Moral Philosophy |
| :--- | :--- |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4550 | Philosophy of Economics |
| PHIL 5001 | Global Justice |


| PHIL 4992 | Directed Study |
| :--- | :--- |
| ECON 4992 | Directed Study |

## Major Credit Requirement

Complete 80 semester hours in the major.

## Program Requirement

128 total semester hours required

## Environmental Studies and Economics, BS

Through this combined major, successful undergraduates will develop an awareness of the scientific, cultural, political, and economic aspects of the world's environmental problems and potential 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Introduction to College |  |
| :--- | :--- |
| Code | Title |
| ECON 1000 | Economics at Northeastern |
| or ENVR 1000 | Marine and Environmental Sciences at |
|  | Northeastern |

## Economics Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Calculus |  |  |
| MATH 1231 | Calculus for Business and Economics | 4 |
| Computer Science |  | 4 |
| CS 1100 | Computer Science and Its Applications | 4 |
| Required Economics | Courses |  |
| A minimum |  |  |
| ECON 1115 of 2.000 is required: | 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 |

## Economics Electives

No more than one course may be at the introductory level (course number 1000-1999).

| Complete two of the following: | 7-8 |  |
| :--- | :--- | :--- |
| ECON 1290 | History of the Global Economy | Development Economics |
| ECON 1291 | International Food Economics and |  |
| ECON 3404 | Policy |  |
| ECON 3420 | Urban Economic Issues |  |
| ECON 3422 | Economics of Transportation |  |
| ECON 3424 | Law and Economics |  |
| ECON 3425 | Energy Economics |  |
| ECON 3440 | Public Finance |  |
| ECON 4635 | International Economics |  |
| PPUA 5260 | Ecological Economics |  |

Environmental Studies Requirements
Code Title Hours

Social Science Component

| PHIL 1180 | Environmental Ethics | 4 |
| :--- | :--- | :--- |
| POLS 1150 | American Government | 4 |
| and POLS 1151 | and Recitation for POLS 1150 |  |
| POLS 2395 | Environmental Politics and Policy | 4 |
| SOCL 1246 | Environment and Society | 4 |

Science Component
ENVR 1101 Environmental Science 4
ENVR 1112 Environmental Geology 4
or ENVR 1200 Dynamic Earth
ENVR 14454
ENVR 3300 Geographic Information Systems 5
and ENVR 3301 and Lab for ENVR 3300
GPA Requirement
Students are required to earn a GPA of 2.000 in either
PHIL 1180 or PHIL 3480 and in ENVR 1101.

## Enivronmental Science Elective

Complete one environmental science elective in consultation with the environmental studies head advisor.

## Integrative Requirements

Code Title Hours

Advanced Writing in the Disciplines

| ENGW 3308 | Advanced Writing in the Social <br> Sciences |
| :--- | :--- |
| Integrative Course | 4 |
| Note: Your integrative course and your capstone course |  |
| (below) must be from different departments. | 4 |
| Complete one of the following: | 4 |


| ECON 4692 | Senior Economics Seminar |
| :--- | :--- |
| ENVR 5210 | Environmental Planning |
| ENVR 5250 | Geology and Land-Use Planning |

## Capstone

Note: Your integrative course (above) and your capstone course must be from different departments.
ECON 4692 Senior Economics Seminar
or ENVR 4997 Senior Thesis
or ENVS 4997 Senior Thesis

| Experiential Learning Requirement <br> Code <br> Title |  |  | Hours |
| :--- | :---: | :---: | :---: |
| Complete one of the following: |  |  |  |

## Major Credit Requirement

Complete 84 semester hours in the major.

## Program Requirement

128 total semester hours required

## Economics, Minor

The minor in economics is flexible enough to be a complement to a student's major field of study. There are six courses needed to complete the minor. three courses in the areas of macro- and microeconomics and three electives that may be chosen to support many different majors.

## Minor Requirements

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

## Calculus 1

Code Title

Hours
If calculus is not required by your major, complete one of the following courses:

| MATH 1231 | Calculus for Business and Economics <br> (preferred) |
| :--- | :--- |
| MATH 1241 | Calculus 1 |
| MATH 1251 | Calculus and Differential Equations for <br> Biology 1 |
| MATH 1242 | Calculus 2 |
| MATH 1340 | Intensive Calculus for Engineers |
| MATH 1341 | Calculus 1 for Science and Engineering |
| MATH 1252 | Calculus and Differential Equations for <br> Biology 2 |

## Required Courses

Students in the macroeconomics track should complete Macroeconomic Theory (ECON 2315); students in the microeconomics track should complete Microeconomic Theory (ECON 2316):

| Code | Title | Hours |
| :--- | :--- | ---: |
| ECON 1115 | Principles of Macroeconomics | 4 |
| ECON 1116 | Principles of Microeconomics | 4 |
| ECON 2315 | Macroeconomic Theory | 4 |
| or ECON 2316 | Microeconomic Theory |  |

## Elective Courses

Code Title Hours

Complete three of the following courses with no more than

ECON 1200 to ECON 1990

| Intermediate |  |
| :---: | :---: |
| ECON 2990 to ECON 3499 |  |
| ECON 2560 | Applied Econometrics |
| ECON 3915 | Intermediate Selected Topics in Macroeconomics |
| ECON 3916 | Intermediate Selected Topics in Microeconomics |
| Advanced |  |
| ECON 3520 | History of Economic Thought |
| ECON 3990 | Elective |
| ECON 4600 to ECON 4699 |  |
| ECON 4915 | Advanced Selected Topics in Macroeconomics |
| ECON 4916 | Advanced Selected Topics in Microeconomics |
| ECON 4970 to ECON 4990 |  |
| ECON 4992 | Directed Study |

## GPA Requirement

2.000 GPA required in the minor

## English

Website (http://www.northeastern.edu/english)
Chair
Professor Elizabeth Maddock Dillon, PhD
4405 Lake Hall
617.373.4540
617.373 .2509 (fax)

## Undergraduate Program Director Professor Kathleen K. <br> Kelly, k.kelly@northeastern.edu

Linda P. Collins, Administrative Specialist, li.collins@northeastern.edu
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.

Students of English develop capacities for reading, analysis, and expression that are in great demand in the workplace and in graduate study, including the ability to interpret and evaluate a variety of texts, to evaluate and produce arguments, and to engage diverse audiences. The major and minors are particularly suitable for students preparing for graduate school or careers in any field that demands analytical ability and well-honed writing skills. For profiles of current students and recent alumni, see the English department (http://www.northeastern.edu/cssh/ english) website.

The English department at Northeastern engages students in the experiential liberal arts across four areas: critical literary studies; digital humanities; writing, rhetoric, and publication; and archival studies and histories of the book. The Department of English offers a major and three minors, as well as many combined majors.
one at the introductory level:
Introductory

Our minors offer concise engagements with several areas of English studies:

- English-introduces the materials and methods of the field as a whole
- Rhetoric-draws on courses in communication studies as well as English
- Writing-encourages students to develop expertise in creative, professional, and public writing, as well as rhetorical theory


## Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 31)."

## Preapproved Template Program in English

The Department of English offers a preapproved template program that may be paired with another preapproved template program to create a combined major.

Students may request admission to such a combined major via the appropriate form, which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on preapproved template programs, see your advisor.

## 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. 695)
- English and Communication Studies (p. 127)
- English and Cultural Anthropology (p. 703)
- English and Graphic and Information Design (p. 89)
- English and Philosophy (p. 708)
- English and Theatre (p. 212)
- History and English (p. 712)
- Journalism and English (p. 164)
- Linguistics and English (p. 512)
- Media and Screen Studies and English (p. 134)


## Bachelor of Science (BS)

- Architecture and English (p. 55)
- Biology and English (p. 488)
- Computer Science and English (p. 314)


## Minor

- English (p. 727)
- Rhetoric (p. 727)
- Writing (p. 728)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 944)

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## English Major Requirements




| ENGL 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| :---: | :--- |
| ENGL 3685 | Modern and Contemporary Jewish <br> Literature |
| or JWSS 3685 | Modern and Contemporary Jewish Literature |

## 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:

| LING 1150 | Introduction to Language and <br> 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

## Experiential Learning Course Work

| ENGL 2690 | Boston in Literature | 4 |
| :--- | :--- | :---: |
| ENGL 2740 | Writing and Community Engagement | 4 |
| ENGL 3340 | Technologies of Text | 4 |
| ENGL 3370 | Writing Cultures | 4 |
| ENGL 3375 | Writing Boston | 4 |
| ENGL 3381 | The Practice and Theory of Teaching | 4 |
| Writing | 4 |  |
| ENGL 3382 | Publishing in the 21 st Century | 4 |


| Dialogues of Civilization |  |  |
| :---: | :---: | :---: |
| Complete o but not limi study-abroad | ues of Civilization experience, including se offered by the department. (Other ms may not be used.) |  |
| ENGL 2600 | Irish Literary Culture (Abroad) | 4 |
| ENGL 2610 | Contemporary Israeli Literature and Art (Abroad) | 4 |
| ENGL 2620 | What Is Nature? (Abroad) | 4 |
| ENGL 3487 | Film and Text (Abroad) | 4 |

## English Major Credit Requirement

Complete 56 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 |
| ENGL 1000 | 1 | ENGL 1700 | 4 | Vacation | 0 | Vacation | 0 |
| ENGW 1111 | 4 | $\begin{aligned} & \text { ENGL } 1410 \\ & \text { or } 1160 \end{aligned}$ | 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 |  | Literary period course elective | 4 |  |  |  |  |
|  |  | Writing and experiential education elective | 4 |  |  |  |  |
|  | 12 |  | 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 |
| :--- | :---: | :---: | ---: |
| Co-op | Literary <br> period <br> elective | English | 4 |
| elective | 4 Elective | 4 |  |
| Theories and <br> methods <br> elective | 4 |  |  |
| Elective <br> English <br> elective | 4 | 8 |  |
| 0 | 16 |  |  |


| Year 5 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| Co-op | 0 Capstone | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
|  | 0 | 16 |

Total Hours: 126

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Computer Science Courses

Code Title Hours

Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses.

| CS 1800 | Discrete Structures |  |
| :--- | :--- | :---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 | Fundamentals of Computer Science 2 | 5 |
| and CS 2511 | and Lab for CS 2510 |  |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |

Computing Focus

Students are required to complete one of the following foci
(two courses total):
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 4100 | Data Collection, Integration, and <br> Analysis |
| DS 4200 | Information Presentation and <br> Visualization |

## Presentation Requirement

THTR 1170 The Eloquent Presenter 1

Computer Science/Information Science Elective Course
IS $2000 \quad$ Principles of Information Science
or CS 4500
Software Development

## Computer Science Elective Courses

With advisor 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, IS, or DS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## English Requirements

Code Title Hours

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

Foundational Courses
ENGL 1400 Introduction to Literary Studies 4
ENGL 1160 Introduction to Rhetoric 4
or ENGL 1410 Introduction to Writing Studies

## Diversity

Complete one of the following courses. This course may also 4
be used to fulfill an additional English requirement below:

| ENGL 2150 | Literature and Digital Diversity |
| :--- | :--- |
| ENGL 2296 | Early African-American Literature |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2760 | Writing in Global Contexts |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in <br> Literature |


| 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 Literature to 1500 |  |
| ENGL 2240 | 17th-Century British Literature |  |
| ENGL 2296 | Early African-American Literature |  |
| ENGL 3618 | Milton |  |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity |  |
| ENGL 4000 | Topics in Early Literatures |  |
| ENGL 4010 | Topics in Shakespeare |  |
| ENGL 4020 | Topics in 17th- and 18th-Century Literatures |  |
| Nineteenth-, Twentieth-, and Twenty-First-Century Literature |  |  |
| Complete one of the fo | following: | 4 |
| ENGL 2260 | Romantic Poetry |  |
| ENGL 2330 | The American Renaissance |  |
| ENGL 2340 | American Realism |  |
| ENGL 3619 | Emerson and Thoreau |  |
| ENGL 3720 | 19th-Century Major Figure |  |
| ENGL 4040 | Topics in 19th-Century Literatures |  |
| ENGL 2301 | The Graphic Novel |  |
| ENGL 2410 | Contemporary American Literature |  |
| 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 21 st-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 Writing Studies |  |
| 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 4100 | Topics in Literary Criticism |  |
| ENGL 4400 | Opening the Archive |  |
| 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 1120 | Trouble in Utopia |  |
| ENGL 1130 | Animals, Objects, Humans |  |
| ENGL 1450 | Reading and Writing in the Digital Age |  |
| ENGL 1500 | British Literature to 1800 |  |
| ENGL 1502 | American Literature to 1865 |  |
| ENGL 1503 | American Literature 1865 to Present |  |
| ENGL 2150 | Literature and Digital Diversity |  |
| ENGL 2370 | The Modern Short Story |  |
| ENGL 2380 | The Modern Novel |  |
| ENGL 2400 | Modern Poetry |  |
| ENGL 2420 | Contemporary Poetry |  |
| ENGL 2430 | Contemporary Fiction |  |
| ENGL 2450 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2510 | Horror Fiction |  |
| ENGL 2520 | Science Fiction |  |
| ENGL 2600 | Irish Literary Culture (Abroad) |  |
| ENGL 2620 | What Is Nature? (Abroad) |  |
| ENGL 2690 | Boston in Literature |  |
| ENGL 3427 | The Literature of Science |  |
| ENGL 3487 | Film and Text (Abroad) |  |
| ENGL 3582 | Children's Literature |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| ENGL 4070 | Topics in Genre |  |
| Writing |  |  |
| Complete one of the following: |  | 4 |
| ENGL 2700 | Creative Writing |  |
| ENGL 2710 | Style and Editing |  |
| ENGL 2730 | Digital Writing |  |
| 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 | Topics in Writing |  |
| ENGL 3382 | Publishing in the 21 st Century |  |
| ENGL 3384 | The Writer's Marketplace |  |
| Capstone |  |  |


| ENGL 4710 | Capstone Seminar |
| :---: | :--- |
| or ENGL 4720 | Capstone Project |

## English Electives

Complete two additional ENGL electives.

## Integrative Course Requirement

This course will not be allowed to double-count in the Theories and Methods section above.

| Code | Title |
| :--- | :--- |
| ENGL 3340 | Technologies of Text |

## Supporting Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | 4 |  |
| SOCL 4528 | Computers and Society |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 1280 | The 21 st-Century Workplace |  |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |  |
| PHIL 1145 | Technology and Human Values <br> IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| Bostonography: The City through Data, |  |  |

## Computer Science Writing Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  |  |
| ENGW 1111 <br> or ENGW 1102 | First-Year Writing | First-Year Writing for Multilingual Writers |

## Advanced Writing in the Disciplines

Complete one course from the following:

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :--- | :--- |
| ENGW 3309 | Advanced Writing in the Humanities |
| ENGW 3310 | Advanced Writing in Literature |
| ENGW 3315 | Interdisciplinary Advanced Writing in <br> the Disciplines |

## Required General Electives

| Code | Title |
| :--- | ---: | Hours

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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.

## Program Requirement

132 total semester hours required

## Plan of Study

Sample Patterns:

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

Year 1


Year 2
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { CS } 3000 & \begin{array}{c}\text { 4 Strand } \\ \text { elective 1 }\end{array} & \begin{array}{c}4 \\ \text { ENGW 3302, } \\ 3309,3310, \\ \text { or 3315 }\end{array} & 4 \text { Co-op }\end{array}\right]$

Year 3


Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :--- | :---: | ---: |
| Co-op | CS 4500 | 4 Elective | 4 |
|  | (or English <br> Category or <br>  <br>  <br>  <br>  Elective) |  |  |
|  |  |  |  |


| ENGL 4710 <br> or 4720 | 4 Elective | 4 |
| :--- | :---: | :---: |
| CS elective | 4 |  |
| Elective | 4 | 8 |
| 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { ENGL } 1160 \\ & \text { or } 1410 \end{aligned}$ | 4 |  |  |  |  |
| and CS 2501 |  |  |  |  |  |  |  |
| ENGW 1111 |  | 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 | 4 CS 1210 | 1 |  |  |
| English <br> literary <br> period 2 | 4 <br> IS 2000 <br> (or English <br> Category or <br> Elective) | 4 |  |  |
| English <br> category or <br> elective | 4 English <br> category or <br> elective | 4 |  |  |
|  | 16 | ENGL 3340 | 4 | 0 |


| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | Strand elective 1 |  | $\begin{aligned} & \text { ENGW 3302, } \\ & 3309,3310 \text {, } \\ & \text { or } 3315 \end{aligned}$ | 4 | Co-op |  |
|  |  | English category or elective | 4 | Elective | 4 |  |  |
|  |  | English category or elective | 4 |  |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |


| Year 4 <br> Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | Strand <br> elective 2 | 4 Elective | 4 Co-op |  |
|  | Computing <br> and social <br> issues | 4 Elective | 4 |  |
|  | Elective | 4 |  |  |


| Elective | 4 |  |  |
| ---: | ---: | :--- | :--- |
| 0 | 16 | 8 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :--- | ---: |
| Co-op | CS 4500 | 4 |
|  | (or English <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Elective) |  |


|  | ENGL 4710 <br> or 4720 | 4 |
| :--- | ---: | ---: |
| CS 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## English Requirements

Code Title Hours

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 |
| :--- | :--- | ---: |
| Foundational Courses |  |  |
| ENGL 1400 | Introduction to Literary Studies | 4 |
| ENGL 1160 | Introduction to Rhetoric | 4 |
| or ENGL 1410 | Introduction to Writing Studies |  |


| Complete one of the be used to fulfill an a | following courses. This course may also dditional English requirement below: | 4 |
| :---: | :---: | :---: |
| ENGL 2150 | Literature and Digital Diversity |  |
| ENGL 2296 | Early African-American Literature |  |
| ENGL 2450 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2760 | Writing in Global Contexts |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| 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 Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following:
ENGL 2260 Romantic Poetry

ENGL 2330 The American Renaissance
ENGL 2340 American Realism
ENGL 3619 Emerson and Thoreau
ENGL 3720 19th-Century Major Figure
ENGL 4040 Topics in 19th-Century Literatures
ENGL 2301 The Graphic Novel
ENGL 2410 Contemporary American Literature
ENGL 2440 The Modern Bestseller
ENGL $2600 \quad$ Irish Literary Culture (Abroad)
ENGL 2610 Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685 Modern and Contemporary Jewish Literature

ENGL 3730 20th- and 21 st-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 Writing Studies |


| 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 <br> Writing |
| ENGL 3700 | Narrative Medicine |
| ENGL 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and |
| LING 2350 | Linguistics |
| LING 3450 | Syntax |
| LING 3452 | Semantics Analysis |
| LING 3454 | History of English |
| LING 3456 | Language and Gender |
| LING 3458 | Topics in Linguistics |

Comparative Literature
Complete one of the following: 4
ENGL $1120 \quad$ Trouble in Utopia
ENGL 1130 Animals, Objects, Humans
ENGL 1450 Reading and Writing in the Digital Age
ENGL 1500 British Literature to 1800
ENGL 1502 American Literature to 1865
ENGL 1503 American Literature 1865 to Present
ENGL 2150 Literature and Digital Diversity
ENGL 2370 The Modern Short Story
ENGL $2380 \quad$ The Modern Novel
ENGL 2400 Modern Poetry
ENGL 2420 Contemporary Poetry
ENGL 2430 Contemporary Fiction
ENGL 2450 Postcolonial Literature
ENGL 2451 Postcolonial Women Writers
ENGL 2455 American Women Writers
ENGL $2460 \quad$ Multiethnic Literatures of the U.S.
ENGL 2470 Asian-American Literature
ENGL 2510 Horror Fiction
ENGL 2520 Science Fiction
ENGL $2600 \quad$ Irish Literary Culture (Abroad)
ENGL $2620 \quad$ What Is Nature? (Abroad)
ENGL 2690 Boston in Literature
ENGL 3427 The Literature of Science
ENGL 3487 Film and Text (Abroad)
ENGL 3582 Children's Literature
ENGL 3663 The African-American Novel
ENGL 3676 Representing Gender and Sexuality in Literature
ENGL 4070 Topics in Genre

## Writing

Complete one of the following: 4
ENGL $2700 \quad$ Creative Writing
ENGL 2710 Style and Editing
ENGL 2730 Digital Writing

| 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 | Topics in Writing |  |
| ENGL 3382 | Publishing in the 21 st Century |  |
| ENGL 3384 | The Writer's Marketplace |  |
| Capstone |  |  |
| $\begin{aligned} & \text { ENGL } 4710 \\ & \text { or ENGL } 4720 \end{aligned}$ | Capstone Seminar Capstone Project | 4 |
| English Electives |  |  |
| Complete two add | nal ENGL electives. | 8 |

## Communication Studies Requirements <br> Code Title Hours

Communication Studies Common Requirements
COMM 1101 Introduction to Communication Studies 4
COMM $1112 \quad$ Public Speaking 4
or COMM 2301
Communication Research Methods
Foundation Course
Complete one of the following:

| COMM 1210 | Persuasion and Rhetoric |
| :--- | :--- |
| COMM 1231 | Principles of Organizational <br> Communication |
| COMM 1225 | Communication Theory |
| COMM 1255 | Communication in a Digital Age |
| Cluster Course |  |
| 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 |
| Criting-Intensive Courses |  |
| 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 3330 | Argumentation Theory |
| COMM 3400 | Rhetoric of Science |
| COMM 3414 | Great Speakers and Speeches 2, 1930-  <br> COMM 3445 Present <br> COMM 3501 Free Speech: Law and Practice <br> COMM 3530 Communication and Sexualities |


| COMM 3532 | Theories of Conflict and Negotiation |
| :--- | :--- |
| COMM 3610 | Communication, Politics, and Social <br> Change |
| COMM 4535 | Nonverbal Social Interaction |
| COMM 4605 | Youth and Communication Technology |
| COMM 4631 | Crisis Communication and Image <br> Management |
| Communication Studies Electives |  |
| Complete three additional COMM courses. |  |

## Integrative Requirement

Code Title Hours

Integrative English Course
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.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## English Requirements

## Code Title

## Hours

## 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 $1000 \quad$ English at Northeastern 1

## Foundational Courses

| ENGL 1400 | Introduction to Literary Studies | 4 |
| :--- | :--- | :--- |
| ENGL 1160 <br> or ENGL 1410 | Introduction to Rhetoric <br> Introduction to Writing Studies |  |
| 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 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2760 | Writing in Global Contexts <br> ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in <br> Literature |  |
| ENGL 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |  |

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
Pre-Nineteenth-Century Literature

| Complete one of the following: |  |
| :--- | :--- |
| ENGL 1600 | Introduction to Shakespeare |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | l7th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| 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:

| ENGL 2260 | Romantic Poetry |
| :--- | :--- |
| ENGL 2330 | The American Renaissance |
| ENGL 2340 | American Realism |
| ENGL 3619 | Emerson and Thoreau |
| ENGL 3720 | 19th-Century Major Figure |


| ENGL 4040 | Topics in 19th-Century Literatures |
| :--- | :--- |
| ENGL 2301 | The Graphic Novel |
| ENGL 2410 | Contemporary American Literature |
| ENGL 2440 | The Modern Bestseller |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2610 | Contemporary Israeli Literature and Art <br> (Abroad) |
| ENGL/JWSS 3685 Modern and Contemporary Jewish |  |
| ENGL 3730 | Literature |
| 20th- and 21 st-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 Writing Studies |
| 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 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and |
| LING 2350 | Linguistics |
| Linguistic Analysis 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 1120 | Trouble in Utopia |
| :--- | :--- |
| ENGL 1130 | Animals, Objects, Humans |
| ENGL 1450 | Reading and Writing in the Digital Age |
| ENGL 1500 | British Literature to 1800 |
| ENGL 1502 | American Literature to 1865 |
| ENGL 1503 | American Literature 1865 to Present |
| ENGL 2150 | Literature and Digital Diversity |
| ENGL 2370 | The Modern Short Story |
| ENGL 2380 | The Modern Novel |
| ENGL 2400 | Modern Poetry |
| ENGL 2420 | Contemporary Poetry |
| ENGL 2430 | Contemporary Fiction |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2510 | Horror Fiction |
| ENGL 2520 | Science Fiction |


| ENGL 2600 | Irish Literary Culture (Abroad) |  |
| :---: | :---: | :---: |
| ENGL 2620 | What Is Nature? (Abroad) |  |
| ENGL 2690 | Boston in Literature |  |
| ENGL 3427 | The Literature of Science |  |
| ENGL 3487 | Film and Text (Abroad) |  |
| ENGL 3582 | Children's Literature |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| ENGL 4070 | Topics in Genre |  |
| Writing |  |  |
| Complete one of th | following: | 4 |
| ENGL 2700 | Creative Writing |  |
| ENGL 2710 | Style and Editing |  |
| ENGL 2730 | Digital Writing |  |
| 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 | Topics in Writing |  |
| ENGL 3382 | Publishing in the 21 st Century |  |
| ENGL 3384 | The Writer's Marketplace |  |
| Capstone |  |  |
| $\begin{aligned} & \text { ENGL } 4710 \\ & \text { or ENGL } 4720 \end{aligned}$ | Capstone Seminar Capstone Project | 4 |
| English Electives |  |  |
| Complete two add | nal ENGL electives. | 8 |


| Cultural Anthropology Requirements <br> Code <br> Foundation Courses | Hours |  |
| :--- | :--- | ---: |
| 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:

| ANTH 4350 | Ethnography of Southeast Asia |
| :--- | :--- |
| ANTH 4500 | Latin American Society and <br> 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

## 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.

## 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
Complete one of the following: 4
ENGL $2450 \quad$ Postcolonial Literature
ENGL 2470 Asian-American Literature
Cultural Anthropology Integrative Courses
Complete one of the following:

| ANTH 2300 | Reading Culture through Ethnography |
| :--- | :--- |
| ANTH 3421 | Foundations of Anthropological Theory |

## Cultural Anthropology Major Grade Requirement <br> A GPA of 2.000 for major courses is required. <br> 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## English Requirements

Code Title

## Hours

## 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 |
| :--- | :--- | ---: |
| Foundational Courses |  |  |
| ENGL 1400 | Introduction to Literary Studies | 4 |
| ENGL 1160 | Introduction to Rhetoric |  |
| or ENGL 1410 | Introduction to Writing Studies |  |
| 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 2450 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. <br> ENGL 2470Asian-American Literature |  |
| ENGL 2760 | Writing in Global Contexts |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in <br> Literature |  |
| ENGL 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |  |

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
Pre-Nineteenth-Century Literature

| Complete one of the following: |  |
| :--- | :--- |
| ENGL 1600 | Introduction to Shakespeare |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | l7th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| 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:

| ENGL 2260 | Romantic Poetry |
| :--- | :--- |
| ENGL 2330 | The American Renaissance |
| ENGL 2340 | American Realism |
| ENGL 3619 | Emerson and Thoreau |
| ENGL 3720 | 19th-Century Major Figure |


| ENGL 4040 | Topics in 19th-Century Literatures |
| :--- | :--- |
| ENGL 2301 | The Graphic Novel |
| ENGL 2410 | Contemporary American Literature |
| ENGL 2440 | The Modern Bestseller |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2610 | Contemporary Israeli Literature and Art <br> (Abroad) |
| ENGL/JWSS 3685 Modern and Contemporary Jewish |  |
| Literature |  |

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 Writing Studies |
| 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 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and |
| LING 2350 | Linguistics |
| Linguistic Analysis 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 1120 | Trouble in Utopia |
| :--- | :--- |
| ENGL 1130 | Animals, Objects, Humans |
| ENGL 1450 | Reading and Writing in the Digital Age |
| ENGL 1500 | British Literature to 1800 |
| ENGL 1502 | American Literature to 1865 |
| ENGL 1503 | American Literature 1865 to Present |
| ENGL 2150 | Literature and Digital Diversity |
| ENGL 2370 | The Modern Short Story |
| ENGL 2380 | The Modern Novel |
| ENGL 2400 | Modern Poetry |
| ENGL 2420 | Contemporary Poetry |
| ENGL 2430 | Contemporary Fiction |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2510 | Horror Fiction |
| ENGL 2520 | Science Fiction |


| ENGL 2600 | Irish Literary Culture (Abroad) |  |
| :---: | :---: | :---: |
| ENGL 2620 | What Is Nature? (Abroad) |  |
| ENGL 2690 | Boston in Literature |  |
| ENGL 3427 | The Literature of Science |  |
| ENGL 3487 | Film and Text (Abroad) |  |
| ENGL 3582 | Children's Literature |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| ENGL 4070 | Topics in Genre |  |
| Writing |  |  |
| Complete one of the following: |  | 4 |
| ENGL 2700 | Creative Writing |  |
| ENGL 2710 | Style and Editing |  |
| ENGL 2730 | Digital Writing |  |
| 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 | Topics in Writing |  |
| ENGL 3382 | Publishing in the 21 st Century |  |
| ENGL 3384 | The Writer's Marketplace |  |
| Capstone |  |  |
| $\begin{aligned} & \text { ENGL } 4710 \\ & \text { or ENGL } 4720 \end{aligned}$ | Capstone Seminar Capstone Project | 4 |
| English Electives |  |  |
| Complete two addi | nal ENGL electives. | 8 |

Graphic and Information Design Requirements
Code Title Hours

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 | 2D Fundamentals: Surface and Drawing <br> (with optional ARTF 1123) | 4 |
| :--- | :--- | :--- |

4D Fundamentals: Sequence and 4
Drawing (with optional ARTF 2221)

| 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 | 4 |
|  | ARTG 2251) | 4 |
| ARTG 2252 | Graphic Design 1 | 4 |
| ARTG 3350 | Typography 2 | 4 |

Degree Project

ARTG 4550
Design Degree Project 1
4
Art and Design Electives
Complete one of the following: 4

| ARTD 2360 | Photo Basics (with optional <br> ARTD 2361) |
| :--- | :--- |
| ARTD 2380 | Video Basics (with optional ARTD 2381) |
| ARTG 2260 | Programming Basics |
| ARTF 1120 | Observational Drawing |
| ARTF 1121 | Conceptual Drawing |
| ARTF 1124 | 3D Fundamentals: Structure and |
|  | Drawing (with optional ARTF 1125) |
| ARTF 2223 | 5D Fundamentals: Experience and |
|  | Drawing (with optional ARTF 2224) |
| ARTG 2400 | Interaction Design 1: Responsive (with |
|  | optional ARTG 2401) |
| ARTG 3351 | Time-Based Design |
| ARTG 3450 | Graphic Design 2 |
| ARTG 3460 | Identity and Brand Design |
| ARTG 4552 | Information Design 2 |
| ARTG 4553 | Environmental Information Design |
| ARTG 4554 | Typography 3 |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative English Course | 4 |  |
| Complete one of the following: |  |  |
| 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 <br> Sample Five Years, Two Co-ops (Summer 2/Fall)

## Year 1

| Fall H | Hours | Spring H | Hours | Summer Hours <br> 1 | Summer Hours $2$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL 1000 <br> or <br> ARTF <br> 1000 | $0 \quad 1$ | ENGL 1160 <br> or $1410$ | $0 \quad 4$ | Vacation | Vacation |
| ENGL 1 / | 4 | ARTG 1: | 4 |  |  |
| ENGL 1450 |  | ARTG 2250 <br> (With <br> optional <br> ARTF <br> 2251) | $0 \quad 4$ |  |  |
| ARTF 11 <br> (with optional ARTF <br> 2221) |  | Integrat course | 4 |  |  |
| Elective | 4 |  |  |  |  |
|  | 17 |  | 16 | 0 | 0 |

## Year 2

| Fall Hour | Hours | Spring Hour | Hours | Summer $1$ | Hours | Summer $2$ | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARTF 2220 <br> (with <br> optional <br> ARTF <br> 2221) | - 4 | ARTH 2210 | 04 | Vacation |  | Co-op |  |
| ARTG 2: | 4 | ARTG 3: | 4 |  |  |  |  |
| ENGL 1700 |  | ENGL <br> 19th- <br> century requirement | 4 |  |  |  |  |
| ENGL pre-19tr century requiren |  | ENGL <br> theories <br>  <br> method: <br> requiren | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

## Year 3



## Year 4



## Year 5

| Fall | urs | Spring | Hours |  |
| :---: | :---: | :---: | :---: | :---: |
| ARTG 4550 |  | Integrat course |  |  |
| ENGL 4: |  | English writing requiren |  | 4 |
| Elective | 4 | Elective | 4 | 4 |
| ENGL elective | 4 | Elective |  | 4 |
|  | 16 |  | 12 | 2 |

[^19]
## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## English Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 |
| Foundational Courses |  |  |
| ENGL 1400 | Introduction to Literary Studies | 4 |
| ENGL 1160 or ENGL 1410 | Introduction to Rhetoric Introduction to Writing Studies | 4 |
| Diversity |  |  |
| Complete one of | following courses. This course may also | 4 |

be used to fulfill an additional English requirement below:

| ENGL 2150 | Literature and Digital Diversity |
| :--- | :--- |
| ENGL 2296 | Early African-American Literature |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2760 | Writing in Global Contexts |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in <br> Literature |


| 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 Literature to 1500 |  |
| ENGL 2240 | 17th-Century British Literature |  |
| ENGL 2296 | Early African-American Literature |  |
| ENGL 3618 | Milton |  |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity |  |
| ENGL 4000 | Topics in Early Literatures |  |
| ENGL 4010 | Topics in Shakespeare |  |
| ENGL 4020 | Topics in 17th- and 18th-Century Literatures |  |
| Nineteenth-, Twentieth-, and Twenty-First-Century Literature |  |  |
| Complete one of the | llowing: | 4 |
| ENGL 2260 | Romantic Poetry |  |
| ENGL 2330 | The American Renaissance |  |
| ENGL 2340 | American Realism |  |
| ENGL 3619 | Emerson and Thoreau |  |
| ENGL 3720 | 19th-Century Major Figure |  |
| ENGL 4040 | Topics in 19th-Century Literatures |  |
| ENGL 2301 | The Graphic Novel |  |
| ENGL 2410 | Contemporary American Literature |  |
| 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 21 st-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 Writing Studies |  |
| 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 4100 | Topics in Literary Criticism |  |
| ENGL 4400 | Opening the Archive |  |
| ENGL 4410 | Research in Rhetoric and Writing |  |
| LING 1150 | Introduction to Language and Linguistics |  |
| LING 2350 | Linguistic Analysis |  |
| LING 3450 | Syntax |  |



| $\begin{aligned} & \text { ENGL } 4710 \\ & \text { or ENGL } 4720 \end{aligned}$ | Capstone Seminar Capstone Project | 4 |
| :---: | :---: | :---: |
| English Electives |  |  |
| Complete two additional ENGL electives. |  | 8 |
| Philosophy Requirements |  |  |
| Code | Title | Hours |
| Philosophy Required Courses |  |  |
| PHIL 1115 or PHIL 1215 | 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 three of the following with at least one at the 4000 or 5000 level: |  | 12 |
| PHIL 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4550 | Philosophy of Economics |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Philosophy Electives |  |  |
| Complete three ad department. | ional electives from the philosophy | 12 |

Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| PHIL 3435 | Moral Philosophy | 4 |
| ENGL 3619 | Emerson and Thoreau | 4 |
| or ENGL 4100 | Topics in Literary Criticism |  |

English and Philosophy Combined-Major Credit Requirement
Complete 88 semester hours in the major.

## Program Requirement

128 total semester hours required

## English and Theatre, BA

The Department of English and the Department of Theatre 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 diverse English and American literatures. Students develop the capacity for interpreting a variety of texts through performance and writing to engage diverse 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## English Requirements

Code Title Hours

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 $1000 \quad$ English at Northeastern 1

Foundational Courses
ENGL 1400 Introduction to Literary Studies 4
ENGL 1160 Introduction to Rhetoric 4
or ENGL 1410 Introduction to Writing Studies
Diversity
Complete one of the following courses. This course may also 4

| be used to fulfill an additional English requirement below: |  |
| :--- | :--- |
| ENGL 2150 | Literature and Digital Diversity |
| ENGL 2296 | Early African-American Literature |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2760 | Writing in Global Contexts |
| ENGL 3663 Representing Gender and Sexuality in |  |
| ENGL 3676 | Literature |
| 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 Literature to 1500 |  |
| ENGL 2240 | 17th-Century British Literature |  |
| ENGL 2296 | Early African-American Literature |  |
| ENGL 3618 | Milton |  |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity |  |
| ENGL 4000 | Topics in Early Literatures |  |
| ENGL 4010 | Topics in Shakespeare |  |
| ENGL 4020 | Topics in 17th- and 18th-Century Literatures |  |
| Nineteenth-, Twentieth-, and Twenty-First-Century Literature |  |  |
| Complete one of the f | following: | 4 |
| ENGL 2260 | Romantic Poetry |  |
| ENGL 2330 | The American Renaissance |  |
| ENGL 2340 | American Realism |  |
| ENGL 3619 | Emerson and Thoreau |  |
| ENGL 3720 | 19th-Century Major Figure |  |
| ENGL 4040 | Topics in 19th-Century Literatures |  |
| ENGL 2301 | The Graphic Novel |  |
| ENGL 2410 | Contemporary American Literature |  |
| 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 21 st-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 Writing Studies |  |
| 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 4100 | Topics in Literary Criticism |  |
| ENGL 4400 | Opening the Archive |  |
| 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 1120
ENGL 1130
ENGL 1450 Reading and Writing in the Digital Age
ENGL 1500 British Literature to 1800
ENGL 1502 American Literature to 1865
ENGL 1503 American Literature 1865 to Present
ENGL $2150 \quad$ Literature and Digital Diversity
ENGL 2370 The Modern Short Story
ENGL 2380 The Modern Novel
ENGL 2400 Modern Poetry
ENGL 2420 Contemporary Poetry
ENGL 2430 Contemporary Fiction
ENGL 2450 Postcolonial Literature
ENGL 2451 Postcolonial Women Writers
ENGL 2455 American Women Writers
ENGL 2460 Multiethnic Literatures of the U.S.
ENGL 2470 Asian-American Literature
ENGL 2510 Horror Fiction
ENGL 2520 Science Fiction
ENGL 2600 Irish Literary Culture (Abroad)
ENGL 2620 What Is Nature? (Abroad)
ENGL $2690 \quad$ Boston in Literature
ENGL 3427 The Literature of Science
ENGL $3487 \quad$ Film and Text (Abroad)
ENGL 3582 Children's Literature
ENGL 3663 The African-American Novel
ENGL 3676 Representing Gender and Sexuality in Literature

ENGL $4070 \quad$ Topics in Genre
Writing
Complete one of the following: 4
ENGL $2700 \quad$ Creative Writing
ENGL 2710 Style and Editing
ENGL 2730 Digital Writing
ENGL $2740 \quad$ Writing and Community Engagement
$\begin{array}{ll}\text { ENGL } 2760 & \text { Writing in Global Contexts } \\ \text { ENGL } 2770 & \text { Writing to Heal }\end{array}$
ENGL 2780 Visual Writing: Writing Visuals
ENGL $2850 \quad$ Writing for Social Media: Theory and Practice
ENGL 3375 Writing Boston
ENGL 3376 Creative Nonfiction
ENGL 3377 Poetry Workshop
ENGL $3378 \quad$ Fiction Workshop
ENGL 3380 Topics in Writing
ENGL 3382 Publishing in the 21st Century
ENGL 3384 The Writer's Marketplace

## Capstone

ENGL $4710 \quad$ 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 |
| :---: | :---: | :---: |
| Foundational Stages |  |  |
| 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 2300 | Classics of Global Theatre |  |
| THTR 2315 | Rebels of Modern Drama |  |
| THTR 2320 | America Onstage: Dramatizing the Dream |  |
| 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 |
| Intermedate 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-Playing Shakespeare |  |
| THTR 3550 | Directing for the Stage |  |
| THTR 3570 | Musical Theatre Performance |  |

## Integrative Requirements

Courses used in the integrative requirements cannot double-count in other areas of the major.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative Courses |  | 4 |
| ENGL 1600 | Introduction to Shakespeare | 4 |
| THTR 2315 | Rebels of Modern Drama | 4 |
| or THTR 2320 | America Onstage: Dramatizing the Dream |  |

## English and Theatre Major Credit Requirement

90 semester hours required in the major

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
History Requirements

| Code <br> History Colloquium | Title | Hours |
| :--- | :--- | :---: |
| HIST 1000 | History at Northeastern | 1 |
| HIST 1200 | Historical Research and Writing | 1 |
| HIST 1201 | First-Year Seminar | 4 |
| Introductory Level |  | 4 |

History Seminar and Historical Writing

| HIST 2301 | The History Seminar | 4 |
| :--- | :--- | :--- |
| HIST 2302 | Historical Writing | 1 |

Pre-1800 History Elective
Complete one of the following:

| HIST 1218 | Pirates, Planters, and Patriots: Making <br> the Americas, 1492-1804 |
| :--- | :--- |
| HIST 1252 | Japanese Literature and Culture |
| HIST 1270 | Ancient Greece |

## Advanced History

Complete one history course at the 3000 level or above.

## Capstone

## 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.

## English Requirements

Code Title Hours

## 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 $1000 \quad$ English at Northeastern | 1 |


| Foundational Courses |  | 4 |
| :--- | :--- | ---: |
| ENGL 1400 | Introduction to Literary Studies |  |
| ENGL 1160 <br> or ENGL 1410 | Introduction to Rhetoric <br> Introduction to Writing Studies |  |
| Diversity | 4 |  |
| Complete one of the following courses. This course may also |  |  |
| be used to fulfill an additional English requirement below: |  |  |$\quad 4$

Complete one of the following: 4

| ENGL 1600 | Introduction to Shakespeare |
| :--- | :--- |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| 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: |
| ENGL 2260 |
| RNGL 2330 |


| ENGL 2340 | American Realism |
| :---: | :---: |
| ENGL 3619 | Emerson and Thoreau |
| ENGL 3720 | 19th-Century Major Figure |
| ENGL 4040 | Topics in 19th-Century Literatures |
| ENGL 2301 | The Graphic Novel |
| ENGL 2410 | Contemporary American Literature |
| 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 21 st-Century Major Figure |
| Theories and Methods |  |
| Complete one of the following: |  |
| ENGL 1140 | Grammar. The Architecture of English |
| ENGL 1160 | Introduction to Rhetoric |
| ENGL 1410 | Introduction to Writing Studies |
| 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 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| 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 1120 | Trouble in Utopia |
| :--- | :--- |
| ENGL 1130 | Animals, Objects, Humans |
| ENGL 1450 | Reading and Writing in the Digital Age |
| ENGL 1500 | British Literature to 1800 |
| ENGL 1502 | American Literature to 1865 |
| ENGL 1503 | American Literature 1865 to Present |
| ENGL 2150 | Literature and Digital Diversity |
| ENGL 2370 | The Modern Short Story |
| ENGL 2380 | The Modern Novel |
| ENGL 2400 | Modern Poetry |
| ENGL 2420 | Contemporary Poetry |
| ENGL 2430 | Contemporary Fiction |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |



| 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and
Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

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 <br> Code <br> Title | Hours |
| :--- | :--- | ---: |
| Journalism Introductory Course |  |$\quad 4$

## or JRNL 4650 Ethics and Issues in Journalism

Journalism Electives
Take three JRNL courses

## English Requirements

Code Title Hours

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

Foundational Courses
ENGL 1400 Introduction to Literary Studies 4
ENGL 1160 Introduction to Rhetoric 4
or ENGL 1410 Introduction to Writing Studies
Diversity
Complete one of the following courses. This course may also 4
be used to fulfill an additional English requirement below:

| ENGL 2150 | Literature and Digital Diversity |
| :--- | :--- |
| ENGL 2296 | Early African-American Literature |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2760 | Writing in Global Contexts |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in <br> Literature |
| ENGL 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature

## Pre-Nineteenth-Century Literature

Complete one of the following:

| ENGL 1600 | Introduction to Shakespeare |
| :--- | :--- |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following:
ENGL 2260 Romantic Poetry
ENGL 2330 The American Renaissance
ENGL 2340 American Realism
ENGL 3619 Emerson and Thoreau
ENGL 3720 19th-Century Major Figure

| ENGL 4040 | Topics in 19th-Century Literatures |
| :--- | :--- |
| ENGL 2301 | The Graphic Novel |
| ENGL 2410 | Contemporary American Literature |
| ENGL 2440 | The Modern Bestseller |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2610 | Contemporary Israeli Literature and Art <br> (Abroad) |
| ENGL/JWSS 3685 | Modern and Contemporary Jewish <br> Literature |
| ENGL 3730 | 20th- and 21 st-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 Writing Studies |  |
| 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 4100 | Topics in Literary Criticism |  |
| ENGL 4400 | Opening the Archive |  |
| 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 1120 Trouble in Utopia
ENGL 1130 Animals, Objects, Humans
ENGL 1450 Reading and Writing in the Digital Age
ENGL 1500 British Literature to 1800
ENGL 1502 American Literature to 1865
ENGL 1503 American Literature 1865 to Present
ENGL 2150 Literature and Digital Diversity
ENGL $2370 \quad$ The Modern Short Story
ENGL 2380 The Modern Novel
ENGL 2400 Modern Poetry
ENGL 2420 Contemporary Poetry
ENGL 2430 Contemporary Fiction
ENGL 2450 Postcolonial Literature
ENGL 2451 Postcolonial Women Writers
ENGL 2455 American Women Writers
ENGL $2460 \quad$ Multiethnic Literatures of the U.S.
ENGL 2470 Asian-American Literature
ENGL 2510 Horror Fiction
ENGL 2520 Science Fiction

| ENGL 2600 | Irish Literary Culture (Abroad) |
| :--- | :--- |
| ENGL 2620 | What Is Nature? (Abroad) |
| ENGL 2690 | Boston in Literature |
| ENGL 3427 | The Literature of Science |
| ENGL 3487 | Film and Text (Abroad) |
| ENGL 3582 | Children's Literature |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in <br> Literature |
| ENGL 4070 | Topics in Genre |

Writing

| Complete one of the following: |  | 4 |
| :---: | :---: | :---: |
| ENGL 2700 | Creative Writing |  |
| ENGL 2710 | Style and Editing |  |
| ENGL 2730 | Digital Writing |  |
| 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 | Topics in Writing |  |
| ENGL 3382 | Publishing in the 21 st Century |  |
| ENGL 3384 | The Writer's Marketplace |  |
| Capstone |  |  |
| $\begin{aligned} & \text { ENGL } 4710 \\ & \text { or ENGL } 4720 \end{aligned}$ | Capstone Seminar Capstone Project | 4 |
| English Electives |  |  |
| Complete two add | nal 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 |  |

## Program Requirement

129 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 <br> or ENGL | JRNL 1101 <br> and | 5 Elective | 4 Vacation | 0 |


| ENGL 1400 |  | Pre- <br> nineteenth- <br> century <br> literature <br> requirement | 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 17 |  | 8 |  | 0 |
| Year 2 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| JRNL 2201 |  | Co-op | 0 | Co-op | 0 | Elective | 4 |
| EEAM 2000 <br> or EESH 2000 | 1 |  |  |  |  | Elective | 4 |
| Nineteenthcentury, 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 |  |
| Journalism <br> elective 1 | 4 |  |  |  |  |
| Comparative <br> literature <br> requirement | 4 |  |  |  |  |
| English <br> writing <br> requirement | 4 |  | 0 | 0 |  |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| JRNL 3610 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| Journalism <br> elective 2 | 4 |  |  |  |
| English <br> elective 1 | 4 |  |  |  |
| ENGL 2740 <br> or 2850 | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| JRNL 3550 <br> or 4650 | 4 <br> Journalism <br> elective 3 | 4 |
| JRNL 3630 | 4 ENGL 4710 <br> or 4720 | 4 |
| English <br> elective 2 | 4 Elective | 4 |


| Elective | 4 Elective | 4 |
| :--- | :---: | ---: |
| 16 | 16 |  |

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Linguistics Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introductory Linguistics |  |  |
| LING 1150 | Introduction to Language and Linguistics | 4 |
| Intermediate/Advanced Linguistics |  |  |
| LING 2350 | Linguistic Analysis | 4 |
| LING 3412 | Language and Culture | 4 |
| LING 3422 | Phonology | 4 |
| LING 3450 | Syntax | 4 |
| Linguistics Electives |  |  |
| Complete three of the following: |  | 12 |
| DEAF 2700 | ASL Linguistics |  |
| LING 3420 | Phonetics |  |
| LING 3424 | Morphology |  |
| LING 3434 | Bilingualism |  |
| LING 3442 | Sociolinguistics |  |
| LING 3452 | Semantics |  |
| LING 3456 | Language and Gender |  |
| LING 3458 | Topics in Linguistics |  |


| LING 4654 | Seminar in Linguistics |
| :--- | :--- |
| PSYC 3464 | Psychology of Language |
| PSYC 3466 | Cognition |
| PSYC 4520 | Language and the Brain |
| 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

## 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 $1000 \quad$ English at Northeastern | 1 |
| :--- | :--- |
| Foundational Courses |  |


| Foundational Courses |  |  |
| :--- | :--- | ---: |
| ENGL 1400 | Introduction to Literary Studies | 4 |
| ENGL 1160 | Introduction to Rhetoric | 4 |
| or ENGL 1410 | Introduction to Writing Studies |  |
| Diversity |  | 4 |
| 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/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 Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |
| ENGL/JWSS 3678 Bedrooms and Battlefields: Hebrew |  |
| Bible and the Origins of Sex, Gender, |  |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following:
ENGL 2260 Romantic Poetry
ENGL 2330 The American Renaissance
ENGL 2340 American Realism
ENGL 3619 Emerson and Thoreau
ENGL 3720 19th-Century Major Figure
ENGL $4040 \quad$ Topics in 19th-Century Literatures
ENGL 2301 The Graphic Novel
ENGL 2410 Contemporary American Literature
ENGL 2440 The Modern Bestseller
ENGL $2600 \quad$ Irish Literary Culture (Abroad)
ENGL 2610 Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
ENGL 3730 20th- and 21 st-Century Major Figure

| Theories and Methods |
| :--- |
| Complete one of the following: |
| ENGL 1140 |
| ENGL 1160 |$\quad$ Intrommar. The Architecture of English to Rhetoric

## Comparative Literature

Complete one of the following: 4
ENGL $1120 \quad$ Trouble in Utopia
ENGL 1130 Animals, Objects, Humans
ENGL 1450 Reading and Writing in the Digital Age
ENGL 1500 British Literature to 1800
ENGL 1502 American Literature to 1865
ENGL 1503 American Literature 1865 to Present
ENGL 2150 Literature and Digital Diversity
ENGL 2370 The Modern Short Story
ENGL 2380 The Modern Novel
ENGL 2400 Modern Poetry
ENGL 2420 Contemporary Poetry
ENGL 2430 Contemporary Fiction

| ENGL 2450 | Postcolonial Literature |  |
| :---: | :---: | :---: |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2510 | Horror Fiction |  |
| ENGL 2520 | Science Fiction |  |
| ENGL 2600 | Irish Literary Culture (Abroad) |  |
| ENGL 2620 | What Is Nature? (Abroad) |  |
| ENGL 2690 | Boston in Literature |  |
| ENGL 3427 | The Literature of Science |  |
| ENGL 3487 | Film and Text (Abroad) |  |
| ENGL 3582 | Children's Literature |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| ENGL 4070 | Topics in Genre |  |
| Writing |  |  |
| Complete one of the following: |  | 4 |
| ENGL 2700 | Creative Writing |  |
| ENGL 2710 | Style and Editing |  |
| ENGL 2730 | Digital Writing |  |
| 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 | Topics in Writing |  |
| ENGL 3382 | Publishing in the 21 st Century |  |
| ENGL 3384 | The Writer's Marketplace |  |
| Capstone |  |  |
| ENGL 4710 | Capstone Seminar | 4 |
| or ENGL 4720 | Capstone Project |  |
| English Electives |  |  |
| Complete two add | nal ENGL electives. | 8 |

## Linguistics/English Combined-Major Requirements

Code Title Hours

## Experiential Learning

Complete one of the following options, or complete a study 4-8 abroad:
Junior/Senior Honors Project

| LING 4970 <br> and LING 4971 | Junior/Senior Honors Project 1 <br> and Junior/Senior Honors Project 2 |
| :--- | :--- |
| Directed Study |  |
| LING 4996 |  |
| Integrative Course |  |
| LING 3454 | History of English |

## Junior/Senior Seminar

| Code | Title | Hours |
| :--- | :--- | ---: |
| ENGL 4710 | Capstone Seminar | 4 |
| or ENGL 4720 | Capstone Project |  |
| or LING 4654 | Seminar in Linguistics |  |

## Linguistics and English Combined-Major Credit Requirement

Complete 84 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 |
| ENGW 1111 | 4 ENGL 1400 | 4 |  |  |
| MATH 1215 | 4 Foreign <br> language <br> core course | 4 |  |  |
| Elective | 4 Elective | 4 | 0 | 0 |

Year 2

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LING 3454 | 4 | LING 3450 | 4 Vacation | 0 Co-op | 0 |
| ENGL 1410 <br> or 1160 | 4 | Linguistics elective | 4 |  |  |
| Foreign language core course | 4 | Theories and methods course | 4 |  |  |
| Elective | 4 | Elective | 4 |  |  |
|  |  | EESC 2000 | 1 |  |  |
|  | 16 |  | 17 | 0 | 0 |

Year 3

| Fall | HoursSpring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: | ---: |
| Co-op | 0 LING 3422 | 4 Elective | 4 Co-op | 0 |
|  | Pre-19th <br> century <br> literature <br> course | 4 Elective | 4 |  |
|  | Comparative <br> literature <br> course | 4 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 LING 3412 | 4 Elective | 4 Co-op | 0 |
|  | Linguistics <br> elective | 4 Elective | 4 |  |
|  | Writing <br> course | 4 |  |  |



Year 5

| Fall | HoursSpring <br> Co-op | Hours |
| :--- | :---: | ---: |
|  | Linguistics <br> elective | 4 |
| Junior/ <br> senior <br> seminar | 4 |  |
| Foreign <br> language <br> core course | 4 |  |
| Experiential <br> learning <br> research <br> course or <br> 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

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 |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| MSCR 1000 | Media and Screen Studies at | 1 |
|  | Northeastern |  |

## Introduction to Media Studies

| MSCR 1220 | Media, Culture, and Society | 4 |
| :--- | :--- | :--- |
| Introduction to Screen Theory |  |  |
| MSCR 2220 | Understanding Media and Film | 4 |


| Media and Screen History |  |
| :--- | :--- |
| MSCR 4208 | TV History |


| Advanced Theory |  |
| :--- | :--- |
| MSCR $4623 \quad$ Theories of Media and Culture |  |

Media and Screen Electives
Complete three of the following:

| CINE 3389 | Screenwriting |
| :--- | :--- |
| CINE 3392 | Gender and Film |
| CINE 3446 | Topics in Documentary Production |
| CINE 3920 | Topics in Film Studies |
| MSCR 1230 | Introduction to Film Production |
| MSCR 1310 | Introduction to Digital Media Culture |
| MSCR 2302 | Advertising and Promotional Culture |
| MSCR 2325 | Global Media |
| MSCR 2895 | Film Analysis |
| MSCR 3210 | Special Topics in Media and Screen |
| MSCR 3422 | Studies |
| MSCR 3426 | Popular Music as Media Form |
| MSCR 3435 | Media Industries |
| MSCR 3437 | Media and Identity |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |
| ARTH 2212 | Survey of the Still and Moving Image |


| Advanced Media and Screen Electives |  |
| :--- | :--- |
| Complete two of the following: |  |
| CINE 3500 | Film Theory |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen <br> Studies |
| MSCR 4992 | Directed Study |
| MSCR 4993 | Independent Study |

## English Requirements

Code Title
Hours
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 |
| :---: | :---: | :---: |
| Foundational Courses |  |  |
| ENGL 1400 | Introduction to Literary Studies | 4 |
| $\begin{aligned} & \text { ENGL } 1160 \\ & \text { or ENGL } 1410 \end{aligned}$ | Introduction to Rhetoric Introduction to Writing 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 2450 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2760 | Writing in Global Contexts |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| 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 for | following: | 4 |
| ENGL 1600 | Introduction to Shakespeare |  |
| ENGL 1700 | Global Literature to 1500 |  |
| ENGL 2240 | 17th-Century British Literature |  |
| ENGL 2296 | Early African-American Literature |  |
| ENGL 3618 | Milton |  |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity |  |
| ENGL 4000 | Topics in Early Literatures |  |
| ENGL 4010 | Topics in Shakespeare |  |
| ENGL 4020 | Topics in 17th- and 18th-Century Literatures |  |
| Nineteenth-, Twentieth-, and Twenty-First-Century Literature |  |  |
| Complete one of the following: |  | 4 |
| ENGL 2260 | Romantic Poetry |  |
| ENGL 2330 | The American Renaissance |  |
| ENGL 2340 | American Realism |  |
| ENGL 3619 | Emerson and Thoreau |  |
| ENGL 3720 | 19th-Century Major Figure |  |
| ENGL 4040 | Topics in 19th-Century Literatures |  |
| ENGL 2301 | The Graphic Novel |  |
| ENGL 2410 | Contemporary American Literature |  |
| 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 21 st-Century Major Figure |  |


| Complete one of the following: |  |
| :---: | :---: |
| ENGL 1140 | Grammar. The Architecture of English |
| ENGL 1160 | Introduction to Rhetoric |
| ENGL 1410 | Introduction to Writing Studies |
| 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 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| 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 1120 | Trouble in Utopia |
| ENGL 1130 | Animals, Objects, Humans |
| ENGL 1450 | Reading and Writing in the Digital Age |
| ENGL 1500 | British Literature to 1800 |
| ENGL 1502 | American Literature to 1865 |
| ENGL 1503 | American Literature 1865 to Present |
| ENGL 2150 | Literature and Digital Diversity |
| ENGL 2370 | The Modern Short Story |
| ENGL 2380 | The Modern Novel |
| ENGL 2400 | Modern Poetry |
| ENGL 2420 | Contemporary Poetry |
| ENGL 2430 | Contemporary Fiction |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2510 | Horror Fiction |
| ENGL 2520 | Science Fiction |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2620 | What Is Nature? (Abroad) |
| ENGL 2690 | Boston in Literature |
| ENGL 3427 | The Literature of Science |
| ENGL 3487 | Film and Text (Abroad) |
| ENGL 3582 | Children's Literature |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in Literature |
| ENGL 4070 | Topics in Genre |

## Writing

Complete one of the following: 4

| ENGL 2700 | Creative Writing |
| :--- | :--- |
| ENGL 2710 | Style and Editing |
| ENGL 2730 | Digital Writing |
| 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 |
| ENGL 3375 | Wractice |
| ENGL 3376 | Creative Nonfiction Boston |
| ENGL 3377 | Poetry Workshop |
| ENGL 3378 | Fiction Workshop |
| ENGL 3380 | Topics in Writing |
| ENGL 3382 | Publishing in the 21 st Century |
| ENGL 3384 | The Writer's Marketplace |
| Capstone |  |
| ENGL 4710 | Capstone Seminar |
| or ENGL 4720 | Capstone Project |
| English Electives |  |
| Complete two additional ENGL electives. | 4 |

Integrative Requirement
Code Title Hours

| Integrative Courses |  | 4 |
| :--- | :--- | ---: |
| CINE 3500 | Film Theory | 4 |
| ENGL 1450 | Reading and Writing in the Digital Age |  |
| 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.

## Program Requirement

128 total semester hours required

## Plan of Study




Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL <br> theories and methods elective |  | Advanced <br> MSCR <br> elective | 4 | Vacation | 0 | Co-op |  |
| ENGL elective |  | ENGL comparative elective | 4 |  |  |  |  |
| Advanced MSCR elective | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | $\begin{aligned} & \text { ENGL } 1450 \\ & \text { or } 3340 \end{aligned}$ | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

## Year 4

$\begin{array}{llccc}\text { Fall } & \text { Hours } & \text { Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 }\end{array}$ Hours $\left.\begin{array}{l}\text { Vacation }\end{array}\right]$

Year 5

| Fall | Hours |
| :--- | ---: |
| MSCR 4623 | 4 |
| ENGL 4710 | 4 |
| or 4720 |  |
| ENGL | 4 |
| elective | 4 |
| Elective | 16 |
|  |  |
| 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

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 |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| ARCH 1110 | Fundamental Architectural <br> Representation | 6 |
| ARCH 1120 | Fundamental Architectural Design | 4 |
| ARCH 1310 | Architecture and Global Cultures, <br> Prehistory to 1400 | 4 |
| ARCH 1320 | Architecture and Global Cultures, 1400 <br> to Present | 4 |
| ARCH 1450 | Understanding Design | 4 |
| ARCH 2130 | Site, Space, and Program | 6 |
| ARCH 2240 | Architectonic Systems | 4 |
| ARCH 2330 | Architecture, Modernity, and the City, | 4 |
| Electives | 1800 to 1910 | 4 |
| Complete two of the following courses: |  |  |

Complete two of the following courses: 8

| ARCH 3370 | Topics in Architectural History |
| :--- | :--- |
| ARCH 3450 | Advanced Architectural Communication |

## English Requirements

Code Title
Hours

## 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 $1000 \quad$ English at Northeastern 1

## Foundational Courses

ENGL 1400 Introduction to Literary Studies 4
ENGL 1160 Introduction to Rhetoric 4
or ENGL 1410 Introduction to Writing Studies
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 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2760 | Writing in Global Contexts |
| ENGL 3663 | The African-American Novel <br> ENGL 3676 |
| Literature |  |

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
Pre-Nineteenth-Century Literature
Complete one of the following:

| ENGL 1600 | Introduction to Shakespeare |
| :--- | :--- |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following: 4
ENGL 2260 Romantic Poetry
ENGL 2330 The American Renaissance
ENGL 2340 American Realism
ENGL 3619 Emerson and Thoreau
ENGL 3720 19th-Century Major Figure
ENGL 4040 Topics in 19th-Century Literatures
ENGL 2301 The Graphic Novel
ENGL 2410 Contemporary American Literature
ENGL 2440 The Modern Bestseller
ENGL $2600 \quad$ Irish Literary Culture (Abroad)
ENGL $2610 \quad$ Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
ENGL 3730 20th- and 21 st-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 Writing Studies |
| 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 4100 | Topics in Literary Criticism |  |
| ENGL 4400 | Opening the Archive |  |
| 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 1120 | Trouble in Utopia |  |
| ENGL 1130 | Animals, Objects, Humans |  |
| ENGL 1450 | Reading and Writing in the Digital Age |  |
| ENGL 1500 | British Literature to 1800 |  |
| ENGL 1502 | American Literature to 1865 |  |
| ENGL 1503 | American Literature 1865 to Present |  |
| ENGL 2150 | Literature and Digital Diversity |  |
| ENGL 2370 | The Modern Short Story |  |
| ENGL 2380 | The Modern Novel |  |
| ENGL 2400 | Modern Poetry |  |
| ENGL 2420 | Contemporary Poetry |  |
| ENGL 2430 | Contemporary Fiction |  |
| ENGL 2450 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2510 | Horror Fiction |  |
| ENGL 2520 | Science Fiction |  |
| ENGL 2600 | Irish Literary Culture (Abroad) |  |
| ENGL 2620 | What Is Nature? (Abroad) |  |
| ENGL 2690 | Boston in Literature |  |
| ENGL 3427 | The Literature of Science |  |
| ENGL 3487 | Film and Text (Abroad) |  |
| ENGL 3582 | Children's Literature |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| ENGL 4070 | Topics in Genre |  |
| Writing |  |  |
| Complete one of the following: |  | 4 |
| ENGL 2700 | Creative Writing |  |
| ENGL 2710 | Style and Editing |  |
| ENGL 2730 | Digital Writing |  |
| 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 | Topics in Writing |
| ENGL 3382 | Publishing in the 21 st Century |
| ENGL 3384 | The Writer's Marketplace |
| Capstone |  |
| $\begin{aligned} & \text { ENGL } 4710 \\ & \quad \text { or ENGL } 4720 \end{aligned}$ | Capstone Seminar <br> Capstone Project |
| English Electives |  |
| Complete two additional ENGL electives. 8 |  |
| Integrative Requirement |  |
| Code | Title Hours |
| ARCH 2330 | Architecture, Modernity, and the City, 1800 to 1910 |
| or ARCH 2340 | Architecture, Modernity, and the City, 1910 to 1980 |
| ENGL 3375 | Writing Boston 4 |

## Program Requirement

128 total semester hours required

## Biology and English, BS

In the BS, combined biology and English 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 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Biology Requirements

Code Title
Hours

| Introduction to College |  |
| :--- | :--- |
| BIOL 1000 | Biology at Northeastern |
| or ENGL 1000 | English at Northeastern |

$\begin{array}{lll}\text { Experiential Learning Introduction } \\ \text { EESC } 2000 & \text { Professional Development for Co-op } & 1\end{array}$

## Required Biology

## Foundations

BIOL 1107 Foundations of Biology 5
and BIOL $1108 \quad$ and Lab for BIOL 1107
Inquiries

| BIOL 2299 | Inquiries in Biological Sciences | 4 |
| :--- | :--- | :---: |
| Genetics | GIOL 2301 <br> and BIOL 2302 <br> Project Lab | and Lab for BIOL 2301 |
| BIOL 2309 <br> Biochemistry | Biology Project Lab | 5 |
| BIOL 3611 <br> and BIOL 3612 | Biochemistry <br> and Lab for BIOL 3611 | 4 |

## Biology Elective

| Code | Title | Hours |
| :--- | :--- | ---: |
| Organismal and Population Biology |  |  |
| Complete one of the following: | $4-5$ |  |
| BIOL 2321 <br> and BIOL 2322 | Microbiology <br> and Lab for BIOL 2321 |  |
| BIOL 2327 | Human Parasitology |  |
| BIOL 3401 | Comparative Vertebrate Anatomy |  |
| EEMB 2302 | Ecology |  |
| and EEMB 2303 | and Lab for EEMB 2302 |  |


| Supporting Courses for Biology <br> Code <br> Mathematics | Title | Hours |
| :--- | :--- | ---: |
| MATH 1251 | Calculus and Differential Equations for <br> Biology 1 | 4 |
| Statistics | 4 |  |
| ENVR 2500 <br> and ENVR 2501 | Biostatistics <br> and Lab for ENVR 2500 | 5 |
| Chemistry <br> General Chemistry |  |  |


| CHEM 1161 <br> and CHEM 1162 <br> and CHEM 1163 | General Chemistry for the Biological Sciences and Lab for CHEM 1161 and Recitation for CHEM 1161 | 5 |
| :---: | :---: | :---: |
| 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 |  |  |
| Physics 1 |  |  |
| 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 <br> and PHYS 1152 <br> 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: |  | 5 |
| PHYS 1147 <br> and PHYS 1148 | Physics for Life Sciences 2 and Lab for PHYS 1147 |  |
| PHYS 1155 <br> and PHYS 1156 <br> 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 PS | C 5999 |  |

## English Requirements

## Code Title

Hours

## 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 $1000 \quad$ English at Northeastern 1
Foundational Courses
ENGL 1400 Introduction to Literary Studies 4
ENGL 1160 Introduction to Rhetoric 4
or ENGL 1410 Introduction to Writing Studies

## Diversity

Complete one of the following courses. This course may also 4
be used to fulfill an additional English requirement below: ENGL 2150 Literature and Digital Diversity


| ENGL 1600 | Introduction to Shakespeare |
| :--- | :--- |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |
| ENGL/JWSS 3678 Bedrooms and Battlefields: Hebrew |  |
| Bible and the Origins of Sex, Gender, |  |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following:
ENGL 2260 Romantic Poetry
ENGL 2330 The American Renaissance
ENGL 2340 American Realism
ENGL 3619 Emerson and Thoreau
ENGL 3720 19th-Century Major Figure
ENGL 4040 Topics in 19th-Century Literatures
ENGL 2301 The Graphic Novel
ENGL 2410 Contemporary American Literature
ENGL 2440 The Modern Bestseller
ENGL $2600 \quad$ Irish Literary Culture (Abroad)
ENGL 2610 Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
ENGL 3730 20th- and 21 st-Century Major Figure

## Theories and Methods

Complete one of the following:

| ENGL 1140 | Grammar. The Architecture of English |
| :--- | :--- |
| ENGL 1160 | Introduction to Rhetoric |
| ENGL 1410 | Introduction to Writing Studies |
| 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 <br> Writing |
| :--- | :--- |
| ENGL 3700 | Narrative Medicine |
| ENGL 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and <br> 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 1120 Trouble in Utopia
ENGL 1130 Animals, Objects, Humans
ENGL 1450 Reading and Writing in the Digital Age
ENGL 1500 British Literature to 1800
ENGL 1502 American Literature to 1865
ENGL 1503 American Literature 1865 to Present
ENGL 2150 Literature and Digital Diversity
ENGL $2370 \quad$ The Modern Short Story
ENGL 2380 The Modern Novel
ENGL 2400 Modern Poetry
ENGL 2420 Contemporary Poetry
ENGL 2430 Contemporary Fiction
ENGL 2450 Postcolonial Literature
ENGL 2451 Postcolonial Women Writers
ENGL 2455 American Women Writers
ENGL 2460 Multiethnic Literatures of the U.S.
ENGL 2470 Asian-American Literature
ENGL 2510 Horror Fiction
ENGL 2520 Science Fiction
ENGL $2600 \quad$ Irish Literary Culture (Abroad)
ENGL 2620 What Is Nature? (Abroad)
ENGL $2690 \quad$ Boston in Literature
ENGL 3427 The Literature of Science
ENGL 3487 Film and Text (Abroad)
ENGL 3582 Children's Literature
ENGL 3663 The African-American Novel
ENGL 3676 Representing Gender and Sexuality in Literature
ENGL 4070 Topics in Genre

## Writing

Complete one of the following: 4
ENGL $2700 \quad$ Creative Writing
ENGL 2710 Style and Editing
ENGL 2730 Digital Writing
ENGL $2740 \quad$ Writing and Community Engagement
ENGL 2760 Writing in Global Contexts
ENGL 2770 Writing to Heal
ENGL $2780 \quad$ Visual Writing: Writing Visuals
$\left.\left.\begin{array}{|cl|}\hline \text { ENGL 2850 } & \begin{array}{l}\text { Writing for Social Media: Theory and } \\ \text { Practice }\end{array} \\ \hline \text { ENGL 3375 } & \text { Writing Boston }\end{array}\right] \begin{array}{l}\text { ENGL 3376 }\end{array} \begin{array}{ll}\text { Creative Nonfiction }\end{array}\right]$

## Integrative Courses



## 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

## 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 |
| :--- | ---: |
| Introductory Course | 4 |
| Complete one course in the following range: | 4 |

ENGL 1001 to ENGL 1999

## Electives

Complete three ENGL courses, two of which must be in the 12
range ENGL 2000 to ENGL 4999.

## GPA Requirement

2.000 GPA required in the minor

## Rhetoric, Minor

In the interdisciplinary rhetoric minor, students take courses in both English and communication studies to explore the ways that symbols work to influence thought and action. The minor gives students a foundation in the classical tradition, which developed rhetoric as the art of speaking necessary for participation in democratic societies in a range of forums such as political assemblies, law courts, and public ceremonies. Students also consider contemporary theories and practices that broaden rhetoric's scope to include any form of human discourse that persuades others, creates knowledge, or shapes identity and culture

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Three of the four total classes must be taken at Northeastern.

Note: For communication studies students, only two courses from this minor also count toward communication studies major requirements. Additional courses taken for this minor do not count toward communication studies major requirements.

## Required Elective

| Code | Title | Hours |
| :--- | :--- | ---: |
| ENGL 1160 | Introduction to Rhetoric | 4 |
| or COMM 1210 | Persuasion and 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 <br> Citizenship |
| :--- | :--- |
| COMM 3414 | Great Speakers and Speeches 2, 1930- <br> Present |
| 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 <br>  <br> Writing |
| ENGL 4410 | Research in Rhetoric and Writing |

## 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 Writing Studies |  |
| ENGL 3325 | Rhetoric of Law |  |
| ENGL 3381 | The Practice and Theory of Teaching <br> Writing |  |
| ENGL 4410 | Research in Rhetoric and Writing |  |

## Writing Electives

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete three of the following: |  |  |
| ENGL 1140 | Grammar. The Architecture of English |  |
| ENGL 1160 | Introduction to Rhetoric |  |
| ENGL 1410 | Introduction to Writing Studies |  |
| ENGL 1450 | Reading and Writing in the Digital Age |  |
| ENGL 2301 | The Graphic Novel |  |
| ENGL 2700 | Creative Writing |  |
| ENGL 2710 | Style and Editing |  |
| ENGL 2730 | Digital Writing |  |
| 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 |  |
| ENGL 3325 | Practice |  |
| ENGL 3340 | Technologic of Law |  |
| ENGL 3370 | Writing Cultures |  |
| ENGL 3375 | Writing Boston |  |
| ENGL 3376 | Creative Nonfiction |  |
| ENGL 3377 | Poetry Workshop |  |
| ENGL 3378 | Fiction Workshop |  |
| ENGL 3380 | Topics in Writing |  |
| ENGL 3381 | The Practice and Theory of Teaching |  |
| ENGL 3382 | Writing |  |
| ENGL 3384 | The Writer's Marketplace |  |
| ENGL 4410 | Research in Rhetoric and Writing |  |

## GPA Requirement

2.000 GPA required in the minor

## History

Website (http://www.northeastern.edu/history)

## Heather Streets-Salter, PhD

Associate Professor and Chair
249 Meserve Hall
617.373.2660
617.373 .2661 (fax)

Kirsten Bilas, Administrative Assistant, k.bilas@northeastern.edu
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. Students focus their studies by establishing a cluster of four courses in a particular geographical area, time period, or theme. 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. 31)."

## Preapproved Template Program in History

The Department of History offers a preapproved template program that may be paired with another preapproved template program to create a combined major; to see a list of current preapproved template programs, visit the combined majors webpage (http://www.northeastern.edu/ registrar/major-2.html).

Students may request admission to such a combined major via the Combined Major Approval form (http://www.northeastern.edu/ registrar/form-maj-comb.pdf), which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on preapproved template programs, see "Student-Requested Combined Major (p. 33)." For template program requirements, visit the myNortheastern web portal (http://www.myneu.neu.edu), click on the "Self-Service" tab, then on "My Degree Audit."

## 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 departmental advisor, Marty Blatt (m.blatt@northeastern.edu), by the end of the sophomore year.

## Programs

## Bachelor of Arts (BA)

- History (p. 729)
- History and Asian Studies (p. 632)
- History and Cultural Anthropology (p. 734)
- History and English (p. 712)
- History and Philosophy (p. 738)
- History and Political Science (p. 739)
- History and Religious Studies (p. 740)
- Environmental Studies and History (p. 521)
- Media and Screen Studies and History (p. 137)


## Bachelor of Science (BS)

- History (p. 744)
- Computer Science and History (p. 322)


## Minor

- History (p. 750)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 944)

## 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), 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## History Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introductory History |  |  |
| 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 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 1228 | Americans in the World: Trade, Travel, and Diplomacy |  |
| HIST 1246 | World War II in the Pacific |  |
| AFAM 1140 | Introduction to African-American History |  |
| 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 |

## 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.

Additional History Requirements
Code

Pre-1800 Course Title \begin{tabular}{l}
Hours <br>
This course may count toward the history cluster or history <br>
elective. <br>
Complete one of the following: <br>
\hline HIST 2390 <br>
\hline HIST 1252 <br>
\hline Africa and the World in Early Times <br>
\hline HIST 1218

 

Japanese Literature and Culture <br>
\hline Pirates, Planters, and Patriots: Making <br>
the Americas, 1492-1804
\end{tabular}

History Outside the United States and Europe
Complete one of the following:

| 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, <br> 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 2214 | War in the Modern World |
| HIST 2311 | Colonialism/Imperialism |
| HIST 2351 | Modern Japan |
| HIST 2390 | Africa and the World in Early Times |
| HIST 4691 | Topics in Middle Eastern History |

Capstone or Project
Complete one of the following: 4
HIST 4701 Capstone Seminar

## Intermediate/Advanced History Course Requirement

A minimum of three courses from the above requirements must be numbered 2303 or higher. These courses may count toward the history cluster.

## Experiential Learning Requirement

The History Seminar (HIST 2301) fulfills the university's experiential learning requirement.

## History Major Credit Requirement

Complete 46 semester hours in the major.

## 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 |
| HIST 1000 | 1 HIST 1130 | 4 Vacation | 0 Vacation | 0 |
| HIST 1170 | 4 MATH 1215 | 4 |  |  |
| ENGW 1111 | 4 HIST 1110 | 4 |  |  |
| Elective | 4 Elective | 4 |  | 0 |
| HIST 1200 | 1 |  | 0 | 0 |
| HIST 1201 | 4 | 16 | 0 |  |
|  | 18 |  |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Foreign <br> language <br> course | F Foreign <br> language <br> course | 4 Vacation | 0 Co-op | 0 |
| Elective | 4 Pre-1800 <br> or history <br> elective | 4 |  |  |
| Pre-1800 <br> or history <br> elective | 4 History <br> cluster <br> course | 4 | 4 Elective | 4 |


| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | Foreign language course | 4 | Elective | 4 | Co-op | 0 |
|  |  | HIST 2301 |  | Upperdivision elective | 4 |  |  |
|  |  | HIST 2302 | 1 |  |  |  |  |
|  |  | History cluster course | 4 |  |  |  |  |
|  |  | History elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | :---: | ---: |
| Co-op | 0 <br> History <br> cluster <br> course | 4 Elective | 4 Co-op | 0 |
|  | Elective | 4 Elective | 4 |  |
|  | Elective | 4 |  | 0 |
| Upper- <br> division <br> elective | 4 | 8 | 0 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | 0 HIST 4701 | 4 |


| Upper- <br> division <br> elective | 4 |
| :--- | :---: | :---: |
| History <br> cluster <br> course | 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 |
| HIST 1170 | 4 | HIST 1130 | 4 | Vacation | 0 Vacation | 0 |
| ENGW 1111 | 4 | MATH 1215 | 4 |  |  |  |
| Elective | 4 | HIST 1110 | 4 |  |  |  |
| HIST 1200 | 1 | Foreign language course | 4 |  |  |  |
| HIST 1201 | 4 |  |  |  |  |  |
|  | 17 |  | 16 |  | 0 | 0 |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Foreign <br> language <br> course | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Pre-1800 <br> or history <br> elective | 4 | Elective | 4 |  |
| History <br> elective | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 8 |

Year 3
$\left.\begin{array}{lcccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \begin{array}{l}\text { Foreign } \\ \text { language }\end{array} & 4 \text { Co-op } & 0 \text { Co-op } & 0 \text { Elective } & 4 \\ \text { course }\end{array} \quad 4 \begin{array}{l}\text { Upper- } \\ \text { division } \\ \text { elective }\end{array}\right)$

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 |  |  | 0 |
| History <br> elective | 4 |  |  |  |
| History <br> cluster <br> course | 4 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| History <br> cluster <br> course | 4 HIST 4701 | 4 |
| Upper- <br> division <br> elective | 4 History <br> cluster <br> course | 4 |
| Elective | 4 Upper- <br> division <br> elective | 4 |
| Elective | 16 | 4 |
| Tlective | 16 |  |
| 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Environmental Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Science Requirements |  |  |
| ENVR 1101 | Environmental Science | 4 |
| ENVR 1202 | History of Earth and Life | 5 |
| and ENVR 1203 | and Interpreting Earth History | 4 |


| Humanities Requirement |  |
| :--- | :--- |
| PHIL $1180 \quad$ Environmental Ethics | 4 |


| Social Science Requirements |  |  |
| :--- | :--- | :--- |
| ECON 1116 | Principles of Microeconomics | 4 |
| POLS 1150 | American Government | 4 |
| and POLS 1151 | and Recitation for POLS 1150 |  |


| SOCL 1246 | Environment and Society | 4 |
| :--- | :--- | ---: |
| Environmental Studies Electives |  |  |
| Complete two of the following: | 8 |  |
| ECON 3423 | Environmental Economics |  |
| PHIL 3480 |  |  |
| POLS 2395 | Environmental Politics and Policy |  |


| History Requirements |  |
| :--- | ---: | :--- |
| Code | Title Hours |


| History Requirements |  |  |
| :--- | :--- | ---: |
| HIST 1130 | Introduction to the History of the United <br> States | 4 |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and <br> Their Aftermath | 4 |
| HIST 1201 | First-Year Seminar | 4 |
| HIST 2342 |  | 4 |
| History Seminar | The History Seminar |  |
| HIST 2301 |  |  |
| and HIST 2302 | and Historical Writing |  |
| History/Geographic-Area Electives |  |  |
| Complete two of the following: | 5 |  |


| ASNS 1150 | East Asian Studies |
| :--- | :--- |
| HIST 1180 | African History |
| HIST 1185 | Introduction to Middle Eastern History |

## History-Area Electives

Complete four HIST courses, approved by a faculty advisor,
16
focused on an idea or geographic area. These courses must
be numbered 2000 or higher.

## Integrative Courses

| Code Title | Hours |
| :--- | :--- | :--- |


| Required Integrative Course |  |  |
| :--- | :--- | :--- |
| ENVR 3300 | Geographic Information Systems <br> and ENVR 3301$\quad$and Lab for ENVR 3300 | 5 |

## Integrated Elective

| Complete one of the following: | 4 |
| :--- | :--- |
| ENVR 5210 | Environmental Planning |
| ENVR 5250 | Geology and Land-Use Planning |

## Experiential Learning and Capstone

Code Title Hours

## Experiential Learning

Complete an approved activity from either department,
combined with reflection in capstone.

## Capstone Course

Complete one of the following: 1-4

| ENVR 4997 | Senior Thesis |
| :---: | :--- |
| 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 Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 1111 | 4 ENVR 1202 <br> and <br> ENVR 1203 | 5 Vacation | 0 Vacation | 0 |
| ENVR 1000 | 1 HIST 1170 | 4 |  |  |
| ENVR 1101 | 4 HIST 1201 | 4 |  |  |
| HIST 1130 <br> and <br> HIST 1131 | 4 PHIL 1180 | 4 |  | 0 |
| SOCL 1246 | 4 | 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 |
| HIST 2342 | 4 | ENVR 1445 | 4 |  |  |  |  |
| Foreign language course | 4 | Elective | 4 |  |  |  |  |
| History <br> elective |  | Foreign language course | 4 |  |  |  |  |
| History elective | 4 | HIST geographic elective | 4 |  |  |  |  |
|  | 20 |  | 17 |  | 0 |  | 0 |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | ENVR 3300 <br> and ENVR 3301 | 5 | Elective | 4 | Co-op | 0 |
|  |  | POLS 1150 <br> and POLS 1151 | 4 | Elective | 4 |  |  |
|  |  | Foreign language course | 4 |  |  |  |  |
|  |  | ENVR <br> undergraduat elective | 4 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

## Year 4

| Fall | HoursSpring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | ENGW 3308 <br> or 3315 | 4 Elective | 4 Co-op | 0 |
|  | HIST 2301 <br> and <br> HIST 2302 | 5 Elective | 4 |  |
| History <br> elective <br> History <br> elective | 4 | 8 | 8 |  |


| Year 5 |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours |
| Co-op | 0 | Capstone course | 1-4 |
|  |  | ENVR <br> undergraduatı <br> elective | 4 |
|  |  | HIST geographic elective | 4 |
|  |  | Integrative major requirement | 4 |
| 0 13-16 |  |  |  |

Total Hours: 134-137

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

History Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| History Colloquium |  |  |
| HIST 1000 | History at Northeastern | 1 |
| HIST 1200 | Historical Research and Writing | 1 |
| HIST 1201 | First-Year Seminar | 4 |
| Introductory Level |  |  |
| Choose one course from the 1000 level except HIST 1215, which is required by Asian studies. |  | 4 |
| History Seminar and Historical Writing |  |  |
| HIST 2301 | The History Seminar | 4 |
| HIST 2302 | Historical Writing | 1 |

Pre-1800 History Elective
Choose one course from the following: 4

| HIST 2390 | Africa and the World in Early Times |
| :--- | :--- |
| HIST 1218 | Pirates, Planters, and Patriots: Making <br> the Americas, 1492-1804 |
| HIST 1252 | Japanese Literature and Culture |
| HIST 1270 | Ancient Greece |
| HIST 1271 | Ancient Rome |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 2330 | Colonial and Revolutionary America |

Advanced History
Complete one history course 3000 level or above

## 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
Required Courses

| ASNS 1150 | East Asian Studies | 4 |
| :--- | :--- | :--- |
| HIST 1215 | Origins of Today: Historical Roots of <br> Contemporary Issues | 4 |

## Asia in Global Context

Complete one of the following: 4

| ECON 1290 | History of the Global Economy |
| :--- | :--- |
| ENGL 2450 | Postcolonial Literature |
| 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

Language Courses
Complete the following courses in either Chinese or 16
Japanese:
Chinese
Select one of the following:

| CHNS 1101 | Elementary Chinese 1 |
| :--- | :--- |
| CHNS 1301 | Elementary Chinese Immersion 1 |

Select one of the following:
CHNS 1102 Elementary Chinese 2

CHNS 1302 Elementary Chinese Immersion 2
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

## Japanese

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.
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 |  |
| ARCH 1320 | Architecture and Global Cultures, 1400 <br> to Present |
| CLTR 1260 | Japanese Film |
| CLTR 1700 | Introduction to Japanese Pop Culture |
| ENGL 2450 | Postcolonial Literature |
| MUSC 2130 | Music of Asia |
| PHIL 1130 | Ethics: East and West |

Religious Studies Focus Area

| PHIL 1231 | Image and Icon in South Asia |
| :--- | :--- |
| PHIL 1273 | Jainism |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: <br>  <br> Eastern Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4545 | Religion and Politics in South Asia |

## Capstone

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | 4 |  |
| HIST 4701 | Capstone Seminar |  |
| ASNS 4900 | Asian Studies Capstone Directed Study |  |
| ASNS 4920 | Asian Studies Capstone Seminar |  |

## Integrative Requirement

Note: Public history concentrators satisfy this requirement within the concentration with Fieldwork in History 1 (HIST 4903) and (HIST 4904).

| 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.

## Program Requirements

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## History Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| History Colloquium |  |  |
| 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 2390 | Africa and the World in Early Times |  |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |  |
| HIST 1252 | Japanese Literature and Culture |  |
| HIST 1270 | Ancient Greece |  |
| HIST 1271 | Ancient Rome |  |
| HIST 1285 | Introduction to Russian Civilization |  |
| HIST 2330 | Colonial and Revolutionary America |  |
| Intermediate/Advanced History Cluster |  |  |
| Complete three history courses numbered 2303 or above. |  | 12 |
| Advanced History |  |  |
| Complete one | course at the 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.

## Cultural 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 |
| Area Courses |  |  |
| Complete two course | s 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 | 12 |
| :--- | :--- |
| Complete three courses in the following range. One study- |  |
| abroad course may count toward this requirement. |  |

abroad course may count toward this requirement.
ANTH 2001 to ANTH 4599
Capstone Requirements

| Code $\quad$ 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.

## Program Requirement

128 total semester hours required

## Plan of Study

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




## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | HIST <br> elective or <br> integrative 5 | 4 Elective | 4 Co-op |  |
|  | ANTH area <br> course 2 | 4 Elective | 4 |  |
| ANTH <br> elective 1 | 4 |  |  |  |
|  | Elective | 4 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Co-op | HIST <br> elective or <br> integrative 6 | 4 Elective | 4 Co-op |  |
| ANTH <br> elective 2 | 4 Elective | 4 |  |  |
| ANTH <br> elective 3 <br> Elective | 4 |  | 0 |  |
| 0 | 16 | 8 |  |  |

Year 5

| Fall | HoursSpring <br> Co-op | Hours |
| :--- | :--- | ---: |
|  | HIST <br> capstone or <br> HIST senior <br> project <br> or ANTH <br> capstone | 4 |
| HIST <br> elective or <br> integrative 7 | 4 |  |
|  | Elective | 4 |


| Elective | 4 |
| ---: | ---: |
| 0 | 16 |

```
Total Hours: }13
```


## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## History Requirements

| Code Title | Hours |
| :--- | :--- | :--- |
| History Colloquium |  |


| HIST 1000 | History at Northeastern | 1 |
| :--- | :--- | :--- |
| HIST 1200 | Historical Research and Writing | 1 |
| HIST 1201 | First-Year Seminar | 4 |

Introductory Level
Complete one course from the 1000 level. 4

| History Seminar and Historical Writing |  |
| :--- | :--- | ---: |
| HIST 2301 The History Seminar 4 <br> HIST 2302 Historical Writing 1 |  |


| Pre-1800 History Elective |
| :--- |
| Complete one of the following: |


| HIST 1218 | Pirates, Planters, and Patriots: Making <br> the Americas, 1492-1804 |
| :--- | :--- |
| HIST 1252 | Japanese Literature and Culture |
| HIST 1270 | Ancient Greece |
| HIST 1271 | Ancient Rome |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 2330 | Colonial and Revolutionary America |

Intermediate/Advanced History Cluster
Complete three history courses numbered 2303 or above.

## Advanced History

Complete one history course at the 3000 level or above. 4
Capstone
HIST 4701
Capstone Seminar
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.

## English Requirements

Code Title Hours

## 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 $1000 \quad$ English at Northeastern 1

## Foundational Courses

ENGL $1400 \quad$ Introduction to Literary Studies 4
ENGL 1160 Introduction to Rhetoric 4
or ENGL 1410 Introduction to Writing Studies

## Diversity

Complete one of the following courses. This course may also 4
be used to fulfill an additional English requirement below:

| ENGL 2150 | Literature and Digital Diversity |  |
| :---: | :---: | :---: |
| ENGL 2296 | Early African-American Literature |  |
| ENGL 2450 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. |  |
| ENGL 2470 | Asian-American Literature |  |
| ENGL 2760 | Writing in Global Contexts |  |
| ENGL 3663 | The African-American Novel |  |
| ENGL 3676 | Representing Gender and Sexuality in Literature |  |
| 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 Literature to 1500 |  |
| ENGL 2240 | 17th-Century British Literature |  |
| ENGL 2296 | Early African-American Literature |  |
| ENGL 3618 | Milton |  |
| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity |  |
| ENGL 4000 | Topics in Early Literatures |  |
| ENGL 4010 | Topics in Shakespeare |  |
| ENGL 4020 | Topics in 17th- and 18th-Century Literatures |  |

[^20]| ENGL 2260 | Romantic Poetry |
| :--- | :--- |
| ENGL 2330 | The American Renaissance |
| ENGL 2340 | American Realism |
| ENGL 3619 | Emerson and Thoreau |
| ENGL 3720 | 19th-Century Major Figure |
| ENGL 4040 | Topics in 19th-Century Literatures |
| ENGL 2301 | The Graphic Novel |
| ENGL 2410 | Contemporary American Literature |
| ENGL 2440 | The Modern Bestseller |
| ENGL 2600 | Irish Literary Culture (Abroad) <br> ENGL 2610 <br> ENGLemporary Israeli Literature and Art <br> (Abroad) |
| ENGL 3730 | Literature |

Theories and Methods
Complete one of the following:

| ENGL 1140 | Grammar: The Architecture of English |
| :--- | :--- |
| ENGL 1160 | Introduction to Rhetoric |
| ENGL 1410 | Introduction to Writing Studies |
| 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 |
| ENGL 3700 | Writing |
| ENGL 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and |
| LING 2350 | Linguistics |
| 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 1120 | Trouble in Utopia |
| :--- | :--- |
| ENGL 1130 | Animals, Objects, Humans |
| ENGL 1450 | Reading and Writing in the Digital Age |
| ENGL 1500 | British Literature to 1800 |
| ENGL 1502 | American Literature to 1865 |
| ENGL 1503 | American Literature 1865 to Present |
| ENGL 2150 | Literature and Digital Diversity |
| ENGL 2370 | The Modern Short Story |
| ENGL 2380 | The Modern Novel |
| ENGL 2400 | Modern Poetry |
| ENGL 2420 | Contemporary Poetry |
| ENGL 2430 | Contemporary Fiction |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |


| ENGL 2455 | American Women Writers |
| :--- | :--- |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2510 | Horror Fiction |
| ENGL 2520 | Science Fiction |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2620 | What Is Nature? (Abroad) |
| ENGL 2690 | Boston in Literature |
| ENGL 3427 | The Literature of Science |
| ENGL 3487 | Film and Text (Abroad) |
| ENGL 3582 | Children's Literature |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in <br> ENGL 4iterature |
| Writing | Topics in Genre |

Complete one of the following: 4
ENGL $2700 \quad$ Creative Writing

ENGL $2710 \quad$ Style and Editing
ENGL 2730 Digital Writing
ENGL $2740 \quad$ Writing and Community Engagement

| ENGL 2760 | Writing in Global Contexts |
| :--- | :--- |
| ENGL 2770 | Writing to Heal |

ENGL $2780 \quad$ Visual Writing: Writing Visual

| 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 Topics in Writing
ENGL $3382 \quad$ Publishing in the 21 st Century
ENGL 3384 The Writer's Marketplace

## Capstone

ENGL $4710 \quad$ Capstone Seminar 4
or ENGL $4720 \quad$ Capstone Project

## English Electives

Complete two additional ENGL electives.
8

## Integrative Requirement

Code Title Hours

## Required Integrative Course

ENGL $4400 \quad$ Opening the Archive 4

## Experiential Learning Requirement

The History Seminar (HIST 2301) fulfills the university'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 |  | HIST elective or integrative 1 | 4 | Vacation |  | Vacation |  |
| HIST 1200 |  | HIST elective or integrative 2 | 4 |  |  |  |  |
| HIST 1201 |  | ENGL 1160 or 1410 | 4 |  |  |  |  |
| ENGW 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 <br> elective or integrative 3 | 4 | Vacation |  | Co-op |  |
| HIST 2302 | 1 | HIST <br> elective or integrative 4 | 4 |  |  |  |  |
| Pre-19thcentury ENGL | 4 | 19th-, 20th-, or 21 stcentury ENGL | 4 |  |  |  |  |
| ENGL <br> theory/ methods | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 0 |  | 0 |

Year 3


Year 4

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours | History Requirements |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | HIST | 4 Elective | $4 \text { Co-op }$ |  | Code | Title | Hours |
|  |  | elective or |  |  |  | History Colloquium |  |  |
|  |  | integrative 6 |  |  |  | HIST 1000 | History at Northeastern | 1 |
|  |  | ENGL diversity | 4 Elective | 4 |  | HIST 1200 | Historical Research and Writing | 1 |
|  |  |  |  |  |  | HIST 1201 | First-Year Seminar | 4 |
|  |  | Elective | 4 |  |  | Introductory Level |  |  |
|  |  | Elective | 4 |  |  | Choose one course from the 1000 level. |  | 4 |
|  | 0 |  | 16 | 8 | 0 | History Seminar and Historical Writing |  |  |
|  |  |  |  |  |  | HIST 2301 | The History Seminar | 4 |
|  |  |  |  |  |  | HIST 2302 | Historical Writing | 1 |
|  |  |  |  |  |  | Pre-1800 History Ele | tive |  |

Choose one course from the following:

| HIST 2390 | Africa and the World in Early Times |
| :--- | :--- |
| HIST 1218 | Pirates, Planters, and Patriots: Making <br> the Americas, 1492-1804 |
| HIST 1252 | Japanese Literature and Culture |
| HIST 1270 | Ancient Greece |
| HIST 1271 | Ancient Rome |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 2330 | Colonial and Revolutionary America |

## Advanced History

Complete one history course 3000 level or above
History Capstone Seminar or Senior Project
HIST $4701 \quad$ Capstone Seminar
Public history concentrators may also select from the following:
HIST $4903 \quad$ Fieldwork in History 1

## Philosophy Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Philosophy Required Courses |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL 2325 | Ancient Philosophy and Political Thought | 4 |
| or POLS 2325 | Ancient Philosophy and Political Th |  |
| PHIL 2330 | Modern Philosophy | 4 |
| Intermediate/Advanced Electives |  |  |
| Complete three of the following with at least one course at the 4000 or 5000 level: |  | 8 |
| PHIL 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Additional Electives |  |  |
| Complete three ad | ional PHIL courses. | 8 |

## Integrative Courses

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Complete one of the following: | 4 |


| PHIL 2395 | Japanese Buddhism |
| :--- | :--- |
| HIST 2308 | Law, Justice, and Society in Modern |
|  | China |

4 History and Philosophy Combined-Major Credit Requirement
Complete 85 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## 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.

## History Major 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 from HIST 1001 to HIST 19994
History Seminar and Historical Writing
HIST 2301 The History Seminar 4
HIST 2302 Historical Writing 1

Pre-1800 History Elective
Complete one of the following:

| HIST 1218 | Pirates, Planters, and Patriots: Making <br> the Americas, 1492-1804 |
| :--- | :--- |
| HIST 1252 | Japanese Literature and Culture |
| HIST 1270 | Ancient Greece |
| HIST 1271 | Ancient Rome |
| HIST 1285 | Introduction to Russian Civilization |

HIST $2330 \quad$ Colonial and Revolutionary America
Intermediate/Advanced History Cluster
Complete three HIST courses numbered 2300 or above.
Cluster is subject to department approval.
Advanced History
Complete one HIST course numbered 3000 or above.
Political Science Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Political Science Foundation Courses |  |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 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 numbered 2300 or above. | 12 |

## 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 |
| Integrative Course |  |  |
| Complete one of | 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 |  |
| HIST 3800 | American Conservatism from the New Deal to the Present |  |
| Capstone |  |  |
| Complete one take HIST 4903 | following. (Public History concentrations T 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 <br> Complete 78 semester hours in the major. <br> Program Requirements <br> 128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

History Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| History Colloquium |  |  |
| HIST 1000 | History at Northeastern | 1 |
| HIST 1200 | Historical Research and Writing | 1 |
| HIST 1201 | First-Year Seminar | 4 |
| Introductory Level |  |  |
| Choose one 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 |  |  |
| Choose one course from the following: |  | 4 |
| HIST 2390 | Africa and the World in Early Times |  |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |  |
| HIST 1252 | Japanese Literature and Culture |  |
| HIST 1270 | Ancient Greece |  |
| HIST 1271 | Ancient Rome |  |
| HIST 1285 | Introduction to Russian Civilization |  |
| HIST 2330 | Colonial and Revolutionary America |  |

Intermediate/Advanced History Cluster
Complete (3) History courses numbered 2303 or above. 12
Cluster is subject to Department approval.

## Advanced History

Complete one history course 3000 level or above

## Religious Studies Requirements

| Code <br> Comparative Religion | Hours |
| :--- | :--- | ---: |
| Complete two of the following: |  |$\quad 8$

## Ancient Mediterranean and African World Traditions

| Complete one of the following: |  |
| :--- | :--- |
| PHIL 1120 | Understanding the Bible |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam <br> PHIL 1280 <br> Encountering Islam: Traditions, <br> Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| or JWSS 1285 | Jewish Religion and Culture |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from <br> the Zohar to Madonna |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 3410 | Religion and Spirituality in the African <br> Diaspora |
| PHIL 4390 | Cults and Sects |

Asian Traditions
Complete one of the following: 4

| PHIL 1272 | Ethics in the World's Religions |
| :--- | :--- |
| PHIL 1276 | Indian Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2100 | The Religious Worlds of Boston: Faith <br> and Devotion in Urban Life |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4545 | Religion and Politics in South Asia |


| Religion and Culture |
| :--- |
| Complete one of the following: |


| Complete one of the following: |  |
| :---: | :--- |
| PHIL 1220 | The Meaning of Death |
| PHIL 1230 | Sound, Music, and Religion |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1285 | Jewish Religion and Culture |
| or JWSS 1285 | Jewish Religion and Culture |
| PHIL 2100 | The Religious Worlds of Boston: Faith <br> and Devotion in Urban Life |
| PHIL 2316 | Interpreting the Bible |

PHIL $4390 \quad$ Cults and Sects

| WMNS 1103 | Introduction to Women's, Gender, and |
| :--- | :--- |
|  | Sexuality Studies |

## Ethics

Complete one of the following:

| PHIL 1130 | Ethics: East and West |
| :--- | :--- |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 4606 | Seminar. Theories and Methods in <br> Religious Studies |
| PHIL 5001 | Global Justice |

## Religious Studies Electives

Complete three of the following, two of which must be
numbered above 2000:

| PHIL 1104 | Goddesses, Witches, Saints, and Sinners: Women in Western Religions |
| :---: | :---: |
| PHIL 1110 | Introduction to Religion |
| PHIL 1120 | Understanding the Bible |
| PHIL 1130 | Ethics: East and West |
| PHIL 1220 | The Meaning of Death |
| PHIL 1230 | Sound, Music, and Religion |
| PHIL 1231 | Image and Icon in South Asia |
| PHIL 1250 | Jesus in the Gospels, American Culture, and the Movies |
| PHIL 1260 | Apocalypticism in Film |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 1273 | Jainism |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1286 | American Judaism |
| PHIL 1287 | Modern Judaism |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 1295 | Religious Perspectives on Health and Healing |
| PHIL 1410 | From Vodou and the Rastas to AfroIslam: African Religions in the Americas |
| PHIL 1666 | The Problem of Evil in Film |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |


| PHIL 2398 | Religion and Culture in Indian Cinema |
| :---: | :---: |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 4992 | Directed Study |
| PHIL 5011 | Comparative Religious Ethics |

## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Capstone |  | $4-8$ |
| Choose one of the following options. Public History |  |  |

concentrators should take HIST 4903 and HIST 4904

| HIST 4701 | Capstone Seminar |  |
| :---: | :---: | :---: |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4393 | Asian Religions in the United States |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4545 | Religion and Politics in South Asia |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4904 | Major Figures in Religious Studies |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Public History: |  |  |
| HIST 4903 and HIST 4904 | Fieldwork in History 1 and |  |
| Integrative Course |  |  |
| Complete one of the following courses: |  | 4 |
| HIST 2370 | Renaissance to Enlightenment |  |
| PHIL 2395 | Japanese Buddhism |  |
| PHIL 4390 | Cults and Sects |  |

## History and Religious Studies Combined-Major Credit Requirement

Complete 78 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

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 |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| MSCR 1000 | Media and Screen Studies at <br>  <br> Northeastern | 1 |

Introduction to Media Studies
MSCR $1220 \quad$ Media, Culture, and Society 4
Introduction to Screen Theory
MSCR $2220 \quad$ Understanding Media and Film 4

Advanced Theory
MSCR 4623 Theories of Media and Culture 4

Media and Screen Electives
Complete four courses from the following: 16
CINE 2160 Narrative Filmmaking
CINE 2336 American Film and Culture
CINE 3446 Topics in Documentary Production
MSCR 1230 Introduction to Film Production

| MSCR 2302 | Advertising and Promotional Culture |  |
| :---: | :---: | :---: |
| MSCR 2325 | Global Media |  |
| MSCR 2895 | Film Analysis |  |
| MSCR 3210 | Special Topics in Media and Screen Studies |  |
| MSCR 3422 | Media Audiences |  |
| MSCR 3420 | Digital Media Culture |  |
| MSCR 3426 | Popular Music as Media Form |  |
| MSCR 3435 | Media Industries |  |
| MSCR 3437 | Media and Identity |  |
| Advanced Media and Screen Electives |  |  |
| Complete two courses from the following: |  | 8 |
| CINE 3389 | Screenwriting |  |
| CINE 3392 | Gender and Film |  |
| CINE 3500 | Film Theory |  |
| CINE 3920 | Topics in Film Studies |  |
| MSCR 4208 | TV History |  |
| MSCR 4602 | Media and Democracy |  |
| MSCR 4622 | Special Topics in Media and Screen Studies |  |
| MSCR 4992 | Directed Study |  |
| MSCR 4993 | Independent Study |  |


| 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: 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:

| HIST 1218 | Pirates, Planters, and Patriots: Making <br> the Americas, 1492-1804 |
| :--- | :--- |
| HIST 1252 | Japanese Literature and Culture |
| HIST 1270 | Ancient Greece |
| HIST 1271 | Ancient Rome |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 2330 | Colonial and Revolutionary America |


| Intermediate/Advanced History Cluster |
| :--- |
| Complete three courses in the following range: |

HIST 2303-HIST 5999
Advanced History
Complete one course in the following range:
HIST 3000-HIST 5999
HIST $4701 \quad$ Capstone Seminar
Capstone

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| HIST 1279 | History of the American Film Industry | 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

130 total semester hours required

## Plan of Study

| Year 1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| MSCR 1000 | 1 | MSCR 2220 | 4 | Elective | 4 | Vacation |  |
| MSCR 1220 | 4 | MSCR <br> elective | 4 | Elective | 4 |  |  |
| HIST 1200 | 1 | Intro-level HIST course | 4 |  |  |  |  |
| HIST 1201 | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |  |
|  | 18 |  | 16 |  | 8 |  | 0 |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| MSCR <br> elective | 4 Co-op | Co-op | Elective | 4 |
| MSCR <br> elective | 4 |  | Elective | 4 |
| HIST 2301 | 4 |  |  |  |
| HIST 2302 | 1 |  |  |  |
| Elective | 4 |  |  | 8 |
| EEAM 2000 | 1 | 0 | 0 |  |
|  | 18 |  |  |  |

## Year 3

\(\left.\begin{array}{lcccc}Fall \& Hours Spring \& Hours Summer 1 \& Hours Summer 2 \& Hours <br>
\begin{array}{l}MSCR <br>

elective\end{array} \& 4 Co-op\end{array} \quad $$
\begin{array}{l}\text { Vacation }\end{array}
$$\right]\)| Pre-1800 |
| :--- |
| history <br> elective |
| Intermediate/ <br> advanced |
| history <br> elective 1 |
| Elective |

## Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Advanced | 4 | Advanced | 4 | Vacation |  | Vacation | 0 |
| MSCR |  | MSCR |  |  |  |  |  |
| elective |  | elective |  |  |  |  |  |
| Intermediate/ advanced history elective 2 |  | Intermediate/ <br> advanced <br> history <br> elective 3 | 4 |  |  |  |  |


| Elective | 4 Advanced <br> history <br> elective | 4 |  |  |
| :--- | ---: | ---: | ---: | ---: |
| HIST 1279 | 4 Elective | 4 | 0 | 0 |
| Year 5 | 16 | 16 |  |  |
| Fall | Hours |  |  |  |
| MSCR 4623 | 4 |  |  |  |
| HIST <br> capstone | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## History Major Requirements

| Code <br> Introductory History | Title | Hours |
| :--- | :--- | ---: |
| 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 1120 | Public History, Public Memory |  |
| HIST 1130 | Introduction to the History of the United |  |
| HIST 1150 | States |  |


| 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 1228 | Americans in the World: Trade, Travel, and Diplomacy |
| HIST 1246 | World War II in the Pacific |
| AFAM 1140 | Introduction to African-American History |
| 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 |

## 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.

## Additional History Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Pre-1800 Course |  |  |
| This course may count toward the history cluster or history elective. |  |  |
| Complete one | following: | 4 |
| HIST 2390 | Africa and the World in Early Times |  |
| HIST 1252 | Japanese Literature and Culture |  |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |  |
| HIST 1270 | Ancient Greece |  |
| HIST 1271 | Ancient Rome |  |
| 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, <br> 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 2214 | War in the Modern World |
| HIST 2311 | Colonialism/Imperialism |


| HIST 2351 | Modern Japan |
| :---: | :---: |
| HIST 2390 | Africa and the World in Early Times |
| HIST 4691 | Topics in Middle Eastern History |
| Capstone or Project |  |
| Requirement for Non-Public History Concentrators |  |
| HIST 4701 | Capstone Seminar 4 |
| Requirement for Public History Concentrators |  |
| Public history concentrators satisfy this requirement within the concentration. |  |
| Intermediate/Advanced History Course Requirement |  |
| A minimum of numbered 2303 cluster. | ourses from the above requirements must be her. These courses may count toward the history |

## Optional Public History Concentration

Note:Public History, Public Memory (HIST 1120) is a prerequisite for Fieldwork in History 1 (HIST 4903) and (HIST 4904).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Public History Courses |  |  |
| HIST 1120 | Public History, Public Memory | 4 |
| HIST 4903 | Fieldwork in History 1 | 4 |
| HIST 4904 |  | 4 |
| Graduate Public History Course |  |  |
| Complete one graduate-level course in public history. See history faculty advisor for an approved list. |  | 4 |
| Supporting Course |  |  |
| Code | Title | Hours |
| Research Methods |  |  |
| 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.

## 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 1000 | 1 HIST 1130 | 4 Vacation | 0 | Vacation |$\quad 0$

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Research <br> methods <br> course | 4 Elective | 4 Vacation | 0 Co-op | 0 |
| Pre-1800 <br> or history <br> elective | 4 Pre-1800 <br> or history <br> elective | 4 |  |  |
| History <br> elective | 4 History <br> cluster <br> course | 4 | 4 Elective | 4 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 HIST 2301 | 4 Minor or free <br> elective | 4 Co-op | 0 |
|  | HIST 2302 | 1 Minor or free <br> elective | 4 |  |
| History <br> cluster <br> course <br> Upper- <br> division <br> elective | 4 | 4 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 History <br> cluster <br> course | 4 History <br> cluster <br> course | 4 Co-op | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 HIST 4701 | 4 |
|  | Upper- <br> division <br> or minor <br> elective | 4 |
|  | Minor or free <br> elective | 4 |
| Minor or free <br> elective | 4 |  |
| Total Hours: 131 | 0 | 16 |

## 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 HIST 1110 | 4 |  |  |
| HIST 1200 | 1 Foreign <br> language <br> course | 4 |  | 0 |
| HIST 1201 | 4 | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Research methods course | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Pre-1800 or history elective | 4 |  | Elective | 4 |
| History elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |


| Year 3 |  |  | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | :---: | ---: | | Hours |
| ---: |
| Fall |
| Pre-1800 <br> or history <br> elective |
| History <br> cluster <br> course |
| Elective |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| HIST 2301 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| HIST 2302 | 1 |  |  |  |
| History <br> cluster <br> course | 4 |  |  |  |
| Upper- <br> division <br> or minor <br> elective | 4 |  |  |  |
| Upper- <br> division <br> elective | 4 | 0 | 0 | 0 |

## Year 5

Fall Hours Spring Hours

History
cluster
course

| Upper- <br> division <br> elective | 4 |  |  |
| :--- | :--- | :--- | :--- |
| Minor or free <br> elective | 4 | 8 | 0 |

Year 5


Total Hours: 130

## 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 HIST 1110 | 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 |
| :---: | :---: | :---: | :---: | :---: |
| Research methods course | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Pre-1800 or history elective | 4 |  | Elective | 4 |
| Public <br> history <br> elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |


| Year 3 |  |  | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | :---: | ---: | Hours

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| HIST 2301 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| HIST 2302 | 1 |  |  |  |


| History cluster course | 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HIST 4903 | 4 |  |  |  |  |
| Minor or free elective | 4 |  |  |  |  |
|  | 17 |  | 0 | 0 | 0 |
| Year 5 |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |
| History cluster course | 4 | HIST 4701 | 4 |  |  |
| HIST 4904 |  | HIST <br> graduate elective | 4 |  |  |
| Minor or free elective | 4 | Minor or free elective | 4 |  |  |
| Minor or free elective |  | Minor or free elective | 4 |  |  |
|  | 16 |  | 16 |  |  |
| Total Hours: 130 |  |  |  |  |  |
| 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

## Computer Science Fundamental Courses

A grade of C - or higher is required in computer science fundamental courses:

| CS 1800 and CS 1802 | Discrete Structures and Seminar for CS 1800 | 5 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | Fundamentals of Computer Science 1 and Lab for CS 2500 | 5 |
| $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 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 | Object-Oriented Design | 4 |
| IS 2000 | Principles of Information Science | 4 |
| Presentation Requirement |  |  |
| THTR 1170 | The Eloquent Presenter | 1 |
| Computer Science Elective Courses |  |  |
| 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, IS, or DS courses that are not already required. Choose courses within the following ranges: |  | 16 |
| CS 2500 or higher, except CS 5010 |  |  |
| IS 2000 or higher, except IS 4900 |  |  |
| DS 2000 or higher, except DS 4900 |  |  |

## History Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| History Required Courses |  |  |
| HIST 1200 | Historical Research and Writing | 1 |
| HIST 1201 | First-Year Seminar | 4 |
| HIST 2301 | The History Seminar | 4 |
| HIST 2302 | Historical Writing | 1 |
| History Electives |  | 4 |


| AFAM 1140 | Introduction to African-American History |  |
| :---: | :---: | :---: |
| 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 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 |  |
| 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 1270 | Ancient Greece |  |
| HIST 1271 | Ancient Rome |  |
| HIST 1285 | Introduction to Russian Civilization |  |


| HIST 1389 | History of Espionage 1: Antiquity World War II |  |
| :---: | :---: | :---: |
| HIST 2330 | Colonial and Revolutionary Amer |  |
| Complete three intermediate/advanced-level courses: |  | 12 |
| Select from any HIST course numbered 2303 or above. |  |  |
| 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 |  |
| Public history concentrators may also select from the following: |  |  |
| HIST 4903 | Fieldwork in History 1 |  |

## Cluster Requirement

Note: Four of the six courses chosen as history electives must create a history cluster of related courses. The history cluster is subject to department approval.

## Integrative Course Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| HIST 2211 | The World Since 1945 | 4 |

## Supporting Courses

Code Title Hours
Research Methods

| Complete one | from the following: | 4 |
| :---: | :---: | :---: |
| ECON 2350 | Statistics |  |
| POLS 2400 | Quantitative Techniques |  |
| PSYC 2320 | Statistics in Psychological Research |  |
| SOCL 2320 | Statistical Analysis in Sociology |  |
| ENVR 3300 | Geographic Information Systems |  |
| ENVR 5260 | Geographical Information Systems |  |
| Computing and Social Issues |  |  |
| Complete one | ollowing: | 4 |


| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| :--- | :--- |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital <br> Rights |
| INSH 2102 | Bostonography: The City through Data, <br> Texts, Maps, and Networks |
| PHIL 1145 | Technology and Human Values |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 4528 | Computers and Society |

## Computer Science Writing Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| College Writing |  |  |
| ENGW 1111 | First-Year Writing | 4 |
| or ENGW 1102 | First-Year Writing for Multilingual Writers |  |

## 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 eight general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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.

## Program Requirement

135 total semester hours required

## Plan of Study

## Sample Patterns:

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

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | IS 2000 | 4 | Elective | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | CS 3200 | 4 |  |  |  |  |
| ENGW 1111 |  | Introductory history elective | 4 |  |  |  |  |
| HIST 1200 | 1 |  |  |  |  |  |  |
| HIST 1201 | 4 |  |  |  |  |  |  |
|  | 20 |  | 17 |  | 8 |  | 0 |


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 |  | Hours


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | CS elective 2 | 4 Elective | 4 Co-op |  |


|  |  | Intermediate history elective 3 | 4 | Elective | 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Advanced history elective | 4 |  |  |  |
|  |  | Computing and social issues | 4 |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |
|  | 0 |  | 17 |  | 8 | 0 |
| Year 4 |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours |  |
| Co-op |  | CS elective 3 | 4 | Elective | 4 |  |
|  |  | History capstone seminar or senior project | 4 | Elective | 4 |  |
|  |  | History integrative requirement | 4 |  |  |  |
|  |  | CS elective 4 | 4 |  |  |  |
|  | 0 |  | 16 |  | 8 |  |

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | CS 3200 | 4 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | IS 2000 | 4 |  |  |  |  |
| ENGW 1111 |  | Introductory history elective | 4 |  |  |  |  |
| HIST 1200 | 1 |  |  |  |  |  |  |
| HIST 1201 | 4 |  |  |  |  |  |  |
|  | 20 |  | 17 |  | 0 |  | 0 |

Year 2
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \begin{array}{c}\text { Hours Summer 1 } \\ \text { CS } 1210\end{array} & 1 \text { Co-op }\end{array} \quad \begin{array}{c}\text { Hours Summer 2 } \\ \text { Vacation }\end{array}\right]$ Hours

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| History | 4 Co-op | Co-op | Elective | 4 |
| Pre-1800 |  |  |  |  |
| elective |  |  |  |  |


| Intermediate <br> history elective 1 | 4 |  |  | Elective |  | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Elective | 4 |  |  |  |  |  |
| CS elective 1 | 4 |  |  |  |  |  |
| THTR 1170 | 1 |  |  |  |  |  |
|  | 17 | 0 |  | 0 |  | 8 |
| Year 4 |  |  |  |  |  |  |
| Fall | Hours Spring | Hours | Summer 1 <br> Co-op | Hours | Summer 2 <br> Elective | Hours |
| CS elective 2 | 4 Co-op |  |  |  |  | 4 |
| Intermediate <br> history elective 2 | 4 |  |  |  | Elective | 4 |
| Computing and social issues | 4 |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |
|  | 16 | 0 |  | 0 |  | 8 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| CS elective 3 | 4 CS elective 4 | 4 |
| Intermediate <br> history <br> elective 3 | 4 Advanced <br> history <br> elective | 4 |
| Elective | 4 <br> History <br> capstone <br> seminar <br> or senior <br> project <br> 4 | 4 |
| Elective | History <br> integrative <br> requirement | 4 |
| 16 | 16 |  |

Total Hours: 136

## 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: Simply complete five history courses ( 20 semester hours), of which at least two must be above the 1200 level and must be taken at Northeastern. Students are encouraged to choose a cluster of courses around a particular theme, though this is not required. 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 1200 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 (http://www.northeastern.edu/humanservices)

## Lori Gardinier, PhD

Director, Human Services Program
310 Renaissance Park
617.373 .5918
617.373 .7905 (fax)

Lori Gardinier, Director, I.gardinier@northeastern.edu
The human services major prepares students for careers in social change by providing 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 individual and structural levels. Students engage in an integrated educational program that emphasizes experiential approaches to learning through servicelearning, 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. All students declare a specialization within the major that reflects their particular focus in the field. Human services specializations include applied behavioral analysis, Deaf studies (BA only), family and children's services, identity and social change, psychology/counseling psychology, and social justice and social policy. Additionally, students may have a specific area of interest not currently reflected in the offered specialization. In such cases, students are invited to submit an independent specialization for approval by the program director.

## Prepared Specializations

- Applied behavior analysis
- Deaf studies
- Family and children's services
- Identity and social change
- Psychology/counseling psychology
- Social justice and social policy
- Customized specialization


## Academic Progression Standards

After four semesters, students must maintain a minimum 2.000 gradepoint average (GPA), have earned at least 64 semester hours, and should have completed the following courses:

| Code | Title | Hours |
| :--- | :--- | ---: |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3700 | Research Methods for Human Services | 4 |
| HUSV 3900 | Introduction to Social Policy | 4 |

An approved organizations course
At least one specialization course (see advisor)
In order to take Human Services Internship (HUSV 4994), students must have permission from the internship coordinator at least one semester prior to the semester they wish to take the internship course. Internship should be taken either the spring semester of a student's junior year or the fall semester of a student's senior year.

## Programs

Bachelor of Arts (BA)

- Human Services (p. 751)
- Human Services and Communication Studies (p. 130)
- Human Services and International Affairs (p. 753)
- Human Services and Sociology (p. 758)
- Political Science and Human Services (p. 757)


## Bachelor of Science (BS)

- Human Services (p. 759)
- Human Services and Criminal Justice (p. 646)
- Human Services and Sociology (p. 767)
- American Sign Language and Human Services (p. 661)
- Political Science and Human Services (p. 766)


## Minor

- Human Services (p. 768)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 944)

## 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. Human services specializations include applied behavioral analysis, Deaf studies (BA only), family and children's services, identity and social change, psychology/counseling psychology, and social justice and social policy. Additionally, students may have a specific area of interest not currently reflected in the offered specialization. In such cases, students are invited to submit an independent specialization for approval by the program director.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
Human Services Major Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Human Services Overview |  |  |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and Social Change | 4 |
| Research |  |  |
| HUSV 3700 | Research Methods for Human Services | 4 |
| Policy |  |  |
| HUSV 3900 | Introduction to Social Policy | 4 |
| Organization |  |  |
| SOCL 3440 | Sociology of Human Service Organizations | 4 |

Human Services and Diverse Populations
Complete one of the following: 4

| HUSV 2350 | Ethnic Relations, Cultural Identity, and |
| :--- | :--- |
| HUSV 2800 | Sexan Services |
| SUSV Orientation and Gender |  |
| Expression in Practice and Policy |  |
|  | Intercultural Studies through Human |


| Human Services Electives | 8 |
| :--- | :--- |
| Complete two HUSV courses. |  |
| Senior Seminar and Internship | 4 |
| HUSV 4700 | Senior Seminar in Human Services |
| HUSV 4994 | Human Services Internship |

## Human Services Specialization for BA Degree

Complete one of the specializations listed below.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Specialization in Deaf Studies |  |  |
| AMSL 1101 | Elementary ASL 1 (normally taken as part of the BA core) | 4 |
| AMSL 1102 | Elementary ASL 2 (normally taken as part of the BA core) | 4 |
| AMSL 2101 | Intermediate ASL 1 | 4 |
| AMSL 2102 | Intermediate ASL 2 | 4 |
| DEAF 1500 | Deaf People in Society | 4 |

Specialization in Family and Children's Services
Required
HUSV $3520 \quad$ Child Intervention and Treatment 4
PSYC $1101 \quad$ Foundations of Psychology 4
or SOCL 1101 Introduction to Sociology
Elective
Complete one of the following:
4
CAEP 5150 Early Intervention: Family Systems
CAEP 5152 Early Intervention: Planning and Evaluating Services
PSYC 3404 Developmental Psychology

| PSYC 3451 | Learning Principles and Behavior <br> Analysis |
| :--- | :--- |
| SOCL 1255 | Sociology of the Family |
| SOCL 1260 | Gender in a Changing Society |
| SOCL 1290 | Juvenile Delinquency |

Specialization in Psychology/Counseling Psychology
Required

| HUSV 2320 | Techniques in Individual and Group Counseling in Human Services |
| :---: | :---: |
| HUSV 3540 | Services and Treatments for Chemical Dependencies |
| or HUSV 3580 | Sexual Violence: Counseling, Programs, and Policy |
| Elective |  |
| Complete one of the following: 4 |  |
| CAEP 3480 | Counseling Theories and Practice |
| CAEP 3485 | Mental Health and Counseling |
| COMM 4535 | Nonverbal Social Interaction |
| HLTH 5002 | Mindfulness: Theory and Practice |
| HUSV 2800 | Sexual Orientation and Gender Expression in Practice and Policy |
| PHIL 1165 | Moral and Social Problems in Healthcare |
| PSYC 1101 | Foundations of Psychology |
| PSYC 3400 | Personality |
| PSYC 3404 | Developmental Psychology |
| PSYC 3406 | Abnormal Psychology |
| NRSG 1205 | Wellness |
| SOCL 3441 | Sociology of Health and Illness |


| Specialization in Social Justice and Social Policy |  |
| :--- | ---: |
| Required | 4 |
| COMM 4603 | 4 |
| POLS 2385 | 4 |
| Elective | 4 |
| Complete one of the following: | 4 |


| COMM 1412 | Social Movement Communication |
| :---: | :--- |
| ECON 1240 | Economics of Crime |
| HUSV 2800 | Sexual Orientation and Gender <br> Expression in Practice and Policy |
| LPSC 2302 | Global Human Rights: A Social and <br> Economic Perspective |
| POLS 3307 | Public Policy and Administration |
| SOCL 1246 | Environment and Society |
| SOCL 2270 | Race and Ethnic Relations |
| Specialization in Identity and Social Change |  |
| Required | Ethnic Relations, Cultural Identity, and <br> HUSV 2350 |
| Human Services | 4 |
| Sexual Orientation and Gender 2800 | Expression in Practice and Policy |


| ASNS 2245 | The Asian-American Experience |
| :--- | :--- |
| ENTR 3212 | Innovation for Social Change |
| COMM 3610 | Communication, Politics, and Social <br> Change |


| EDUC 5503 | Culture, Equity, Power, and Influence |
| :--- | :--- |
| PHIL 1110 | Introduction to Religion |
| PHIL 1285 | Jewish Religion and Culture |
| POLS 2370 | Religion and Politics |
| SOCL 1260 | Gender in a Changing Society |
| WMNS 1101 | Sex, Gender, and Popular Culture |
| WMNS 1103 | Introduction to Women's, Gender, and <br>  <br> Wexuality Studies |
| WMNS 2480 Women and World Politics <br> Specialization in Applied Behavior Analysis Gender, Social Justice, and <br> PSYC 1101 Foundations of Psychology <br> PSYC 3358 Behavior Therapies <br> PSYC 3450 Learning and Motivation <br> PSYC 4654 Seminar in Behavioral Modification |  |

Independent Specialization
With approval from the program director, an independent
specialization, consisting of three courses, may be defined in consultation with your advisor.

## Human Services Major Credit Requirement

Complete 58 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 |
| HUSV 1000 | 1 | HUSV 2300 | 4 Vacation | 0 Vacation | 0 |
| HUSV 1101 | 4 | HSVC elective | 4 |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |
| MATH 1215 | 4 | Elective | 4 |  |  |
| Elective | 4 |  |  |  |  |
|  | 17 |  | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| HSVC <br> specialization | HSVC <br> organization <br> course | 4 Vacation | 0 Co-op | 0 |
| HSVC <br> elective | 4 Foreign <br> language <br> core course | 4 |  |  |
| Foreign <br> language <br> core course | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 | 0 | 0 |
|  | EESH 2000 | 1 | 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 |
|  | HUSV 3700 | 4 Elective | 4 |  |



Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | HUSV 4994 | 6 | HSVC <br> specialization | 4 | Co-op | 0 |
|  |  | HUSV 3900 | 4 | Elective | 4 |  |  |
|  |  | HSVC <br> specialization | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 18 |  | 8 |  | 0 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 HUSV 4700 | 4 |
|  | HSVC | 4 |
|  | elective |  |
|  | Elective | 4 |
|  | Elective | 4 |
|  | 0 | 16 |

Total Hours: 132

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

| Year 1 |  |  | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | :---: | ---: | Hours

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| HSVC <br> specialization | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| HSVC <br> elective | 4 |  | Elective | 4 |
| Foreign <br> language <br> core course | 4 |  |  |  |
| Elective | 4 |  |  |  |
| EESH 2000 | 1 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| HSVC | 4 Co-op | 0 Co-op | 0 HSVC | 4 |
| organization |  |  | specialization |  |


| Foreign <br> language <br> core course | 4 | Elective | 4 |
| :--- | :--- | :--- | :--- |
| Elective | 4 |  |  |
| HSVC <br> diverse <br> population <br> course | 4 |  |  |
|  | 16 | 0 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 3315 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| HUSV 3700 | 4 |  |  |  |
| HSVC <br> specialization | 4 |  |  |  |
| HSVC <br> elective | 4 |  |  | 0 |
|  | 16 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| HUSV 4994 | 6 HUSV 4700 | 4 |
| HUSV 3900 | 4 Elective | 4 |
| Foreign <br> language <br> core course | 4 Elective | 4 |
| Elective | 4 Elective | 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 nongovernment 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

Human Services Requirements
Code
Code Title Hours

## Required Courses

| HUSV 1101 | Human Services Professions | 4 |
| :--- | :--- | :---: |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and | 4 |
|  | Social Change |  |

Research Methods

| HUSV 3700 | Research Methods for Human Services | 4 |
| :--- | :--- | :---: |
| Policy | Introduction to Social Policy | 4 |
| HUSV 3900 | Sociology of Human Service <br> Organization | 4 |
| SOCL 3440 | Organizations |  |

## Internship

HUSV 4994
Human Services Internship
6
Human Services Electives
Complete two HUSV courses.

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| INTL 1101 | Globalization and International Affairs | 4 |
| INTL 3400 | International Conflict and Negotiation | 4 |
| POLS 1160 | International Relations | 4 |
| ECON 1115 <br> or ECON 1116 <br> or HIST 2211 | Principles of Macroeconomics <br> Principles of Microeconomics <br> The World Since 1945 | 4 |
| Global Dynamics |  |  |
| 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 major requirements. |  | 8 |
| Environment |  |  |
| ENVR 1110 | Global Climate Change |  |
| ENVR 4515 | Sustainable Development |  |
| SOCL 1246 | Environment and Society |  |
| Law, Diplomacy, and Global Governance |  |  |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |  |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |  |
| COMM 2303 | Global and Intercultural Communication |  |
| POLS 1155 | Comparative Politics |  |
| POLS 1160 | International Relations |  |
| POLS 2370 | Religion and Politics |  |


| POLS 3405 | International Political Economy |
| :---: | :---: |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |
| Human Rights and Social Justice |  |
| INTL 2400 | Politics of Islam and Gender |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| 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 |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| Globalization |  |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 |
| POLS 3407 | International Organizations |


| SOCL 3465 | Globalization and the Evolution of Human Societies | AFRS 2307 | Africa Today |
| :---: | :---: | :---: | :---: |
|  |  | AFRS 2465 | The Scope and Dynamics of Conflicts in Africa |
| Population, Migration, and Diaspora |  |  |  |
| INTL 2240 | Global Population and Development | AFRS 2900 | Swahili, Culture, and Politics in Kenya |
| INTL 2400 | Politics of Islam and Gender | AFRS 3460 | Contemporary Government and Politics |
| INTL 3200 | Cities in a Global Context |  | in Africa |
| AFRS 1185 | Gender in the African Diaspora | AFRS 4939 | Community Health, Culture, and |
| AFRS 3424 | Epidemiology of Pandemic Diseases |  | Development in Kenya |
|  | and Health Disparities in the African | ANTH 4510 | Anthropology of Africa |
|  | Diaspora | ENTR 3308 | Business Economic History of South Africa |
| ANTH 1101 | Peoples and Cultures |  |  |
| ANTH 2350 | Urban Anthropology | HIST 1180 | African History |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 | HIST 2390 | Africa and the World in Early Times |
|  |  | Asia |  |
| PHIL 1270 | Judaism, Christianity, and Islam: | ASNS 1150 or HIST 1150 | East Asian Studies |
|  | Abrahamic Religions |  | East Asian Studies |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam | ANTH 4350 or INTL 4350 | Ethnography of Southeast Asia |
| Development |  |  | Ethnography of Southeast Asia |
| INTL 2240 | Global Population and Development | CLTR 1500 | Modern Chinese History and Culture |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives | CLTR 1506 | Introduction to Chinese Popular Culture |
|  |  | CLTR 1700 | Introduction to Japanese Pop Culture |
| ANTH 2305 | Global Markets and Local Culture | HIST 1246 | World War II in the Pacific |
| $\text { ECON } 3404$ | Development Economics | HIST 1252 | Japanese Literature and Culture |
|  | International Food Economics and Policy | HIST 1253 | History of Vietnam Wars |
|  |  | HIST 1500 | Modern Chinese History and Culture |
| ENTR 2206 | Global Social Enterprise | HIST 2308 | Law, Justice, and Society in Modern China |
| ENVR 4515 | Sustainable Development |  |  |
| INTB 1203 | International Business and Global Social Responsibility | HIST 2351 | Modern Japan |
|  |  | HIST 2360 | History of Capitalism in East Asia |
| or INTB 1209 | International Business and Global Social Responsibility | PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHTH 5230 | Global Health | PHIL 1290 | Chinese Philosophy and Religion |
| POLS 3487 | Politics of Developing Nations | PHIL 2394 | Chinese Buddhism |
| Communication and Media |  |  |  |
|  |  | PHIL 2395 | Japanese Buddhism |
| COMM 2303 | Global and Intercultural Communication | PHIL 4545 | Religion and Politics in South Asia |
| INTB 3310 | Cultural Aspects of International Business | Europe |  |
| JRNL 3300 | Covering Conflicts: Peace, War, and the Media | CLTR 1501 | Introduction to French Culture |
|  |  | CLTR 1503 | Introduction to Italian Culture |
| or INTL 3300 | Covering Conflicts: Peace, War, and the Media | CLTR 1504 | Introduction to Spanish Culture |
| JRNL 5360 | Global Reporting | ECON 1293 | European Economic History |
| MSCR 2325 | Global Media | HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |
| MUSC 1140 | Global Pop Music |  |  |
| International Experiential Learning |  | HIST 2280 | Hitler, Germany, and the Holocaust |
| Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs. |  | HIST 2370 | Renaissance to Enlightenment |
|  |  | HIST 2376 | Britain and the British Empire |
|  |  | HIST 4946 | Independent Field Research Abroad: Central Europe |
| Regional Analysis Requirement |  | POLS 3435 | Politics and Governance of Europe and the European Union |
| 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: |  | Latin America |  |
|  |  | ANTH 4500 or INTL 4500 | Latin American Society and Development <br> Latin American Society and Development |
|  |  | CLTR 1505 | Introduction to Latin American Culture |
|  |  | CLTR 1240 | Latin American Film |


| HIST 1187 | Introduction to Latin American History |
| :---: | :---: |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |
| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| SOCL 1215 | Society and Culture in Russia |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel 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 advisor to obtain approval for a substitute INTL course. Similarly, students wishing to take INTL 4700 but not HUSV 4700 must meet with an HUSV advisor 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 |
| :--- | :--- | ---: |
| Human Services  4 <br> HUSV 4700 Senior Seminar in Human Services 4 <br> International Affairs   <br> INTL 4700 Senior Capstone Seminar in <br> International Affairs In | 4 |  |

## Human Services and International Affairs Combined-Major Credit Requirement

Complete 90 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 | 4 Elective | 4 Vacation | 0 Vacation | 0 |
| ENGW 1111 | 1 Foreign <br> language <br> core course | 4 |  |  |
| INTL 1000 | 4 HUSV 2300 | 4 |  |  |
| INTL 1101 | 4 ECON 1290 | 4 |  | 0 |
| HUSV 1101 | 4 | 16 | 0 |  |
| HSVC |  |  |  |  |


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Elective | 4 Elective | 4 | Vacation | 0 |
| Foreign <br> language <br> core course | 4 HUSV 3700 | 4 |  |  |
| INTL elective | 4 HUSV 3900 | 4 |  |  |
| HSVC <br> elective | 4 EXED 2000 | 1 |  | 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 <br> organization <br> course | 4 |  | 0 |  |
|  | HSVC <br> elective | 4 | 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 |

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 <br> language <br> core course | 4 |  |  |
| INTL 1101 | 4 HUSV 2300 | 4 |  |  |
| HUSV 1101 | 4 ECON 1290 | 4 |  |  |
| HSVC <br> elective | 4 | 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 <br> language <br> core course | 4 |  | INTL elective |  |$\quad 4$

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 3700 | 4 |  |  |  |
| HSVC <br> 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 |  |
| Elective | 4 |  |  |  |
| INTL elective | 4 |  |  | 0 |
| HUSV 4994 | 6 |  | 0 | 0 |
|  | 18 | 0 | 0 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| HSVC <br> organization <br> course | 4 INTL elective | 4 |
| HSVC policy <br> course | 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

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

Political Science Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses in Political Science |  |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 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 | es in the following range: | 12 |
| POLS 2330 t | S 5999 |  |

## Supporting Course for Political Science

| Code | Title | Hours |
| :--- | :--- | ---: |
| Mathematics |  | 4 |
| Complete one of the following to fulfill the prerequisite for |  |  |
| POLS 2400 | Interactive Mathematics |  |
| MATH 1213 | Mathematical Thinking |  |
| MATH 1215 | Calculus for Business and Economics |  |
| MATH 1231 | Calculus 1 |  |
| MATH 1241 |  |  |

Human Services Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| HUSV 1101 | Human Services Professions | 4 |


| HUSV 2300 | Counseling in Human Services | 4 |
| :--- | :--- | :--- |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and | 4 |
|  | Social Change |  |

Human Services Internship
HUSV $4994 \quad$ Human Services Internship 6

Human Services \& Diverse Populations
Complete one of the following:

| HUSV 2350 | Ethnic Relations, Cultural Identity, and <br> Human Services |
| :---: | :--- |
| HUSV 2800 | Sexual Orientation and Gender <br> Expression in Practice and Policy |
| HUSV 4866 | Intercultural Studies through Human <br> Services |
| Human Services Electives | 8 |
| Complete two HUSV courses. | 8 |
| Organization | Sociology of Human Service <br> SOCL 3440 |

## Integrative Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Integrative Courses |  |  |
| POLS 3307 | Public Policy and Administration | 4 |
| HUSV 3900 | Introduction to Social Policy | 4 |
| Research Methods |  |  |
| Complete one of the following: |  | 4 |
| POLS 2399 | Research Methods in Political Science |  |
| HUSV 3700 | Research Methods for Human Services |  |
| Capstone \& Elective |  |  |
| Complete one of th | 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 or POLS 4703 | Political Science Senior Capstone Senior Thesis |  |
| HUSV 1000 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 PO | S 5999 |  |

## Political Science and Human Services Combined-Major Credit Requirement <br> Complete 86 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Human Services Requirements <br> Code <br> Title | Hours |  |
| :--- | :--- | ---: |
| Human Services Overview |  |  |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and | 4 |
| Policy | Social Change |  |

## Research Methods

Complete option A or option B: 4

Option A
HUSV 3700 Research Methods for Human Services
Option B
Complete the following and one additional HUSV course:
SOCL 2321 Research Methods in Sociology
Organization
SOCL 3440
Sociology of Human Service
Organizations

## Human Services Internship

HUSV 4994 Human Services Internship

## Human Services Elective

Complete one additional HUSV course.
Senior Capstone ${ }^{1} \quad$ Senior Seminar in Human Services
HUSV 4700
${ }^{1}$ 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 |
| :--- | :--- | ---: |
| Required Sociology Courses |  |  |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2320 | Statistical Analysis in Sociology | 4 |
| SOCL 3440 | Sociology of Human Service | 4 |


| Introductory Electives |  |  |
| :---: | :---: | :---: |
| Complete two of the following: |  | 8 |
| SOCL 1120 | Society and Health |  |
| SOCL 1220 | Sociology of Boston |  |
| SOCL 1228 | Social Problems |  |
| SOCL 1241 | Sociology of Violence |  |
| SOCL 1245 | Sociology of Poverty |  |
| SOCL 1246 | Environment and Society |  |
| SOCL 1255 | Sociology of the Family |  |
| SOCL 1260 | Gender in a Changing Society |  |
| SOCL 1275 | Social Stratification |  |
| SOCL 1285 | Deviant Behavior and Social Control |  |
| SOCL 1290 | Juvenile Delinquency |  |
| SOCL 1295 | Drugs and Society |  |
| ANTH 1101 | Peoples and Cultures |  |

## Intermediate-Level Elective

Complete one of the following: 4

| SOCL 2205 | Law and Social Justice |
| :--- | :--- |
| SOCL 2268 | Social Movements |
| SOCL 2270 | Race and Ethnic Relations |
| SOCL 2358 | Current Issues in Cities and Suburbs |
| SOCL 2450 | Class, Power, and Social Change |
| SOCL 3441 | Sociology of Health and Illness |
| SOCL 3487 | Applied Sociology: Practice and Theory |
| ANTH 2302 | Gender and Sexuality: A Cross-Cultural |
| ANTH 2305 | Perspective |
| ANTH 2350 | Urban Anthropology |

## Advanced-Level Elective

| Complete one of the following: <br> SOCL 4514 | "The Wire" and the Study of Urban <br> Inequalities |
| :--- | :--- |
| SOCL 4518 | Law and Society in a Digital World |
| SOCL 4520 | Race, Class, and Gender |
| SOCL 4523 | Sexualities |
| SOCL 4580 | Special Topics in Sociology |
| ANTH 4350 | Ethnography of Southeast Asia |
| ANTH 4500 | Latin American Society and |


| 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 2 |  |
| SOCL 4600 | Senior Seminar |
| 2 | With permission of the sociology head advisor, the student may |
| complete human services capstone Senior Seminar in Human <br> Services (HUSV 4700) and substitute one advanced sociology elective <br> for Senior Seminar (SOCL 4600). |  |

Human Services/Sociology Integrative Course
Code Title

Hours

## Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Human Services and Sociology Combined-Major Credit Requirement <br> Complete 78 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. All students declare a specialization within the major that reflects their particular focus in the field. Human services specializations include applied behavioral analysis, Deaf studies (BA only), family and children's services, identity and social change, psychology/counseling psychology, and social justice and social policy. Additionally, students may have a specific area of interest not currently reflected in the offered specialization. In such cases, students are invited to submit an independent specialization for approval by the program director.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

Human Services Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Human Services Overview |  |  |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and <br> Social Change | 4 |
| Research | Research Methods for Human Services | 4 |
| HUSV 3700 | Introduction to Social Policy | 4 |
| Policy | Sociology of Human Service | 4 |
| Organization | Organizations | 4 |

Human Services and Diverse Populations
Complete one of the following:

| HUSV 2350 | Ethnic Relations, Cultural Identity, and |
| :--- | :--- |
|  | Human Services |

HUSV 2800 Sexual Orientation and Gender
Expression in Practice and Policy
HUSV 4866 Intercultural Studies through Human Services

| Human Services Electives |  |
| :--- | :--- |
| Complete two HUSV courses. | 8 |
| Senior Seminar and Internship | 4 |
| HUSV 4700 | Senior Seminar in Human Services |
| HUSV 4994 | Human Services Internship |

## Human Services Specialization for BS Degree

Complete one of the specializations listed below.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Family and Children's Services |  |  |
| Required |  | 4 |
| HUSV 3520 | Child Intervention and Treatment | 4 |
| PSYC 1101 | Foundations of Psychology |  |
| or SOCL 1101 Introduction to Sociology |  |  |
| Electives |  | 12 |


| CAEP 5150 | Early Intervention: Family Systems |
| :--- | :--- |
| CAEP 5151 | Early Intervention: Infant and Toddler <br> Development, Risk, and Disability |
| PSYC 3404 | Developmental Psychology <br> PSYC 3451 |
| Analysis |  |

## Psychology/Counseling Psychology

Required

| HUSV 2320 | Techniques in Individual and Group <br> Counseling in Human Services | 4 |
| :---: | :--- | ---: |
| HUSV 3540 | Services and Treatments for Chemical <br> Dependencies | 4 |
| or HUSV 3580 | Sexual Violence: Counseling, Programs, and Policy |  |

## Electives

Complete three of the following:

| CAEP 3480 | Counseling Theories and Practice |
| :--- | :--- |
| CAEP 3485 | Mental Health and Counseling |
| COMM 4535 | Nonverbal Social Interaction |
| HLTH 5002 | Mindfulness: Theory and Practice |
| HUSV 2800 | Sexual Orientation and Gender <br> Expression in Practice and Policy |
| PHIL 1165 | Moral and Social Problems in <br> Healthcare |
| PSYC 1101 | Foundations of Psychology |
| PSYC 3400 | Personality |
| PSYC 3404 | Developmental Psychology |
| PSYC 3406 | Abnormal Psychology |
| NRSG 1205 | Wellness |
| SOCL 3441 | Sociology of Health and Illness |

## Social Justice and Social Policy

Required
COMM 4603 4
POLS 23854

Electives
Complete three of the following: 12

| COMM 1412 | Social Movement Communication |
| :---: | :--- |
| ECON 1240 | Economics of Crime |
| HUSV 2350 | Ethnic Relations, Cultural Identity, and <br> Human Services |
| HUSV 2800 | Sexual Orientation and Gender <br> Expression in Practice and Policy |
| LPSC 2302 | Global Human Rights: A Social and <br> Economic Perspective |
| POLS 3307 | Public Policy and Administration |
| SOCL 1246 | Environment and Society |
| SOCL 2270 | Race and Ethnic Relations |
| Identity and Social Change |  |

Required

| HUSV 2350 | Ethnic Relations, Cultural Identity, and <br>  <br> Human Services |
| :--- | :--- |

HUSV 2800 Sexual Orientation and Gender 4

## Electives

Complete three of the following:

| ASNS 2245 | The Asian-American Experience |
| :--- | :--- |
| EDUC 5503 | Culture, Equity, Power, and Influence |
| ENTR 3212 | Innovation for Social Change |
| COMM 3610 | Communication, Politics, and Social <br> Change |
| PHIL 1110 | Introduction to Religion |
| PHIL 1185 | The Ethics of Food |


| PHIL 3500 | Sexuality, Gender, and the Law |
| :--- | :--- |
| SOCL 1260 | Gender in a Changing Society |
| WMNS 1101 | Sex, Gender, and Popular Culture |
| WMNS 1103 | Introduction to Women's, Gender, and <br> Sexuality Studies |
| WMNS 2480 | Women and World Politics |
| WMNS 3100 | Gender, Social Justice, and <br> Transnational Activism |
| Applied Behavior Analysis |  |


| Required |  | 4 |
| :--- | :--- | ---: |
| PSYC 1101 | Foundations of Psychology | 4 |
| PSYC 3358 | Behavior Therapies | 4 |
| PSYC 3450 | Learning and Motivation | 4 |
| PSYC 4654 | Seminar in Behavioral Modification |  |
| Electives |  | 4 |
| Complete one of the following: |  |  |


| PSYC 3400 | Personality |
| :--- | :--- |
| PSYC 3404 | Developmental Psychology |
| PSYC 3466 | Cognition |

Independent Specialization
With approval from the program director, an independent
specialization, consisting of five courses, may be defined in
consultation with your advisor.

## Human Services Major Credit Requirement

Complete 66 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 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| HSVC <br> specialization | HSVC <br> organization <br> course | 4 | Vacation | 0 Co-op |$\quad 0$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| Co-op | 0 ENGW 3315 | 4 Elective | 4 Co-op | 0 |

$\left.\begin{array}{lrll}\text { HUSV 3700 } & \begin{array}{l}4 \\ \text { HSVC } \\ \text { specialization }\end{array} & 4\end{array}\right]$

Year 4

| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 HUSV 3900 |  | HSVC <br> specialization | 4 | Co-op | 0 |
|  | HUSV 4994 | 6 | Elective | 4 |  |  |
|  | Elective | 4 |  |  |  |  |
|  | HSVC <br> diverse population course | 4 |  |  |  |  |
|  | 0 | 18 |  | 8 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 HUSV 4700 | 4 |
|  | HSVC <br> elective | 4 |
| Upper- <br> division <br> elective <br> 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 HSVC |  |  |  |
| elective | 4 |  |  |  |
| ENGW 1111 | 4 Elective | 4 |  |  |
| MATH 1215 | 4 Elective | 4 |  | 0 |
| Elective | 4 | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| HSVC <br> specialization | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| HSVC <br> elective | 4 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
| EESH 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| HSVC <br> organization <br> course | 4 Co-op | 0 Co-op | 0 HSVC | 4 |


| HSVC <br> diverse <br> population <br> course | 4 | Elective | 4 |  |
| :--- | ---: | :--- | :--- | :--- |
| ENGW 3315 | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 8 |
|  | 16 |  |  |  |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| HUSV 3700 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| Elective | 4 |  |  |  |
| HSVC <br> specialization | 4 |  |  |  |
| HSVC <br> elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |

Year 5


Total Hours: 132

## American Sign Language and Human Services, BS

The American Sign Language (ASL) 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 ASL Program offers a wide array of courses as well as volunteer, internship, and practicum opportunities. 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## American Sign Language Requirements

Code Title Hours

American Sign Language

| 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 |


| Social and Cultural World |  |  |
| :--- | :--- | :--- |
| DEAF 1500 | Deaf People in Society | 4 |
| DEAF 2500 | Deaf History and Culture | 4 |


| Linguistics |  | 4 |
| :--- | :--- | :--- |
| LING 1150 | Introduction to Language and <br> Linguistics | 4 |
| DEAF 2700 | ASL Linguistics | 4 |

Performance Interpreting

| INTP 3500 | The Interpreting Profession | 2 |
| :--- | :--- | :---: |
| Interpreting |  | 4 |
| INTP 3510 | Interpreting Inquiry Texts | 4 |

Human Services Requirements


## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| INTP 4940 | Interpreting Research Practicum | 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.

## 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 <br> elective | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 | 0 | 0 |
|  | 16 | 16 |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| AMSL 2101 | 4 AMSL 2102 | 4 | Vacation | 0 Vacation |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| DEAF 2500 | 4 HUSV 3700 | 4 Vacation | 0 Vacation | 0 |
| SOCL 3440 | 4 Elective | 4 |  |  |
| INTP 3510 | 4 ENGW 3315 | 4 |  |  |
| AMSL 3101 | 4 AMSL 3102 | 4 |  | 0 |
|  | 16 | 16 | 0 |  |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| INTP 4940 | 4 HUSV 4700 | 4 |
| HUSV 3900 | 4 Elective | 4 |
| HUSV 4994 | 6 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 18 | 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

Human Services Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Human Services Overview |  |  |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and | 4 |
|  | Social Change | 4 |
| HUSV 3700 | Research Methods for Human Services | 4 |
| HUSV 3900 | Introduction to Social Policy | 4 |
| Organization | Sociology of Human Service <br> SOCL 3440 | Organizations |
|  |  | 4 |

## Internship

HUSV $4994 \quad 6$

Human Services Electives
Complete two additional HUSV courses.

## Communication Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Communication Studies Common Requirements |  |  |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking |  |
| or COMM 2301 | Communication Research Methods | 4 |
| Foundation Course |  | 4 |
| Complete one of the following: |  |  |


| COMM 1210 | Persuasion and Rhetoric |
| :---: | :--- |
| COMM 1225 | Communication Theory |
| COMM 1231 | Principles of Organizational <br> Communication |
| COMM 1255 | Communication in a Digital Age |
| Cluster Course |  |
| 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 |  |
| Writing-Intensive Courses |  |  |
| Complete two of | following: | 8 |
| COMM 3200 | Mobile Communication |  |
| COMM 3201 | Health Communication |  |
| COMM 3230 | Interpersonal Communication |  |
| COMM 3304 | Communication and Inclusion |  |
| COMM 3320 | Political Communication |  |
| COMM 3330 | Argumentation Theory |  |
| COMM 3400 | Rhetoric of Science |  |
| COMM 3414 | Great Speakers and Speeches 2, 1930Present |  |
| 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 | Communication, Politics, and Social Change |  |
| COMM 4535 | Nonverbal Social Interaction |  |
| COMM 4605 | Youth and Communication Technology |  |
| COMM 4631 | Crisis Communication and Image Management |  |
| Communication Studies Electives |  |  |
| Complete three of the following: |  | 12 |
| COMM 1331 | Legal Argumentation, Advocacy, and Citizenship |  |
| COMM 1412 | Social Movement Communication |  |
| COMM 1511 | Communication and Storytelling |  |
| COMM 1990 | Elective |  |
| COMM 2105 | Social Networks |  |
| COMM 2350 | Producing for the Entertainment Industry |  |
| COMM 2450 | Sound Production for Digital Media |  |
| COMM 2990 | Elective |  |
| COMM 3306 | International Communication Abroad |  |
| COMM 3409 | Advocacy Writing |  |
| COMM 3451 | Advertising Practices |  |
| COMM 3534 |  |  |
| COMM 3550 | Television Field Production |  |
| COMM 3650 | Television Studio Production |  |
| COMM 3990 | Elective |  |
| COMM 4650 | Digital Editing for TV |  |
| COMM 4940 | Special Topics in Media Production |  |
| COMM 4990 | Elective |  |
| COMM 4992 | Directed Study |  |
| COMM 4993 | Independent Study |  |
| COMM 4994 | Internship in Communication |  |

Capstone
Code Title Hours

## Communications Capstone Option

Complete one of the following:

Hours4

| COMM 4102 | Health Communication Campaigns |
| :---: | :--- |
| COMM 4530 | Communication and Quality of Life |
| COMM 4625 | Online Communities |
| Complete one additional HUSV elective. | 4 |

8 Human Services Capstone Option
HUSV $4700 \quad$ Senior Seminar in Human Services 4
Complete one course in the following range: 4
COMM 3000 to COMM 4999

## Integrative Course

Code Title Hours<br>HUSV 3590 Nonprofit Communications<br>4

## Program Requirement

128 total semester hours required

## 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 skillbased 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Foundation Courses

Code Title
Hours
Introduction to the Major

| CRIM 1000 | Criminal Justice at Northeastern | 1 |
| :---: | :--- | :--- |
| or HUSV 1000 | Human Services at Northeastern |  |

Criminal Justice Foundation Courses

| CRIM 1100 | Introduction to Criminal Justice | 4 |
| :---: | :---: | :---: |
| CRIM 1300 | The Death Penalty | 4 |
| or CRIM 1400 | Human Trafficking |  |
| or CRIM 1500 | Corruption, Integrity, and Accountability |  |
| or CRIM 1700 | Crime, Media, and Politics |  |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| CS 1100 | Computer Science and Its Applications | 4 |
| Human Services Foundation Courses |  |  |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and Social Change | 4 |

## Upper-Level Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Policy Course |  | 4 |
| HUSV 3900 | Introduction to Social Policy | 4 |
| Organization Course | Sociology of Human Service <br> Organizations | 4 |
| SOCL 3440 |  |  |

## Survey Electives

Complete two of the following:

## 8

| CRIM 3010 | Criminal Violence |
| :--- | :--- |
| CRIM 3030 | Global Criminology |
| CRIM 3040 | Psychology of Crime |
| CRIM 3050 | Organized Crime |
| CRIM 3100 | Criminal Law |
| CRIM 3200 | Youth Crime and Justice |
| CRIM 3300 | Punishment in the Age of Mass <br> Incarceration |
| CRIM 3400 | Corporate Security: Securing the Private <br> Sector |
| CRIM 3500 | Policing a Democratic Society |
| Research Methods | Criminal Justice Research Methods |
| CRIM 3600 | Research Methods for Human Services |

Criminal Justice Elective

| Complete one of the following: |  |
| :--- | :--- |
| CRIM 4010 | Gender, Crime, and Justice |
| CRIM 4020 | Race, Crime, and Justice |
| CRIM 4040 | Crime Prevention |

## Statistics

Complete one of the following:

| CRIM 3700 | Criminal Justice Statistics |
| :--- | :--- |
| PSYC 2320 | Statistics in Psychological Research |
| SOCL 2320 | Statistical Analysis in Sociology |

## Human Services Internship

Code Title
Hours
HUSV 4994 Human Services Internship
6

## Integrative Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| CRIM 4949 | Senior Capstone Seminar | 4 |
| or HUSV 4700 | Senior Seminar in Human Services |  |
| Open Electives <br> Code | Title | Hours |

Complete seven courses. Two of these courses must be in 28 criminal justice and four must be in human services.

## Cooperative Education for Criminal Justice

Code Title Hours
Co-op Integration Seminar 1/Professional Development
All students should complete one of the following:

| CRIM 2000 | Co-op Integration Seminar 1 |  |
| :--- | :--- | :--- |
| EESH 2000 | Professional Development for Co-op |  |
| Co-op Integration Seminars 2 and 3 | 1 |  |
| Co-op students should complete the following: | 1 |  |
| CRIM 3000 | Co-op Integration Seminar 2 | 1 |
| CRIM 4000 | Co-op Integration Seminar 3 |  |
| Non-co-op students should complete an additional 2 |  |  |
| semester hours of open elective credit. |  |  |

## 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 1200 | 4 Vacation | 0 Vacation | 0 |
| CRIM 1100 | 4 HUSV 2300 | 4 |  |  |
| HUSV 1101 | 4 CS 1100 | 4 |  |  |
| ENGW 1111 | 4 HSVC <br> elective | 4 |  | 0 |
| MATH 1215 | 4 | 16 | 0 |  |

Year 2

| Fall H | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CRIM 2100 | 4 | CRIM 2000 | 1 | Vacation | 0 | Co-op | 0 |
| CRIM 2200 |  | CJ concentration elective | 4 |  |  |  |  |
| HSVC <br> intermediate/ <br> advanced <br> undergraduate <br> elective | e | CJ concentration elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 16 |  | 17 |  | 0 |  | 0 |



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



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 systemwide 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 <br> or HUSV <br> 4700 | 4 |
| Elective | 4 Elective | 4 |
|  | 18 | 16 |

Total Hours: 134

## Political Science and Human Services, 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Political Science |  |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |
| POLS 2400 | Quantitative Techniques | 4 |
| Political Thought |  | 4 |
| Complete one of the following: |  |  |


| POLS 2325 | Ancient Philosophy and Political <br> 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:

| POLS 2330 to POLS 5999 | 32 |
| :--- | :--- |

Supporting Course for Political Science


Human Services Internship
HUSV $4994 \quad$ Human Services Internship 6

Human Services \& Diverse Populations
Complete one of the following:

| HUSV 2350 | Ethnic Relations, Cultural Identity, and |
| :---: | :--- |
|  | Human Services |
| HUSV 2800 | Sexual Orientation and Gender |
|  | Expression in Practice and Policy |
| HUSV 4866 | Intercultural Studies through Human |
|  | Services |


| Human Services Electives | 8 |
| :--- | :--- |
| Complete two HUSV courses. | 8 |
| Organization | Sociology of Human Service <br> Organizations |
| SOCL 3440 | 4 |

Total Hours

| Supporting Course for Human Services <br> Code <br> Organization | Title | Hours |
| :--- | :--- | ---: |
| SOCL 3440 | Sociology of Human Service <br> Organizations | 4 |

## Integrative Requirements

| Code <br> Integrative Courses | Title | Hours |
| :--- | :--- | ---: |
| POLS 3307 | Public Policy and Administration | 4 |
| HUSV 3900 | Introduction to Social Policy | 4 |
| Research Methods |  | 4 |
| Complete one of the following: |  |  |
| POLS 2399 |  | Research Methods in Political Science |

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 1000 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.

## Program Requirement

128 total semester hours required

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Human Services Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Human Services Overview |  |  |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and Social Change | 4 |
| HUSV 3900 | Introduction to Social Policy | 4 |
| Research Methods |  |  |
| Complete option A or option B: |  | 4 |
| Option A |  |  |
| HUSV 3700 | Research Methods for Human Services |  |
| Option B |  |  |
| Complete the following and one additional HUSV course: |  |  |
| SOCL 2321 | Research Methods in Sociology |  |
| Organization |  |  |
| SOCL 3440 | Sociology of Human Service Organizations | 4 |
| Human Services Internship |  |  |
| HUSV 4994 | Human Services Internship | 6 |
| Human Services Elective |  |  |
| Complete one additional HUSV course. |  | 4 |
| Senior Capstone ${ }^{1}$ |  |  |
| HUSV 4700 | Senior Seminar in Human Services | 4 |
| 1 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 |
| :--- | :--- | ---: |
| Required Sociology Courses |  |  |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2320 | Statistical Analysis in Sociology | 4 |
| SOCL 3440 | Sociology of Human Service | 4 |
| Introductory Electives | Organizations | 8 |


| Complete two of the following: |  |
| :--- | :--- |
| SOCL 1120 | Society and Health |
| SOCL 1220 | Sociology of Boston |
| SOCL 1228 | Social Problems |
| SOCL 1241 | Sociology of Violence |
| SOCL 1245 | Sociology of Poverty |
| SOCL 1246 | Environment and Society |
| SOCL 1255 | Sociology of the Family |
| SOCL 1260 | Gender in a Changing Society |
| SOCL 1275 | Social Stratification |
| SOCL 1285 | Deviant Behavior and Social Control |
| SOCL 1290 | Juvenile Delinquency |
| SOCL 1295 | Drugs and Society |
| ANTH 1101 | Peoples and Cultures |
| Intermediate-Level Elective | 4 |
| Complete one of the following: |  |


| SOCL 2205 | Law and Social Justice |
| :--- | :--- |
| SOCL 2268 | Social Movements |
| SOCL 2270 | Race and Ethnic Relations |
| SOCL 2358 | Current Issues in Cities and Suburbs |
| SOCL 2450 | Class, Power, and Social Change |
| SOCL 3441 | Sociology of Health and Illness |
| SOCL 3487 | Applied Sociology: Practice and Theory |
| ANTH 2302 | Gender and Sexuality: A Cross-Cultural <br> Perspective |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ANTH 2350 | Urban Anthropology |

## Advanced-Level Elective

Complete one of the following: 4

| SOCL 4514 | "The Wire" and the Study of Urban <br> Inequalities |
| :--- | :--- |
| SOCL 4518 | Law and Society in a Digital World |
| SOCL 4520 | Race, Class, and Gender |
| SOCL 4523 | Sexualities |
| SOCL 4580 | Special Topics in Sociology |
| ANTH 4350 | Ethnography of Southeast Asia |
| ANTH 4500 | Latin American Society and <br> 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 ${ }^{2}$ |  |
| SOCL 4600 | Senior Seminar |

2 With permission of the sociology head advisor, 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

## 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.

## Program Requirement

128 total semester hours required

## 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 nonprofit and social change organizations as it relates to their major. The course work students will take in the human services program provides an opportunity to apply social and psychological theories and develop direct practice experience through service-learning.

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. 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 Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |

Policy Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| HUSV 3900 | Introduction to Social Policy | 4 |

Organization Course

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following: | 4 |  |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and <br> Social Change |  |
| SOCL 3440 | Sociology of Human Service <br> Organizations |  |

## Human Services Elective

Code Title Hours
Complete one HUSV course.

## GPA Requirement

2.000 GPA required in the minor

## International Affairs

Website (http://www.northeastern.edu/internationalaffairs)

## Berna Turam, PhD

Professor, Sociology and International Affairs, and Director, International Affairs Program

201 Renaissance Park
617.373 .5472

Kimberly Jones, Head Advisor, k.jones@northeastern.edu Ioannis Livanis, Advisor, i.livanis@northeastern.edu

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. 769)
- International Affairs with African Studies Concentration (p. 773)
- International Affairs with Asian Studies Concentration (p. 775)
- International Affairs with European Studies Concentration (p. 777)
- International Affairs with Latin American Studies Concentration (p. 779)
- International Affairs with Middle East Studies Concentration (p. 781)
- Environmental Studies and International Affairs (p. 522)
- Human Services and International Affairs (p. 753)
- International Affairs and Cultural Anthropology (p. 790)
- International Affairs and Economics (p. 676)
- International Affairs and Religious Studies (p. 796)
- Political Science and International Affairs (p. 800)
- Sociology and International Affairs (p. 805)
- Spanish and International Affairs (p. 654)


## Minors

- International Affairs (p. 811)
- Middle East Studies (p. 813)


## 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. Successful undergraduate students develop 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. 41).

## $B A$ Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| 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 |
| ECON 1115 or ECON 1116 | Principles of Macroeconomics Principles of Microeconomics | 4 |
| Global Dynamics |  |  |
| Complete three of the into thematic groups courses to take and h | following courses. Courses are divided to aid students in deciding which have no bearing on major requirements. | 10-12 |
| Environment |  |  |
| ENVR 1110 | Global Climate Change |  |
| ENVR 4515 | Sustainable Development |  |
| SOCL 1246 | Environment and Society |  |
| Law, Diplomacy, and Global Governance |  |  |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |  |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |  |
| COMM 2303 | Global and Intercultural Communication |  |
| POLS 1155 | Comparative Politics |  |
| POLS 1160 | International Relations |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3405 | International Political Economy |  |
| POLS 3406 | International Law |  |
| POLS 3407 | International Organizations |  |
| POLS 4910 | Model United Nations |  |
| POLS 4918 | Model NATO |  |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |  |

## Human Rights and Social Justice

INTL $2400 \quad$ Politics of Islam and Gender

| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| :---: | :---: |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| 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 |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| Globalization |  |
| INTL 2300 | Religion in International Affairs |
| INTL 2240 | Global Population and Development |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 3200 or SOCL 3200 | Cities in a Global Context Cities in Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of Human Societies |
| Population, Migration, and Diaspora |  |
| INTL 2240 | Global Population and Development |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |


| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African | AFRS 3460 | Contemporary Government and Politics in Africa |
| :---: | :---: | :---: | :---: |
|  | Diaspora | AFRS 4939 | Community Health, Culture, and |
| ANTH 1101 | Peoples and Cultures |  | Development in Kenya |
| ANTH 2350 | Urban Anthropology | ANTH 4510 | Anthropology of Africa |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 | ENTR 3308 | Business Economic History of South Africa |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions | HIST 1180 | African History |
|  |  | HIST 2390 | Africa and the World in Early Times |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam | Asia |  |
| Development |  | ANTH 4350 or INTL 4350 | Ethnography of Southeast Asia |
| INTL 2240 | Global Population and Development |  | Ethnography of Southeast Asia |
| INTL 5200 | Political Economy. Interdisciplinary Perspectives | ASNS 1150 or HIST 1150 | East Asian Studies <br> East Asian Studies |
| ANTH 2305 | Global Markets and Local Culture | CLTR 1500 | Modern Chinese History and Culture |
| ECON 1291 | Development Economics | CLTR 1506 | Introduction to Chinese Popular Culture |
| ECON 3404 | International Food Economics and Policy | CLTR 1700 | Introduction to Japanese Pop Culture |
| ENTR 2206 | Global Social Enterprise | HIST 1252 | World War II in the Pacific |
| ENVR 4515 | Sustainable Development |  | Japanese Literature and Culture |
| INTB 1203 | International Business and Global | HIST 1253 | History of Vietnam Wars |
|  | Social Responsibility | HIST 1500 | Modern Chinese History and Culture |
| or INTB 1209 | International Business and Global Social Responsibility | HIST 2308 | Law, Justice, and Society in Modern China |
| PHTH 5230 | Global Health | HIST 2351 | Modern Japan |
| POLS 3487 | Politics of Developing Nations | HIST 2360 | History of Capitalism in East Asia |
| Communication and Media |  | PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| COMM 2303 | Global and Intercultural Communication | PHIL 1290 | Chinese Philosophy and Religion |
| INTB 3310 | Cultural Aspects of International Business | PHIL 2394 | Chinese Buddhism |
| JRNL 3300 | Covering Conflicts: Peace, War, and the | PHIL 2395 | Japanese Buddhism |
|  | Media | PHIL 4545 | Religion and Politics in South Asia |
| or INTL 3300 | Covering Conflicts: Peace, War, and the Media | Europe |  |
| JRNL 5360 | Global Reporting | CLTR 1501 | Introduction to French Culture |
| MSCR 2325 | Global Media | CLTR 1503 | Introduction to Italian Culture |
| MUSC 1140 | Global Pop Music | CLTR 1504 | Introduction to Spanish Culture |
| Senior Seminar/Experiential Learning |  | ECON 1293 | European Economic History |
| INTL 4700 | Senior Capstone Seminar in International Affairs | HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |
| International Experiential Learning |  | HIST 2280 | Hitler, Germany, and the Holocaust |
| Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs. |  | HIST 2370 | Renaissance to Enlightenment |
|  |  | HIST 2376 | Britain and the British Empire |
|  |  | HIST 4946 | Independent Field Research Abroad: Central Europe |
| Regional Analysis Requirement <br> 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 advisor. See department for additional courses: |  | POLS 3435 | Politics and Governance of Europe and the European Union |
|  |  | Latin America |  |
|  |  | ANTH 4500 | Latin American Society and Development |
|  |  | or INTL 4500 | Latin American Society and Development |
| Code | Title Hours | CLTR 1505 | Introduction to Latin American Culture |
| Africa |  | CLTR 1240 | Latin American Film |
| AFRS 2307 | Africa Today | HIST 1187 | Introduction to Latin American History |
| AFRS 2465 | The Scope and Dynamics of Conflicts in Africa | LACS 1220 | Latino, Latin American, and Caribbean Studies |
| AFRS 2900 | Swahili, Culture, and Politics in Kenya | LITR 4655 | Latin American Literature |


| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| $\begin{aligned} & \text { SOCL } 1215 \\ & \text { or INTL } 1215 \end{aligned}$ | Society and Culture in Russia |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel 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.

## Program Requirement

128 total semester hours required

## Plan of Study

Five Years, Three Co-ops in Summer 2/Fall

| 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 |  | Foreign language course | 4 |  |  |  |
| Foreign language course | 4 | POLS 1160 | 4 |  |  |  |
| ANTH 1101 | 4 | POLS 1161 | 0 |  |  |  |
|  | 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 |  | Foreign language course | 4 |  |  |
| Elective | 4 | INTL elective | 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 | 0 INTL 3400 | 4 INTL elective | 4 Co-op | 0 |  |
|  | ENGW 3315 | 4 Elective | 4 |  |  |
|  | INTL elective | 4 |  |  |  |
| Upper- <br> division <br> elective | 4 |  |  |  |  |
|  | 0 | 16 | 8 | 0 |  |

Year 4

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | :---: | ---: | Hours

Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: |
| Co-op | 0 | Hours |
|  | Elective 4700 | 4 |
|  | Upper- <br> division <br> 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 |
| :--- | :---: | :---: | :---: | ---: |
| INTL 1000 | 1 MATH 1215 | 4 | Vacation | 0 Vacation |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| INTL 2718 | 4 Co-op | 0 Co-op | 0 | INTL elective | 4 |
| INTL elective | 4 |  | Elective | 4 |  |
| Foreign <br> language <br> course | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |
| EESH 2000 | 1 |  |  | 8 |  |
|  | 17 | 0 | 0 |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ECON 1115 <br> or 1116 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Elective | 4 |  | Elective | 4 |
| INTL elective | 4 |  |  |  |
| Foreign <br> language <br> course | 4 |  |  |  |

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 |  |  |  |
| INTL elective | 4 |  |  |  |
| Upper- <br> division <br> elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| INTL elective | 4 INTL 4700 | 4 |
| INTL elective | 4 Elective | 4 |
| Upper- <br> division <br> elective | 4 Upper- <br> division <br> elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 130

## International Affairs with African Studies Concentration, BA

Through this concentrated major, successful undergraduates will develop 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

Note: Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| AFRS 1101 | Introduction to African Studies | 4 |
| ANTH 1101 | Peoples and Cultures | 4 |
| ECON 1115 | Principles of Macroeconomics |  |
| or ECON 1116 | Principles of Microeconomics | 4 |
| HIST 2211 | The World Since 1945 | 4 |
| INTL 1101 | Globalization and International Affairs | 4 |
| INTL 2718 | Research Methods in International | 4 |
| INTL 3400 | Affairs | 4 |
| POLS 1155 | International Conflict and Negotiation | 4 |

African Studies Regional Analysis Courses
Complete four of the following, at least two of which must be numbered 2000 or above:

| AFRS 2307 | Africa Today |
| :---: | :--- |
| AFRS 2465 | The Scope and Dynamics of Conflicts in <br> Africa |
| AFRS 2900 | Swahili, Culture, and Politics in Kenya |
| AFRS 4939 3460 | Contemporary Government and Politics <br> in Africa |
| ANTH 4510 | Community Health, Culture, and <br> Development in Kenya |
| ENTR 3308 | Anthropology of Africa <br> Business Economic History of South |
| HIST 1180 | Africa |
| HIST 2390 | African History |
| Global Dynamics |  |
| POLS 1160 | International Relations World in Early Times |

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.

## Environment

| ENVR 1110 | Global Climate Change |
| :---: | :---: |
| ENVR 4515 | Sustainable Development |
| SOCL 1246 | Environment and Society |
| Law, Diplomacy, and Global Governance |  |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| COMM 2303 | Global and Intercultural Communication |
| POLS 1155 | Comparative Politics |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |

Human Rights and Social Justice

| INTL 2400 | Politics of Islam and Gender |
| :---: | :---: |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |


| AFAM 2600 | Contemporary Issues: Race, Science, <br> and Technology |
| :--- | :--- |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and <br> Economic Perspective |


| PHIL 1272 | Ethics in the World's Religions |
| :--- | :--- |
| PHIL 5001 | Global Justice |

Conflict and Security
CRIM $4630 \quad$ Political Crime and Terrorism
HIST 1206 Drug Trade and Drug War. History, Security, Culture
HIST 3330 The Global Cold War
JRNL $3300 \quad$ Covering Conflicts: Peace, War, and the Media
or INTL 3300 Covering Conflicts: Peace, War, and the Media
PHIL 5001 Global Justice
POLS 3408 International Security
POLS $3420 \quad$ U.S. National Security Policy
POLS 3430 Revolution, Civil War, and Insurrection

| Globalization |  |
| :---: | :--- |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary <br>  <br> Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |

4

| ANTH 2305 | Global Markets and Local Culture |
| :---: | :---: |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of Human Societies |
| Population, Migration, and Diaspora |  |
| INTL 2240 | Global Population and Development |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |

PHIL 1270 Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271 Sex in Judaism, Christianity, and Islam
Development

| INTL 2240 | Global Population and Development |
| :--- | :--- |
| INTL 5200 | Political Economy: Interdisciplinary <br> Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and <br> Policy |

ENTR 2206 Global Social Enterprise
ENVR 4515 Sustainable Development
INTB 1203 International Business and Global Social Responsibility
or INTB 1209 International Business and Global Social Responsibility
PHTH 5230 Global Health
POLS $3487 \quad$ Politics of Developing Nations
Communication and Media

| COMM 2303 | Global and Intercultural Communication |
| :--- | :--- |
| INTB 3310 | Cultural Aspects of International |
| JRNL 3300 | Covering Conflicts: Peace, War, and the <br> Media |
| or INTL 3300 | Covering Conflicts: Peace, War, and the Media |


| JRNL 5360 | Global Reporting |
| :--- | :--- |
| MSCR 2325 | Global Media |
| MUSC 1140 | Global Pop Music |


| Senior Seminar/Experiential Learning |
| :--- |
| INTL 4700 |
| $\quad$Senior Capstone Seminar in <br> International Affairs |
| 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 advisor |
| approval). If they do not complete an international semester, |
| they must participate in Model African Union. |


| Foreign Language Requirement |
| :--- |
| Complete language course work in Kiswahili, French, or Arabic |
| 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 60 semester hours in the major with a 2.000 GPA.

## Upper-Division Electives

Complete three general electives numbered 3000 or above.

## Program Requirement

128 total semester hours required

## International Affairs with Asian Studies Concentration, BA

Through this concentrated major, successful undergraduates will develop 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

Note: Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p.622).

## International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics or regional analysis requirements. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| 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 |
| 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 |

## 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 advisor. See department for additional courses.
Complete four of the following, at least two of which must be
numbered 2000 or above:

| ANTH 4350 or INTL 4350 | Ethnography of Southeast Asia Ethnography of Southeast Asia |
| :---: | :---: |
| ASNS 1150 or HIST 1150 | East Asian Studies 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 |
| HIST 2360 | History of Capitalism in East Asia |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |
| Global Dynamics |  |
| POLS 1160 | International Relations |


| Environment |  |
| :---: | :---: |
| ENVR 1110 | Global Climate Change |
| ENVR 4515 | Sustainable Development |
| SOCL 1246 | Environment and Society |
| Law, Diplomacy, and Global Governance |  |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| COMM 2303 | Global and Intercultural Communication |
| POLS 1155 | Comparative Politics |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |
| Human Rights and Social Justice |  |
| INTL 2400 | Politics of Islam and Gender |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| HIST 3330 | The Global Cold War |
| JRNL 3300 or INTL 3300 | Covering Conflicts: Peace, War, and the Media <br> Covering Conflicts: Peace, War, and the Media |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| Globalization |  |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |


| ANTH 2305 | Global Markets and Local Culture |
| :--- | :--- |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International |
| LPSC 2302 | Global Human Rights: A Social and |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of |

Population, Migration, and Diaspora

| INTL 2240 | Global Population and Development |
| :---: | :---: |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| Development |  |
| INTL 2240 | Global Population and Development |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 or INTB 1209 | International Business and Global Social Responsibility International Business and Global Social Responsibility |
| 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 |
| JRNL 3300 | Business |
| or INTL 3300 | Covering Conflicts: Peace, War, and the <br> Covering Conflicts: Peace, War, and the Media |


| JRNL 5360 | Global Reporting |  |
| :---: | :---: | :---: |
| MSCR 2325 | Global Media |  |
| MUSC 1140 | Global Pop Music |  |
| Senior Seminar/Experiential Learning |  |  |
| INTL 4700 | Senior Capstone Seminar in International Affairs | 4 |
| 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 advisor approval). |  |  |
| Foreign Language Requirement |  |  |
| Complete language course work in Chinese or Japanese 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 60 semester hours in the major with a 2.000 GPA. |  |  |
| Upper-Division Electives |  |  |
| Complete three general electives numbered 3000 or above. |  |  |
| Program Requirement |  |  |
| 128 total semester hours required |  |  |

## International Affairs with European Studies Concentration, BA

Through this concentrated major, successful undergraduates will develop 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

Note: Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ANTH 1101 | Peoples and Cultures | 4 |
| INTL 1101 | Globalization and International Affairs | 4 |
| ECON 1115 or ECON 1116 | Principles of Macroeconomics <br> Principles of Microeconomics | 4 |
| INTL 2718 | Research Methods in International Affairs | 4 |
| INTL 3400 | International Conflict and Negotiation | 4 |
| HIST 2211 | The World Since 1945 | 4 |
| POLS 1155 | Comparative Politics | 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 advisor. See department for additional courses.
Complete four of the following, at least two of which must be 16
numbered 2000 or above:

| CLTR 1501 | Introduction to French Culture |
| :--- | :--- |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and <br> Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| HIST 2376 | Britain and the British Empire |
| HIST 4946 Central Europe |  |

Global Dynamics
POLS 1160 International Relations

Complete one of the following courses. Courses are divided 4 into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.

## Environment

| ENVR 1110 | Global Climate Change |
| :--- | :--- |
| ENVR 4515 | Sustainable Development |
| SOCL 1246 | Environment and Society |

Law, Diplomacy, and Global Governance
INTL $2480 \quad$ Women and World Politics

| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| :---: | :---: |
| COMM 2303 | Global and Intercultural Communication |
| POLS 1155 | Comparative Politics |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |
| Human Rights and Social Justice |  |
| INTL 2400 | Politics of Islam and Gender |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| 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 |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| Globalization |  |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |


| LPSC 2302 | Global Human Rights: A Social and <br> Economic Perspective |
| :--- | :--- |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of <br>  |

Population, Migration, and Diaspora

INTL 2240 Global Population and Development
INTL $2400 \quad$ Politics of Islam and Gender
INTL 2300 Religion in International Affairs
AFRS 1185 Gender in the African Diaspora
AFRS 3424 Epidemiology of Pandemic Diseases
and Health Disparities in the African Diaspora

| ANTH 1101 | Peoples and Cultures |
| :--- | :--- |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making |
|  | the Americas, 1492-1804 |

PHIL 1270 Judaism, Christianity, and Islam: Abrahamic Religions

PHIL 1271 Sex in Judaism, Christianity, and Islam
Development

| INTL 2240 | Global Population and Development |
| :--- | :--- |
| INTL 5200 | Political Economy: Interdisciplinary <br> Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and <br> Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 | International Business and Global <br> Oocial Responsibility |
| PHTH 5230 1209 | International Business and Global Social <br> Responsibility |
| POLS 3487 | Plobal Health |
| Communication and Media |  |

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 $5360 \quad$ Global Reporting

MSCR 2325 Global Media
MUSC 1140 Global Pop Music
Senior Seminar/Experiential Learning
INTL $4700 \quad$ Senior Capstone Seminar in International Affairs

## 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 advisor 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 course work in French, German, Greek, Italian, Portuguese, or Spanish through at least intermediatelevel two. Note: Completing this requirement satisfies the language requirement for the BA degree.

## 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.

## Program Requirements

128 total semester hours required

## International Affairs with Latin American Studies Concentration, BA

Through this concentrated major, successful undergraduates will develop 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

Note: Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| 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 |
| 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 |

## 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 advisor. See department for additional courses.
Complete four of the following, at least two of which must be 16 numbered 2000 or above:

| ANTH 4500 | Latin American Society and Development |
| :---: | :---: |
| or INTL 4500 | Latin American Society and Development |
| CLTR 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |
| Global Dynamics |  |
| POLS 1160 | International Relations |
| 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. |  |
| Environment |  |
| ENVR 1110 | Global Climate Change |
| ENVR 4515 | Sustainable Development |
| SOCL 1246 | Environment and Society |
| Law, Diplomacy, and Global Governance |  |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| COMM 2303 | Global and Intercultural Communication |
| POLS 1155 | Comparative Politics |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |


| POLS 3407 | International Organizations |
| :---: | :---: |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |
| Human Rights and Social Justice |  |
| INTL 2400 | Politics of Islam and Gender |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| 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 |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| Globalization |  |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of Human Societies |


| Population, Migration, and Diaspora |  |
| :---: | :---: |
| INTL 2240 | Global Population and Development |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| Development |  |
| INTL 2240 | Global Population and Development |
| INTL 5200 | Political Economy. Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 | International Business and Global Social Responsibility |
| or INTB 1209 | International Business and Global Social Responsibility |
| 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 |
| MUSC 1140 | Global Pop Music |
| Senior Seminar/Experiential Learning |  |
| INTL 4700 | Senior Capstone Seminar in International Affairs |
| 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 advisor approval). |  |
| Foreign Language Requirement |  |
| Complete language course work in Portuguese or Spanish 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 60 semester hours in the major with a 2.000 GPA.

## Upper-Division Electives

Complete three general electives numbered 3000 or above.

## Program Requirement

128 total semester hours required

## International Affairs with Middle East Studies Concentration, BA

Through this concentrated major, successful undergraduates will develop 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 accomplilshed through diverse and cross-disciplinary theories of interstate relations: conflict, cooperation, hierarchies; civil society, transnational advocacy networks, global social movements; and statesociety relations: democracy, authoritarianism, inequalities, citizenship.

## Program Requirements

Note: Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement.Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| INTL 1101 | Globalization and International Affairs | 4 |
| INTL 1160 | Middle East Studies | 4 |
| INTL 2718 | Research Methods in International <br>  <br> INTL 3400 | Iffairs |


| POLS 1155 | Comparative Politics | 4 |
| :--- | :--- | :--- |
| HIST 2211 | The World Since 1945 | 4 |
| ECON 1115 | Principles of Macroeconomics | 4 |

or ECON 1116 Principles of Microeconomics
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 advisor. See department for additional courses.
Complete four of the following, at least two of which must be
numbered 2000 or above: ${ }^{1}$


POLS 1160 International Relations
Complete one of the following courses. Courses are divided 4
into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.
Environment

| ENVR 1110 | Global Climate Change |
| :--- | :--- |
| ENVR 4515 | Sustainable Development |
| SOCL 1246 | Environment and Society |
| Law, Diplomacy, and | Global Governance |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 5200 | Political Economy: Interdisciplinary |
| COMM 2303 | Perspectives |
| POLS 1155 | Comparative Politics |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |


| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |
| :---: | :---: |
| Human Rights and Social Justice |  |
| INTL 2400 | Politics of Islam and Gender |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| HIST 2373 | Gender and Sexuality in World History |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| HIST 3330 | The Global Cold War |
| JRNL 3300 or INTL 3300 | Covering Conflicts: Peace, War, and the Media <br> Covering Conflicts: Peace, War, and the Media |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| Globalization |  |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of Human Societies |
| Population, Migration, and Diaspora |  |
| INTL 2240 | Global Population and Development |
| INTL 2400 | Politics of Islam and Gender |


| INTL 3200 | Cities in a Global Context |
| :---: | :---: |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| Development |  |
| INTL 2240 | Global Population and Development |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 or INTB 1209 | International Business and Global Social Responsibility International Business and Global Social Responsibility |
| 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 |
| MUSC 1140 | Global Pop Music |
| Senior Seminar/Experiential Learning |  |
| INTL 4700 | Senior Capstone Seminar in International Affairs |

## 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 advisor 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 course work in Arabic or Hebrew through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.
${ }^{1}$ Middle East Studies (INTL 1160) may not be used as a regional analysis course.

## 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.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Environmental Studies Requirements |  |
| :---: | :---: |
| Code Title | Hours |
| Social Science Component |  |
| Philosophy |  |
| PHIL 1180 Environmental Ethics | 4 |
| Sociology |  |
| SOCL 1246 Environment and Society | 4 |
| Political Science |  |
| POLS 2395 Environmental Politics and Policy | 4 |


| Science Component |  |
| :--- | :--- | ---: |
| Biology |  |
| BIOL 1141 <br> or BIOL 1143$\quad$Microbes and Society <br> Biology and Society | 4 |
| Earth and Environmental Sciences |  |
| Complete one of the following: | 4 |


| ENVR 1110 | Global Climate Change |  |
| :--- | :--- | ---: |
| ENVR 1112 | Environmental Geology |  |
| Environment |  | 4 |
| ENVR 1101 | Environmental Science | $4-5$ |
| Quantitative Methods |  |  |
| Complete one of the following: |  |  |
| ENVR 3300 | Geographic Information Systems |  |
| and ENVR 3301 | and Lab for ENVR 3300 |  |
| MATH 2280 | Statistics and Software |  |
| Planning |  |  |
| ENVR 5210 <br> or ENVR 5250 | Environmental Planning <br> Geology and Land-Use Planning | 4 |

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| INTL 1101 | Globalization and International Affairs | 4 |
| INTL 3400 | International Conflict and Negotiation | 4 |
| POLS 1160 | International Relations |  |
| and POLS 1161 | and Recitation for POLS 1160 |  |
| Global Dynamics | 12 |  |
| Complete three of the following courses. Courses are divided <br> into thematic groups to aid students in deciding which <br> courses to take and have no bearing on major requirements. |  |  |

Environment

| ENVR 1110 | Global Climate Change |
| :--- | :--- |
| ENVR 4515 | Sustainable Development |
| SOCL 1246 | Environment and Society |
| Law, Diplomacy, and | Global Governance |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |


| INTL 5200 | Political Economy: Interdisciplinary <br> Perspectives |
| :--- | :--- |
| COMM 2303 | Global and Intercultural Communication |
| POLS 1155 | Comparative Politics |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International |

Human Rights and Social Justice
INTL $2400 \quad$ Politics of Islam and Gender
INTL $2480 \quad$ Women and World Politics
or WMNS 2480 Women and World Politics
AFAM 2600 Contemporary Issues: Race, Science, and Technology

| HIST 2373 | Gender and Sexuality in World History |
| :---: | :---: |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| HIST 3330 | The Global Cold War |
| JRNL 3300 or INTL 3300 | Covering Conflicts: Peace, War, and the Media <br> Covering Conflicts: Peace, War, and the Media |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| Globalization |  |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of Human Societies |
| Population, Migration, and Diaspora |  |
| INTL 2240 | Global Population and Development |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |


| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| :---: | :---: |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| Development |  |
| INTL 2240 | Global Population and Development |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 or INTB 1209 | International Business and Global Social Responsibility International Business and Global Social Responsibility |
| 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 |
| MUSC 1140 | Global Pop Music |
| International Experiential Learning |  |

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

## Regional Analysis Requirement

Code Title Hours
Complete two regional analysis courses, both of which must 8 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.

| Africa | Africa Today |
| :--- | :--- |
| AFRS 2307 | The Scope and Dynamics of Conflicts in <br> Africa |
| AFRS 2905 | Swahili, Culture, and Politics in Kenya |
| AFRS 3460 | Contemporary Government and Politics <br> in Africa |
| AFRS 4939 | Community Health, Culture, and <br> Development in Kenya |
| ANTH 4510 | Anthropology of Africa |
| ENTR 3308 | Business Economic History of South <br> Africa |
| HIST 1180 | African History |


| HIST 2390 | Africa and the World in Early Times |
| :---: | :---: |
| Asia |  |
| $\begin{aligned} & \text { ANTH } 4350 \\ & \text { or INTL } 4350 \end{aligned}$ | Ethnography of Southeast Asia Ethnography of Southeast Asia |
| ASNS 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 |
| HIST 2360 | History of Capitalism in East Asia |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |
| Europe |  |
| CLTR 1501 | Introduction to French Culture |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| 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 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |
| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle <br> East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: <br> Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, <br> Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia | Introduction to Russian Civilization |
| HIST 1285 | History of the Soviet Union |
| HIST 1286 | Society and Culture in Russia |
| SOCL 1215 |  |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel two. Note: Completing this requirement satisfies the language requirement for the BA degree.

## Integrative Courses

| Code <br> Integrative Courses | Title | Hours |
| :--- | :--- | ---: |
| ECON 3423 | Environmental Economics | 4 |
| or ECON 1290 | History of the Global Economy | 4 |
| ENVR 4515 | Sustainable Development | 4 |
| HIST 2211 | The World Since 1945 | 4 |
| INTL 4700 | Senior Capstone Seminar in <br> International Affairs | 4 |
| or ENVS 4997 | Senior Thesis |  |

## Environmental Studies and International Affairs CombinedMajor 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
Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours
ENGW 11114 ENVR 1200, 4 Vacation 0 Vacation 0

| ENVR 1101 | 4 PHIL 1180 | 4 |  |
| :--- | :--- | :--- | :--- |
| INTL 1101 | 4 POLS 1160 <br> and | 4 |  |
| POLS 1161 | 4Foreign <br> language <br> course | 4 | 0 |


| Year 2 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| BIOL 1141 or 1143 | 4 | EESC 2000 | 1 | Vacation | 0 | Co-op | 0 |
| HIST 2211 | 4 | POLS 2395 | 4 |  |  |  |  |
| Foreign language course | 4 | Foreign language course | 4 |  |  |  |  |
| INAF <br> regional <br> analysis <br> course 1 | 4 | INAF global dynamics course 1 | 4 |  |  |  |  |
|  |  | INAF regional analysis course 2 | 4 |  |  |  |  |
| 16 |  |  | 17 |  | 0 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> lnternational <br> learning | 16 Elective | 4 Co-op | 0 |


| Year 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | ECON 3423 or 1290 | 4 | Elective | 4 | Co-op | 0 |
|  |  | ENGW 3308 or 3315 | 4 | Elective | 4 |  |  |
|  |  | ENVR 5210 or 5250 | 4 |  |  |  |  |
|  |  | INTL 3400 | 4 |  |  |  |  |
|  |  | INAF global dynamics course 2 | 4 |  |  |  |  |
|  | 0 |  | 20 |  | 8 |  | 0 |



Total Hours: 133-134

## 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
nongovernment 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

0 NUpath Requirements
All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Human Services Requirements <br> Title <br> Code <br> Required Courses | Hours |  |
| :--- | :--- | ---: |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and <br> Social Change | 4 |

## Research Methods

| HUSV 3700 | Research Methods for Human Services | 4 |
| :--- | :--- | ---: |
| Policy | Introduction to Social Policy | 4 |
| HUSV 3900 | Sociology of Human Service <br> Organizations | 4 |
| Organization |  |  |

Internship
HUSV 4994 Human Services Internship 6

Human Services Electives
Complete two HUSV courses.

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| INTL 1101 | Globalization and International Affairs | 4 |
| INTL 3400 | International Conflict and Negotiation | 4 |


or WMNS 2480 Women and World Politics

| INTL 3200 | Cities in a Global Context |
| :--- | :--- |
| INTL 5200 | Political Economy: Interdisciplinary <br> Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International <br> LPSC 2302 |
| Global Human Rights: A Social and |  |
| POLS 1160 | Economic Perspective |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law <br> POLS 3407International Organizations  <br> SOCL 3465 Globalization and the Evolution of <br> Human Societies |

Population, Migration, and Diaspora

| INTL 2240 | Global Population and Development |
| :--- | :--- |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora <br> AFRS 3424Epidemiology of Pandemic Diseases <br> and Health Disparities in the African <br> Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making <br> the Americas, 1492-1804 |

PHIL 1270 Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271 Sex in Judaism, Christianity, and Islam
Development
INTL 2240 Global Population and Development
INTL $5200 \quad$ Political Economy: Interdisciplinary Perspectives
ANTH 2305 Global Markets and Local Culture
ECON 1291 Development Economics
ECON 3404 International Food Economics and Policy
ENTR 2206 Global Social Enterprise
ENVR 4515 Sustainable Development
INTB 1203 International Business and Global Social Responsibility
or INTB 1209 International Business and Global Socia Responsibility
PHTH 5230 Global Health
POLS $3487 \quad$ Politics of Developing Nations

| COMM 2303 | Global and Intercultural Communication |
| :--- | :--- |
| INTB 3310 | Cultural Aspects of International <br>  <br> Business |
| JRNL 3300 | Covering Conflicts: Peace, War, and the <br> Media |
| or INTL 3300 | Covering Conflicts: Peace, War, and the Media |
| JRNL 5360 | Global Reporting |
| MSCR 2325 | Global Media |
| MUSC 1140 | Global Pop Music |

International Experiential Learning
Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

## 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:

## Africa

| AFRS 2307 | Africa Today |
| :---: | :---: |
| AFRS 2465 | The Scope and Dynamics of Conflicts in Africa |
| 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 | Africa and the World in Early Times |
| Asia |  |
| ASNS 1150 or HIST 1150 | East Asian Studies East Asian Studies |
| $\begin{aligned} & \text { ANTH } 4350 \\ & \text { or INTL } 4350 \end{aligned}$ | Ethnography of Southeast Asia 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 2394 | Chinese Buddhism |


| PHIL 2395 | Japanese Buddhism |
| :---: | :---: |
| PHIL 4545 | Religion and Politics in South Asia |
| Europe |  |
| CLTR 1501 | Introduction to French Culture |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| 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 or INTL 4500 | Latin American Society and Development <br> Latin American Society and Development |
| CLTR 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |
| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| SOCL 1215 | Society and Culture in Russia |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel 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 advisor to obtain approval for a substitute INTL course. Similarly, students wishing to take INTL 4700 but not HUSV 4700 must meet with an HUSV advisor 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 |
| :--- | :--- |
| Human Services |  |
| HUSV 4700 | Senior Seminar in Human Services |
| International Affairs | Senior Capstone Seminar in <br> International Affairs |
| INTL 4700 | Human Services and International Affairs Combined-Major |
| Hedit Requirement |  |

Complete 90 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

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 1111 | 4 Elective | 4 Vacation | 0 Vacation | 0 |
| INTL 1000 | 1 Foreign <br> language <br> core course | 4 |  |  |
| INTL 1101 | 4 HUSV 2300 | 4 |  |  |
| HUSV 1101 | 4 ECON 1290 | 4 |  |  |
| HSVC <br> elective | 4 |  | 0 | 0 |


| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Elective | 4 | Elective |  | Vacation |  | Co-op | 0 |
| Foreign language core course | 4 | HUSV 3700 | 4 |  |  |  |  |
| INTL elective | 4 | HUSV 3900 | 4 |  |  |  |  |
| HSVC elective | 4 | EXED 2000 | 1 |  |  |  |  |
|  |  | INTL 3400 | 4 |  |  |  |  |
|  | 16 |  | 17 |  | 0 |  | 0 |
| Year 3 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | Elective | 4 | 4 Elective | 4 | Co-op | 0 |
|  |  | INTL elective |  | 4 INTL elective | 4 |  |  |


| HSVC <br> organization <br> course | 4 |  |  |
| :--- | :---: | :--- | :--- |
| HSVC <br> elective | 4 | 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 |

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 |  | Vacation | 0 | Vacation | 0 |
| INTL 1000 |  | Foreign language core course | 4 |  |  |  |  |
| INTL 1101 | 4 | HUSV 2300 | 4 |  |  |  |  |
| HUSV 1101 | 4 | ECON 1290 | 4 |  |  |  |  |
| elective |  |  |  |  |  |  |  |
|  | 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 |  |  |  |  |  |  |
| EXED 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 |$\quad 4$

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 |  |  | 0 |
|  | 18 | 0 | 0 |  |

Year 5
Fall Hours Spring Hours

HSVC 4 INTL elective 4
organization

## course

| HSVC policy <br> course | 4 Elective | 4 |
| :--- | :--- | ---: |
| Elective | 4 HUSV 4700 | 4 |
| INTL elective | 4 INTL 4700 | 4 |
|  | 16 | 16 |

Total Hours: 132

## International Affairs and Cultural Anthropology, BA

Through this combined major, successful undergraduates will 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 statesociety 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International

Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| 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 |  |  |
| Complete two of the following. Courses are divided into | 8 |  |

thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:
Environment

| ENVR 1110 | Global Climate Change |
| :--- | :--- |
| ENVR 4515 | Sustainable Development |
| SOCL 1246 | Environment and Society |
| Law, Diplomacy, and Global Governance |  |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 5200 | Political Economy: Interdisciplinary |
| POMM 2303 | Global and Intercultural Communication |
| POLS 1155 | Comparative Politics |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International |

Human Rights and Social Justice

| INTL 2400 | Politics of Islam and Gender |
| :---: | :---: |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| 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 |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |


| POLS 3420 | U.S. National Security Policy | INTB 1203 | International Business and Global |
| :---: | :---: | :---: | :---: |
| POLS 3430 | Revolution, Civil War, and Insurrection |  | Social Responsibility |
| Globalization |  | or INTB 1209 | International Business and Global Social |
| INTL 2240 | Global Population and Development |  | Responsibility |
| INTL 2300 | Religion in International Affairs | PHTH 5230 | Global Health |
| INTL 2480 | Women and World Politics | POLS 3487 | Politics of Developing Nations |
| or WMNS 2480 | Women and World Politics | Communication and Media |  |
| INTL 3200 | Cities in a Global Context | COMM 2303 | Global and Intercultural Communication |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives | INTB 3310 | Cultural Aspects of International Business |
| AFAM 2639 | Globalism, Racism, and Human Rights | JRNL 3300 | Covering Conflicts: Peace, War, and the Media |
| ANTH 2305 | Global Markets and Local Culture |  | Covering Conflicts: Peace, War, and the Media |
| ANTH 2315 | Religion and Modernity | or INTL 3300 |  |
| ECON 1290 | History of the Global Economy | JRNL 5360 | Global Reporting |
| ECON 4635 | International Economics | MSCR 2325 | Global Media |
| ENGL 2450 | Postcolonial Literature | MUSC 1140 | Global Pop Music |
| HIST 2211 | The World Since 1945 | International Experiential Learning |  |
| HIST 2311 | Colonialism/Imperialism | Complete at least one "international semester" via study abroad, international internship, international co-op, or two approved short-term programs abroad. |  |
| INTB 3310 | Cultural Aspects of International Business |  |  |  |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective | Regional Analysis Requirement |  |
| POLS 1160 | International Relations | 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: |  |
| POLS 2370 | Religion and Politics |  |  |  |
| POLS 3405 | International Political Economy |  |  |  |
| POLS 3406 | International Law |  |  |  |
| POLS 3407 | International Organizations |  |  |  |
| SOCL 3465 | Globalization and the Evolution of Human Societies | Africa |  |
| Population, Migration, and Diaspora |  | AFRS 2307 | Africa Today |
| INTL 2240 | Global Population and Development | AFRS 2465 | The Scope and Dynamics of Conflicts in Africa |
| INTL 2400 | Politics of Islam and Gender |  |  |
| INTL 3200 | Cities in a Global Context | AFRS 2900 | Swahili, Culture, and Politics in Kenya |
| AFRS 1185 | Gender in the African Diaspora | AFRS 3460 | Contemporary Government and Politics in Africa |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora | AFRS 4939 | Community Health, Culture, and Development in Kenya |
|  |  | ANTH 4510 | Anthropology of Africa |
| ANTH 1101 | Peoples and Cultures | ENTR 3308 | Business Economic History of South Africa |
| ANTH 2350 | Urban Anthropology |  |  |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 | HIST 1180 | African History |
|  |  | HIST 2390 | Africa and the World in Early Times |
| PHIL 1270 | Judaism, Christianity, and Islam: <br> Abrahamic Religions | Asia |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam | $\begin{aligned} & \text { ANTH } 4350 \\ & \text { or INTL } 4350 \end{aligned}$ | Ethnography of Southeast Asia Ethnography of Southeast Asia |
| Development |  |  |  |
| INTL 2240 | Global Population and Development | ASNS 1150 or HIST 1150 | East Asian Studies <br> East Asian Studies |
| INTL 5200 | Political Economy: Interdisciplinary |  |  |
|  | Perspectives | CLTR 1500 | Modern Chinese History and Culture |
| ANTH 2305 | Global Markets and Local Culture | CLTR 1506 | Introduction to Chinese Popular Culture |
| ECON 1291 | Development Economics | CLTR 1700 | Introduction to Japanese Pop Culture |
| ECON 3404 | International Food Economics and Policy | HIST 1246 | World War II in the Pacific |
|  |  | HIST 1252 | Japanese Literature and Culture |
| ENTR 2206 | Global Social Enterprise | HIST 1253 | History of Vietnam Wars |
| ENVR 4515 | Sustainable Development | 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 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |
| Europe |  |
| CLTR 1501 | Introduction to French Culture |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| 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 <br> or INTL 4500 | Latin American Society and Development <br> Latin American Society and Development |
| CLTR 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |
| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |


| PHIL 1287 | Modern Judaism |
| :---: | :--- |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| SOCL 1215 | Society and Culture in Russia |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel two. Note: Completing this requirement satisfies the language requirement for the BA degree.

## Anthropology Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Cultural Anthropology |  |  |
| ANTH 1101 | Peoples and Cultures | 4 |
| ANTH 3421 | Foundations of Anthropological Theory | 4 |
| ANTH 3410 | Ethnographic Field Experience | 4 |

Anthropology Electives
Complete three courses in the following range, one of which 12
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

## Advanced Area Courses

Complete two of the following: 8

| ANTH 4350 | Ethnography of Southeast Asia |
| :--- | :--- |
| ANTH 4500 | Latin American Society and <br> Development |
| ANTH 4505 | Native North Americans |
| ANTH 4510 | Anthropology of Africa |
| ANTH 4515 | Culture and Politics in Modern India |

## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Global Markets |  |  |
| ANTH 2305 | Global Markets and Local Culture | 4 |
| Capstone |  | 4 |
| ANTH 4600 | Senior Seminar |  |
| 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.

## Program Requirement

128 total semester hours required

## International Affairs and Economics, BA

Through this combined major, successful undergraduates will develop 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| International Affairs/Economics at Northeastern |  |  |
| INTL 1000 or ECON 1000 | International Affairs at Northeastern 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 |  |
| Global Dynamics |  |  |
| Complete three 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: |  | 12 |
| Environment |  |  |
| ENVR 1110 | Global Climate Change |  |
| ENVR 4515 | Sustainable Development |  |
| SOCL 1246 | Environment and Society |  |

## Law, Diplomacy, and Global Governance

| INTL 2480 | Women and World Politics |
| :--- | :--- |
| or WMNS 2480 | Women and World Politics |
| INTL 5200 | Political Economy: Interdisciplinary <br> Perspectives |
| COMM 2303 | Global and Intercultural Communication |
| POLS 1155 | Comparative Politics |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International |

Human Rights and Social Justice

| INTL 2400 | Politics of Islam and Gender |
| :---: | :--- |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |

PHIL 1272 Ethics in the World's Religions
PHIL 5001 Global Justice
Conflict and Security

| CRIM 4630 | Political Crime and Terrorism |
| :--- | :--- |
| HIST 1206 | Drug Trade and Drug War. History, <br> Security, Culture |
| 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
PHIL 5001 Global Justice
POLS 3408 International Security
POLS $3420 \quad$ U.S. National Security Policy
POLS 3430 Revolution, Civil War, and Insurrection

| Globalization |  |
| :---: | :--- |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary <br>  <br> AFAM 2639 |
| ANTH 2305 | Globalism, Racism, and Human Rights |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |


| INTB 3310 | Cultural Aspects of International <br> Business |
| :--- | :--- |
| LPSC 2302 | Global Human Rights: A Social and <br> Economic Perspective |
| POLS 1160 | International Relations |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of |

Population, Migration, and Diaspora

| INTL 2240 | Global Population and Development |
| :---: | :---: |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |


| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| :---: | :---: |
| Development |  |
| INTL 2240 | Global Population and Development |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 | International Business and Global Social Responsibility |
| or INTB 1209 | International Business and Global Social Responsibility |
| 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 <br> Business |
| JRNL 3300 | Covering Conflicts: Peace, War, and the <br> Media |
| or INTL 3300 | Covering Conflicts: Peace, War, and the Media |
| JRNL 5360 | Global Reporting |
| MSCR 2325 | Global Media |
| MUSC 1140 | Global Pop Music |

## International Experiential Learning

Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs.

## Regional Analysis Requirement


#### Abstract

Code Title 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:


Hours

## Africa

| AFRS 2307 | Africa Today |
| :--- | :--- |
| AFRS 2465 | The Scope and Dynamics of Conflicts in |
| AFrica |  | | AFRS 2900 | Swahili, Culture, and Politics in Kenya |
| :--- | :--- |
| AFRS 3460 | Contemporary Government and Politics |
| in Africa |  |


| HIST 2370 | Renaissance to Enlightenment |
| :---: | :---: |
| 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 <br> or INTL 4500 | Latin American Society and Development <br> Latin American Society and Development |
| CLTR 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |
| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| SOCL 1215 | Society and Culture in Russia |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel two. Note: Completing this requirement satisfies the language requirement for the BA degree.

## Economics Requirements

| Code $\quad$ Title | Hours |  |
| :--- | :--- | :--- |
| Required Economics Courses |  |  |
| Grades in the following courses must average a minimum of |  |  |
| 2.000 with no grade lower than C-. | 4 |  |
| ECON 1115 | Principles of Macroeconomics | 4 |
| ECON 1116 | Principles of Microeconomics | 4 |
| ECON 2315 | Macroeconomic Theory |  |


| ECON 2316 | Microeconomic Theory | 4 |
| :--- | :--- | :--- |
| ECON 2350 | Statistics | 4 |
| ECON 3520 | History of Economic Thought | 4 |

## Economics Electives

Code Title Hours

Complete three economics electives with a minimum of 12
one numbered 3000 or above. Courses used to satisfy international affairs requirements may not be used as economics electives.

## Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Calculus |  |  |
| MATH 1231 | Calculus for Business and Economics | 4 |


| Computer Science |  |  |
| :--- | :--- | :--- |
| CS 1100 | Computer Science and Its Applications |  |

## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Development Economics |  |  |
| ECON 1291 | Development Economics | 4 |

Senior Seminar
Complete one of the following with a thesis or project that integrates both international affairs and economics:

| ECON 4692 | Senior Economics Seminar |
| :---: | :--- |
| or INTL 4700 | Senior Capstone Seminar in International Affairs |

## International Affairs and Economics Combined-Major Credit Requirement <br> Complete 88 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study <br> 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 1231 | 4 | Vacation | 0 |
| INTL 1101 | 4 ECON 1116 | 4 |  |  |
| ECON 1115 | 4 POLS 1160 | 4 |  |  |
| ENGW 1111 | 4 POLS 1161 | 0 |  |  |
| Foreign | 4 HIST 2211 | 4 |  | 0 |
| language <br> core course |  |  | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ECON 3520 | 4 ECON 2350 | 4 Vacation | 0 Co-op | 0 |
| CS 1100 | 4 INTL elective | 4 |  |  |
| INTL elective | 4 <br> Foreign <br> language <br> core course | 4 |  |  |


| Foreign <br> language <br> core course | 4 ECON 2316 | 4 |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 16 | 16 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 INTL 3400 | 4 INTL elective | 4 Co-op | 0 |
|  | ECON 2315 | 4 INTL elective | 4 |  |
|  | Elective | 4 |  |  |
|  | Elective | 4 |  |  |
|  | 0 | 16 | 8 | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | ECON <br> undergraduate <br> elective | 4 Elective | 4 Co-op | 0 |
|  | ECON <br> undergraduatı <br> elective | 4 Elective | 4 |  |
|  | INTL elective | 4 |  |  |
|  | Elective | 4 | 8 | 0 |

Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: | Hours

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 1231 | 4 Vacation | 0 Vacation | 0 |
| INTL 1101 | 4 ECON 1116 | 4 |  |  |
| ECON 1115 | 4 POLS 1160 | 4 |  |  |
| ENGW 1111 | 4 POLS 1161 | 0 |  |  |
| Foreign <br> language <br> core course | 4 HIST 2211 | 4 |  | 0 |


| Year 2 |  |  |  |  |  |
| :--- | :---: | :---: | ---: | ---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| ECON 3520 | 4 Co-op | 0 | Co-op | 0 | INTL elective |$\quad 4$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ECON 2350 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| INTL elective | 4 |  | Elective | 4 |
| Foreign <br> language <br> core course | 4 |  |  |  |
| ECON 2316 | 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 |
| ECON 2315 | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
| Elective | 4 | 0 | 0 |  |
|  | 16 |  |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ECON <br> undergraduate <br> elective | ECON <br> undergraduate <br> elective | 4 |
| ECON <br> undergraduat, <br> elective | 4 INTL 4700 | 4 |
| INTL elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 129

## International Affairs and Religious Studies, BA

Through this combined major, successful undergraduates will develop an awareness of 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 crossdisciplinary 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| INTL 1101 | Globalization and International Affairs | 4 |
| INTL 3400 | International Conflict and Negotiation | 4 |
| POLS 1160 | International Relations | 4 |
| Complete one of the following: |  | 4 |
| POLS 1155 | Comparative Politics |  |
| ECON 1115 | Principles of Macroeconomics |  |
| HIST 2211 | The World Since 1945 |  |
| INTL 2300 | Religion in International Affairs |  |
| Global Dynamics |  |  |
| 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 major requirements: |  | 8 |
| Environment |  |  |
| ENVR 1110 | Global Climate Change |  |
| ENVR 4515 | Sustainable Development |  |
| SOCL 1246 | Environment and Society |  |
| Law, Diplomacy, and Global Governance |  |  |
| INTL 2480 | Women and World Politics |  |
| or WMNS 2480 | Women and World Politics |  |
| INTL 5200 | Political Economy. Interdisciplinary Perspectives |  |
| COMM 2303 | Global and Intercultural Communication |  |
| POLS 1155 | Comparative Politics |  |
| POLS 1160 | International Relations |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3405 | International Political Economy |  |
| POLS 3406 | International Law |  |
| POLS 3407 | International Organizations |  |
| POLS 4910 | Model United Nations |  |
| POLS 4918 | Model NATO |  |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |  |
| Human Rights and Social Justice |  |  |
| INTL 2400 | Politics of Islam and Gender |  |
| INTL 2480 | Women and World Politics |  |
| or WMNS 2480 | Women and World Politics |  |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |  |
| HIST 2373 | Gender and Sexuality in World History |  |


| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| :---: | :---: |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| 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 |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| Globalization |  |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of Human Societies |
| Population, Migration, and Diaspora |  |
| INTL 2240 | Global Population and Development |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |


| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| :---: | :---: |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| Development |  |
| INTL 2240 | Global Population and Development |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 or INTB 1209 | International Business and Global Social Responsibility <br> International Business and Global Social Responsibility |
| PHTH 5230 | Global Health |
| POLS 3487 | Politics of Developing Nations |
| Communication and | edia |
| 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 |
| MUSC 1140 | Global Pop Music |
| 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, both of which must be in 8 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:

## Africa

| AFRS 2307 | Africa Today |
| :--- | :--- |
| AFRS 2465 | The Scope and Dynamics of Conflicts in <br> Africa |
| AFRS 2900 | Swahili, Culture, and Politics in Kenya <br> AFRS 3460 <br> Contemporary Government and Politics <br> in Africa |
| AFRS 4939 | Community Health, Culture, and <br> Development in Kenya |
| ANTH 4510 | Anthropology of Africa |
| ENTR 3308 | Business Economic History of South <br> Africa |
| HIST 1180 | African History <br> HIST 2390Africa and the World in Early Times |
| Asia |  |



ASNS 1150
or HIST 1150
CLTR 1500
CLTR 1506
CLTR 1700
HIST 1246
HIST 1252
HIST 1253
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 2394 Chinese Buddhism
PHIL 2395 Japanese Buddhism
PHIL 4545 Religion and Politics in South Asia

## Europe

| CLTR 1501 | Introduction to French Culture |
| :--- | :--- |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and <br> Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| HIST 2376 | Britain and the British Empire <br> HIST 4946 |
| POLSentral Europe 3435 | Politics and Governance of Europe and <br> the European Union |

Latin America

| ANTH 4500 | Latin American Society and <br> Development <br> or INTL 4500 |
| :--- | :--- |
| CLTR 1505 | Latin American Society and Development |

LITR 4655 Latin American Literature
Middle East
INTL 1150
INTL 1160 Middle East Studies
INTL 2100 Modern Israel
INTL 2200 America and the Middle East
INTL 2400 Politics of Islam and Gender

| ANTH 4500 | Latin American Society and <br> Development <br> or INTL 4500 |
| :--- | :--- |
| CLTR 1505 | Latin American Society and Development |

CLTR 1502 Introduction to Arabic Culture
ECON 1292 Economic History of the Middle East
Ethnography of Southeast Asia Ethnography of Southeast Asia
East Asian Studies
East Asian Studies
Modern Chinese History and Culture
Introduction to Chinese Popular Culture
Introduction to Japanese Pop Culture
World War II in the Pacific
Japanese Literature and Culture
Japanese Literature and Culture
ure

CLTR 1504 Introduction to Spanish Culture
ECON 1293 European Economic History
HIST 1170 Europe: Empires, Revolutions, Wars, and Their Aftermath

| HIST 1185 | Introduction to Middle Eastern History |
| :---: | :--- |
| HIST 1290 | Modern Middle East |
| POLS 3465 | Government and Politics in the Middle <br> East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: <br> Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, <br> Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia | Introduction to Russian Civilization |
| HIST 1285 | History of the Soviet Union |
| HIST 1286 | Society and Culture in Russia |
| SOCL 1215 |  |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel two. Note: Completing this requirement satisfies the language requirement for the BA degree.

Religious Studies Requirements

| Code <br> Comparative Religion | Title | Hours |
| :--- | :--- | ---: |
| Complete two of the following: |  |  |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1130 | Ethics: East and West |  |
| PHIL 1230 | Sound, Music, and Religion <br> Judaism, Christianity, and Islam: <br> Abrahamic Religions |  |
| PHIL 1270 1271 | Sex in Judaism, Christianity, and Islam <br> PHIL 1272Ethics in the World's Religions |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: <br> Eastern Religions |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith <br> and Devotion in Urban Life |  |
| PHIL 2300 | Mysticism |  |
| PHIL 2315 | Adam and Eve and Their Interpreters <br> Cults and Sects |  |
| PHIL 4390 |  |  |

Ancient Mediterranean and African World Traditions
Complete one of the following: 4

| JWSS 1285 | Jewish Religion and Culture |
| :--- | :--- |
| PHIL 1111 | Introduction to World Religions |
| PHIL 1120 | Understanding the Bible |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1280 | Encountering Islam: Traditions, <br> Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture <br> PHIL 2311 <br> The Kabbalah: Jewish Mysticism from <br> the Zohar to Madonna |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 3410 | Religion and Spirituality in the African <br> Diaspora |

PHIL $4390 \quad$ Cults and Sects
Asian Traditions
Complete one of the following: 4

| PHIL 1111 | Introduction to World Religions |
| :--- | :--- |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 2100 | The Religious Worlds of Boston: Faith <br> and Devotion in Urban Life |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2394 | Chinese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |
| Religion and Culture |  |
| Complete one of the following: |  |
| JWSS 1285 | Jewish Religion and Culture |
| PHIL 1220 | The Meaning of Death |
| PHIL 1230 | Sound, Music, and Religion |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam <br> PHIL 1285 |
| Jewish Religion and Culture |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith <br> and Devotion in Urban Life |
| PHIL 2316 | Interpreting the Bible |
| PHIL 4390 | Cults and Sects |
| WMNS 1103 | Introduction to Women's, Gender, and <br> Sexuality Studies |

Ethics
Complete one of the following: 4

| PHIL 1130 | Ethics: East and West |
| :--- | :--- |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 4606 | Seminar. Theories and Methods in <br> Religious Studies |
| PHIL 5001 | Global Justice |

Religious Studies Electives
Complete three of the following, two of which must be
numbered above 2000:

| PHIL 1104 | Goddesses, Witches, Saints, and <br> Sinners: Women in Western Religions |
| :--- | :--- |
| PHIL 1110 | Introduction to Religion |
| PHIL 1120 | Understanding the Bible |
| PHIL 1130 | Ethics: East and West |
| PHIL 1220 | The Meaning of Death |
| PHIL 1230 | Sound, Music, and Religion |
| PHIL 1231 | Image and Icon in South Asia |
| PHIL 1250 | Jesus in the Gospels, American Culture, <br> and the Movies |

PHIL 1260 Apocalypticism in Film
PHIL 1270 Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271 Sex in Judaism, Christianity, and Islam
PHIL 1272 Ethics in the World's Religions
PHIL 1273 Jainism
PHIL 1275 Hinduism, Buddhism, and Beyond: Eastern Religions

| PHIL 1276 | Indian Religions |
| :---: | :---: |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1286 | American Judaism |
| PHIL 1287 | Modern Judaism |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 1295 | Religious Perspectives on Health and Healing |
| PHIL 1410 | From Vodou and the Rastas to AfroIslam: African Religions in the Americas |
| PHIL 1666 | The Problem of Evil in Film |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 4992 | Directed Study |
| PHIL 5011 | Comparative Religious Ethics |

## International Affairs and Religious Studies Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Capstone |  | 4 |
| INTL 4700 | Senior Capstone Seminar in <br> International Affairs |  |

International Affairs and Religious Studies Combined-Major Credit Requirement
Complete 76 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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 crossdisciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; political processes, institutions, and actors; and statesociety 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

Code Title Hours

Political Science Requirements

| POLS 1150 | American Government | 4 |
| :--- | :--- | :--- |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |
| POLS 2400 | Quantitative Techniques | 4 |
| Political Theory |  | 4 |
| Complete one of the following: |  |  |


| 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 advisor in order for it to be added to your record. Requirements for the concentrations are listed below (p. 803).

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Political Science Electives |  |
| Complete four political science courses at or above POLS | 16 |
| 2300. |  |

- Concentration in Campaigns and Elections (p. 803)
- Concentration in Comparative Politics (p. 803)
- Concentration in Identity, Culture, and Politics (p. 803)
- Concentration in International Relations and Diplomacy (p. 803)
- Concentration in Security Studies (p. 804)


## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code <br> Required Courses | Title | Hours | Globalization |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | INTL 2240 | Global Population and Development |
| INTL 1101 | Globalization and International Affairs | 4 | INTL 2300 | Religion in International Affairs |
| INTL 3400 | International Conflict and Negotiation | 4 | INTL 2480 | Women and World Politics |
| HIST 2211 | The World Since 1945 | 4 | or WMNS 2480 | Women and World Politics |
| ECON 1115 or ECON 1116 | Principles of Macroeconomics <br> Principles of Microeconomics | 4 | INTL 3200 | Cities in a Global Context |
|  |  |  | INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| Global Dynamics |  |  |  |  |
| 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 major requirements. One course must be numbered 2000 or above: |  | 8 | AFAM 2639 | Globalism, Racism, and Human Rights |
|  |  | ANTH 2305 | Global Markets and Local Culture |  |
|  |  | ANTH 2315 | Religion and Modernity |  |
|  |  | ECON 1290 | History of the Global Economy |  |
| Environment |  |  |  | ECON 4635 | International Economics |
| ENVR 1110 | Global Climate Change |  |  | ENGL 2450 | Postcolonial Literature |
| ENVR 4515 | Sustainable Development |  |  | HIST 2211 | The World Since 1945 |
| SOCL 1246 | Environment and Society |  | HIST 2311 | Colonialism/Imperialism |
| Law, Diplomacy, and Global Governance |  |  | INTB 3310 | Cultural Aspects of International Business |
| INTL 2480 | Women and World Politics |  |  |  |
| or WMNS 2480 | Women and World Politics |  | LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |  |  |  |
|  |  |  | POLS 1160 | International Relations |
| COMM 2303 | Global and Intercultural Communication |  | POLS 2370 | Religion and Politics |
| POLS 1155 | Comparative Politics |  | POLS 3405 | International Political Economy |
| POLS 1160 | International Relations |  | POLS 3406 | International Law |
| POLS 2370 | Religion and Politics |  | POLS 3407 | International Organizations |
| POLS 3405 | International Political Economy |  | SOCL 3465 | Globalization and the Evolution of Human Societies |
| POLS 3406 | International Law |  |  |  |
| POLS 3407 | International Organizations |  | Population, Migration, and Diaspora |  |
| POLS 4910 | Model United Nations |  | INTL 2240 | Global Population and Development |
| POLS 4918 | Model NATO |  | INTL 2400 | Politics of Islam and Gender |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |  | INTL 3200 | Cities in a Global Context |
|  |  |  | AFRS 1185 | Gender in the African Diaspora |
| Human Rights and Social Justice |  |  | AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| INTL 2400 | Politics of Islam and Gender |  |  |  |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |  |  |  |
|  |  |  | ANTH 1101 | Peoples and Cultures |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology <br> Gender and Sexuality in World History |  | ANTH 2350 | Urban Anthropology |
|  |  |  | HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| HIST 2373 |  |  |  |  |


| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| :---: | :---: |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| Development |  |
| INTL 2240 | Global Population and Development |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 | International Business and Global Social Responsibility |
| or INTB 1209 | International Business and Global Social Responsibility |
| PHTH 5230 | Global Health |
| POLS 3487 | Politics of Developing Nations |
| Communication and | edia |
| 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 |
| MUSC 1140 | Global Pop Music |
| International Experiential Learning |  |
| Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs. |  |

## Regional Analysis Requirement

Code Title Hours

Complete three of the following, two of which must be in

Hours 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:

## Africa

| AFRS 2307 | Africa Today |
| :---: | :--- |
| AFRS 2465 | The Scope and Dynamics of Conflicts in <br> Africa |
| AFRS 2900 | Swahili, Culture, and Politics in Kenya <br> AFRS 3460Contemporary Government and Politics <br> in Africa |
| AFRS 4939 | Community Health, Culture, and <br> Development in Kenya |
| ANTH 4510 | Anthropology of Africa |
| ENTR 3308 | Business Economic History of South <br> Africa |
| HIST 1180 | African History |
| HIST 2390 | Africa and the World in Early Times |
| Asia |  |

$\begin{aligned} \text { ANTH } 4350 & \text { Ethnography of Southeast Asia } \\ \text { or INTL 4350 } & \text { Ethnography of Southeast Asia }\end{aligned}$

| 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 |
| ChinT 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 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |


| Europe |  |
| :--- | :--- |
| CLTR 1501 | Introduction to French Culture |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and <br> Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| HIST 2376 | Britain and the British Empire |
| HIST 4946 | Independent Field Research Abroad: <br> Central Europe |
| POLS 3435 | Politics and Governance of Europe and <br> the European Union |


| Latin America |  |
| :--- | :--- |
| ANTH 4500 | Latin American Society and <br> Development |
| or INTL 4500 | Latin American Society and Development |


| HIST 1185 | Introduction to Middle Eastern History |
| :---: | :--- |
| HIST 1290 | Modern Middle East |
| POLS 3465 | Government and Politics in the Middle <br> East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: <br> Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, <br> Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia | Introduction to Russian Civilization |
| HIST 1285 | History of the Soviet Union |
| HIST 1286 | Society and Culture in Russia |
| SOCL 1215 |  |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel two. Note: Completing this requirement satisfies the language requirement for the BA degree.

| Integrative <br> Code | Hours |  |
| :--- | :--- | ---: |
| Capstone | Title | 4 |
| Complete one of the following: |  |  |
| POLS 4701 |  | Political Science Senior Capstone |
| POLS 4703 | Senior Thesis |  |
| INTL 4700 | Senior Capstone Seminar in <br> International Affairs |  |

Political Science and International Affairs Combined-Major Credit Requirement
Complete 76 semester hours in the major.

## Program Requirement

128 total semester hours required

| Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN CAMPAIGNS AND ELECTIONS |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| With advisor approval, a co-op or internship may be substituted in place of POLS 4947: |  |  |
| POLS 3160 | Campaign Strategy | 4 |
| POLS 4947 |  | 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 2355 |  |  |
| POLS 3310 | Public Opinion, Voting, and Elections |  |
| POLS 3162 | Local Campaigns and Elections |  |
| POLS 3320 | Politics and Mass Media |  |

POLS 3402
POLS 3304

## CONCENTRATION IN COMPARATIVE POLITICS

| Code | Title | Hours |
| :---: | :---: | :---: |
| Theoretical Requirement |  |  |
| Complete one of the following: |  | 4 |
| POLS 2370 | Religion and Politics |  |
| POLS 3418 | Nationalism |  |
| POLS 3427 | Civil-Military Relations |  |
| 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 3445 |  |  |
| POLS 3450 |  |  |
| POLS 3460 |  |  |
| POLS 3465 | Government and Politics in the Middle East |  |
| POLS 3475 |  |  |
| POLS 3480 |  |  |
| POLS 3485 |  |  |
| 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 |  |

$\begin{array}{lll}\text { CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS } \\ \text { Code } & \text { Title Hours }\end{array}$

| Core Course |  |  |
| :--- | :--- | ---: |
| POLS 3418 | Nationalism | 4 |
| Electives |  | 12 |
| Complete three of the following: |  |  |


| POLS 2360 | Politics of Poverty |
| :--- | :--- |
| POLS 2368 | Music and Politics in America and <br> Abroad |
| POLS 2370 | Religion and Politics |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |
| POLS 3324 | Law and Society |

Code Title Hours

## Experiential/Practicum Requirement

Complete one of the following:

| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International <br>  |

## Core Courses

| Complete three of the following: |
| :--- |
| POLS 3405 International Political Economy <br> POLS 3406 International Law <br> POLS 3407 International Organizations <br> POLS 3408 International Security <br> POLS 3435 Politics and Governance of Europe and <br> the European Union <br> POLS 3470 Arab-Israeli Conflict |


|  |  | 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 |  | Co-op | 0 |
|  |  | INTL undergraduat elective | 4 | Elective | 4 |  |  |
|  |  | POLS <br> undergraduate elective | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |



## 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 POLS 1151 | 0 |  |  |
| POLS 1156 | 0 Foreign <br> language <br> core course | 4 |  |  |
| INTL 1101 | 4 POLS 1160 | 4 |  | 0 |
| POLS 1000 | 1 POLS 1161 | 0 | 0 | 0 |

Year 2

| Fall H | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ECON 1290 |  | INTL undergraduate elective | - 4 | Vacation | 0 | Co-op | 0 |
| POLS 2326 | 4 | POLS 2400 | 4 |  |  |  |  |
| POLS undergraduate elective | 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 |  | INTL undergraduat elective | e 4 | Co-op | 0 |
|  | POLS undergraduat elective | 4 | POLS undergraduat elective | 4 |  |  |

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 |  | Vacation | 0 | Vacation | 0 |
| MATH 1215 | 4 | Foreign language core course | 4 |  |  |  |  |


| POLS 1155 | 4 POLS 1150 | 4 |  |  |
| :--- | :---: | :---: | :--- | :--- |
| POLS 1156 | 0 POLS 1151 | 0 |  |  |
| INTL 1101 | 4 POLS 1160 | 4 |  | 0 |
| POLS 1000 | 1 POLS 1161 | 0 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| ECON 1290 | 4 Co-op | 0 Co-op | 0 <br> POLS <br> undergraduate | 4 |
| POLS 2326 | 4 | elective |  |  |


| Foreign <br> language <br> core course | 4 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| POLS <br> undergraduatı <br> elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |

## Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INTL undergraduate elective | e 4 | Co-op | 0 | Co-op | 0 | INTL undergraduate elective | $\mathrm{e}^{4}$ |
| POLS 2400 | 4 |  |  |  |  | POLS <br> undergraduat elective | 4 |
| POLS undergraduate elective | e 4 |  |  |  |  |  |  |
| Foreign language core course | 4 |  |  |  |  |  |  |
|  | 16 |  | 0 |  | 0 |  | 8 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 H | Hours |
| INTL 3400 |  | Co-op | 0 | Co-op | 0 | Vacation | 0 |
| POLS <br> undergraduat elective | 4 |  |  |  |  |  |  |
| INTL undergraduate elective | $e^{4}$ |  |  |  |  |  |  |
| ENGW 3315 | 4 |  |  |  |  |  |  |
|  | 16 |  | 0 |  | 0 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| INTL | 4 INTL 4700 | 4 |
| undergraduate <br> elective |  |  |
| POLS <br> undergraduat | 4 Elective | 4 |
| elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 16 | 16 |

Total Hours: 129

## Sociology and International Affairs, BA

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Sociology Requirements

| Code | Title | Hours |
| :--- | :--- | :--- |
| Sociology Required Courses |  |  |
| ANTH 2305 | Global Markets and Local Culture | 4 |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2320 | Statistical Analysis in Sociology | 4 |
| SOCL 2321 | Research Methods in Sociology | 4 |

Sociology Electives A
Complete two courses in the following range: 8
SOCL 1000 to SOCL 2999
Sociology Electives B
Complete two courses in the following range: 8
SOCL 3000 to SOCL 5999

## Capstone Requirement

SOCL $4600 \quad$ Senior Seminar 4
or INTL $4700 \quad$ 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. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ECON 1115 | Principles of Macroeconomics | 4 |
| or HIST 2211 | The World Since 1945 |  |
| INTL 1101 | Globalization and International Affairs | 4 |
| INTL 3400 | International Conflict and Negotiation | 4 |
| POLS 1155 | Comparative Politics | 4 |
| Global Dynamics |  |  |
| POLS 1160 | International Relations | 4 |
| Global Dynamics Elective 1 |  |  |
| Complete one of the following courses: |  | 4 |
| INTL 2240 | Global Population and Development |  |
| INTL 2480 | Women and World Politics |  |
| INTL 2300 | Religion in International Affairs |  |
| POLS 3418 | Nationalism |  |
| PHIL 5001 | Global Justice |  |
| Global Dynamics Elective 2 |  |  |
| Complete one of | following courses: | 4 |
| INTL 2240 | Global Population and Development |  |
| INTL 2300 | Religion in International Affairs |  |
| INTL 2400 | Politics of Islam and Gender |  |
| INTL 2480 | Women and World Politics |  |


| or WMNS 2480 | Women and World Politics |
| :---: | :---: |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ANTH 2350 | Urban Anthropology |
| COMM 2303 | Global and Intercultural Communication |
| MSCR 2325 | Global Media |
| CRIM 4630 | Political Crime and Terrorism |
| ECON 1290 | History of the Global Economy |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| ENTR 2206 | Global Social Enterprise |
| ENTR 3306 | Global Entrepreneurship |
| ENVR 1110 | Global Climate Change |
| ENVR 4515 | Sustainable Development |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| HIST 2211 | The World Since 1945 |
| HIST 2214 | War in the Modern World |
| HIST 2311 | Colonialism/Imperialism |
| INTB 1203 or INTB 1209 | International Business and Global Social Responsibility International Business and Global Social Responsibility |
| INTB 3310 | Cultural Aspects of International Business |
| JRNL 3300 or INTL 3300 | Covering Conflicts: Peace, War, and the Media <br> Covering Conflicts: Peace, War, and the Media |
| JRNL 5360 | Global Reporting |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| MUSC 1140 | Global Pop Music |
| PHIL 5001 | Global Justice |
| PHTH 5230 | Global Health |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| POLS 3487 | Politics of Developing Nations |


| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International <br> Politics Abroad |
| PHIL 1270 | Judaism, Christianity, and Islam: <br> Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1272 | Ethics in the World's Religions |
| SOCL 1246 | Environment and Society |

## 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 8 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.

| Africa |  |
| :---: | :---: |
| AFRS 2307 | Africa Today |
| AFRS 2465 | The Scope and Dynamics of Conflicts in Africa |
| 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 | Africa and the World in Early Times |
| Asia |  |
| ANTH 4350 or INTL 4350 | Ethnography of Southeast Asia Ethnography of Southeast Asia |
| ASNS 1150 or HIST 1150 | East Asian Studies 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 |
| HIST 2360 | History of Capitalism in East Asia |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |


| PHIL 2395 | Japanese Buddhism |
| :---: | :---: |
| PHIL 4545 | Religion and Politics in South Asia |
| Europe |  |
| CLTR 1501 | Introduction to French Culture |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| 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 <br> or INTL 4500 | Latin American Society and Development <br> Latin American Society and Development |
| CLTR 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |
| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| SOCL 1215 | Society and Culture in Russia |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediate level two. Note: Completing this requirement satisfies the language requirement for the $B A$ degree.

## Integrative Requirements

Code Title Hours

SOCL $3465 \quad$ Globalization and the Evolution of

## 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

## Spanish and International Affairs, BA

Through this combined major, successful undergraduates will 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Spanish Language Requirements

Code Title Hours

Spanish Language Requirements

| SPNS 2101 | Intermediate Spanish 1 |
| :--- | :--- |
| SPNS 2102 | Intermediate Spanish 2 |
| SPNS 3101 | Advanced Spanish 1 |


| CLTR 1120 | Introduction to Languages, Literature, and Culture | 4 |
| :---: | :---: | :---: |
| Spanish Literature |  |  |
| Complete one of the following courses in the language of your major. |  | 4 |
| LITR 4560 | Masterpieces of Spanish Literature: 18th-20th Century |  |
| LITR 4561 | Masterpieces of Spanish Literature: 12th-17th Century |  |
| Advanced Spanish Language |  |  |
| Complete two of the following courses in the appropriate language while on study abroad: |  | 8 |
| SPNS 2101 to SPNS 5999 |  |  |
| LITR 4560 | Masterpieces of Spanish Literature: 18th-20th Century |  |
| LITR 4561 | Masterpieces of Spanish Literature: 12th-17th Century |  |
| LITR 4655 | Latin American Literature |  |
| Spanish Language Electives |  |  |
| Complete three of the following courses in the language of your major with course numbers 2990 or above: |  | 12 |
| SPNS 2990 to SPNS 3990 |  |  |
| LITR 4560 | Masterpieces of Spanish Literature: 18th-20th Century |  |
| LITR 4561 | Masterpieces of Spanish Literature: 12th-17th Century |  |
| LITR 4655 | Latin American Literature |  |

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| 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 |  |

Global Dynamics
Complete three 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.

Environment

| ENVR 1110 | Global Climate Change |
| :---: | :--- |
| ENVR 4515 | Sustainable Development |
| SOCL 1246 | Environment and Society |
| Law, Diplomacy, and | Global Governance |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 5200 | Political Economy: Interdisciplinary  <br>  Perspectives |
| COMM 2303 | Global and Intercultural Communication |
| POLS 1155 | Comparative Politics |


| POLS 1160 | International Relations |
| :---: | :---: |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |
| Human Rights and Social Justice |  |
| INTL 2400 | Politics of Islam and Gender |
| INTL 2480 or INTL 2480 | Women and World Politics Women and World Politics |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| 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 |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| POLS 3420 | U.S. National Security Policy |
| Globalization |  |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy. Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 | Code | Title | Hours |
| :---: | :---: | :---: | :---: | :---: |
| POLS 3407 | International Organizations | Africa |  |  |
| SOCL 3465 | Globalization and the Evolution of Human Societies | AFRS 2307 | Africa Today |  |
|  |  | AFRS 2465 | The Scope and Dynamics of Conflicts in |  |
| Population, Migration, and Diaspora |  |  | Africa |  |
| INTL 2240 | Global Population and Development | AFRS 2900 | Swahili, Culture, and Politics in Kenya |  |
| INTL 2400 | Politics of Islam and Gender | AFRS 3460 | Contemporary Government and Politics in Africa |  |
| INTL 3200 | Cities in a Global Context |  |  |  |
| AFRS 1185 | Gender in the African Diaspora | AFRS 4939 | Community Health, Culture, and Development in Kenya |  |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |  |  |  |
|  |  | ANTH 4510 | Anthropology of Africa |  |
|  |  | ENTR 3308 | Business Economic History of South Africa |  |
| ANTH 1101 | Peoples and Cultures |  |  |  |
| ANTH 2350 | Urban Anthropology | HIST 1180 | African History |  |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 | HIST 2390 | Africa and the World in Early Times |  |
|  |  | Asia |  |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions | ANTH 4350 or INTL 4350 | Ethnography of Southeast Asia <br> Ethnography of Southeast Asia |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam | ASNS 1150 | East Asian Studies |  |
| Development |  | or HIST 1150 | East Asian Studies |  |
| INTL 2240 | Global Population and Development | CLTR 1500 | Modern Chinese History and Culture |  |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives | CLTR 1506 | Introduction to Chinese Popular Culture |  |
|  |  | CLTR 1700 | Introduction to Japanese Pop Culture |  |
| ANTH 2305 | Global Markets and Local Culture | HIST 1246 | World War II in the Pacific |  |
| ECON 1291 | Development Economics | HIST 1252 | Japanese Literature and Culture |  |
| ECON 3404 | International Food Economics and Policy | HIST 1253 | History of Vietnam Wars |  |
|  |  | HIST 1500 | Modern Chinese History and Culture |  |
| ENTR 2206 | Global Social Enterprise | HIST 2308 | Law, Justice, and Society in Modern |  |
| ENVR 4515 | Sustainable Development |  | China |  |
| INTB 1203 | International Business and Global Social Responsibility | HIST 2351 | Modern Japan |  |
| or INTB 1209 | International Business and Global Social Responsibility | HIST 2360 | History of Capitalism in East Asia |  |
|  |  | PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHTH 5230 | Global Health | PHIL 1290 | Chinese Philosophy and Religion |  |
| POLS 3487 | Politics of Developing Nations | PHIL 2394 | Chinese Buddhism |  |
| Communication and Media |  | PHIL 2395 | Japanese Buddhism |  |
| COMM 2303 | Global and Intercultural Communication | PHL 23 | Japanese Buddhism |  |
| INTB 3310 | Cultural Aspects of International Business | Europe |  |  |
| JRNL 3300 | Covering Conflicts: Peace, War, and the Media | CLTR 1501 | Introduction to French Culture |  |
|  |  | CLTR 1503 | Introduction to Italian Culture |  |
| or INTL 3300 | Covering Conflicts: Peace, War, and the Media | CLTR 1504 | Introduction to Spanish Culture |  |
| JRNL 5360 | Global Reporting | ECON 1293 | European Economic History |  |
| MSCR 2325 | Global Media | HIST 1170 | Europe: Empires, Revolutions, Wars, and |  |
| MUSC 1140 | Global Pop Music |  |  |  |
| International Experiential Learning |  | HIST 2280 | Hitler, Germany, and the Holocaust |  |
| Complete at least one "international semester" via study abroad, international internship, international co-op, or two short-term programs. |  | HIST 2370 | Renaissance to Enlightenment |  |
|  |  | HIST 2376 | Britain and the British Empire |  |
|  |  | HIST 4946 | Independent Field Research Abroad: Central Europe |  |
| Regional Analysis Requirement |  | POLS 3435 | Politics and Governance of Europe and the European Union |  |
| Complete three of the following courses, two of which must be in one region. Select courses taken during a semester study abroad or specific |  | Latin America |  |  |
| Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty advisor. See department for additional courses: |  | ANTH 4500 or INTL 4500 | Latin American Society and Development <br> Latin American Society and Development |  |


| CLTR 1505 | Introduction to Latin American Culture |
| :---: | :---: |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |
| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| SOCL 1215 | Society and Culture in Russia |

## Integrative Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Capstone |  | 4 |
| LITR 3500 | International Perspectives | 4 |
| INTL 4700 | Senior Capstone Seminar in <br>  | International Affairs |

## Spanish and International Affairs Combined-Major Credit/ GPA Requirements

Complete 84 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 |
| :--- | :---: | :---: | :---: | ---: |
| INTL 1000 | 1 MATH 1215 | 4 Vacation | 0 Vacation | 0 |
| ENGW 1111 | 4 ECON 1115 | 4 |  |  |
| or 1116 |  |  |  |  |
| 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 | 4Spanish <br> elective <br> $3000-5000$ | 4 |  |  |  |
|  | 4 | 12 | 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 <br> division <br> elective | 4 |  |
|  | Advanced <br> literature/ <br> cultural <br> course | 4 |  |  |
| Advanced <br> literature/ <br> cultural <br> course | 4 | 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 <br> division <br> elective | 4 |
|  | LITR 3500 | 4 |
| Spanish <br> elective <br> $3000-5000$ | 4 |  |
| 0 | 16 |  |

Total Hours: 125

## 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 <br> or 1116 | 4 |  |  |
|  |  |  |  |  |


| INTL 1101 | 4 Elective | 4 |  |  |
| :--- | :--- | :---: | :--- | :--- |
| CLTR 1120 | 4 SPNS 2202 | 4 |  |  |
| SPNS 2101 | 4 |  | 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 |
| Spanish | 4 |  | Elective | 4 |
| elective |  |  |  |  |
| 3000-5000 |  |  |  |  |
| SPNS 3101 | 4 | 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 |  |$\quad 4$


| Year 4 |  | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | 0 Co-op | 0 Vacation | 0 |
| INTL 3400 | 4 Co-op |  |  |  |
| ENGW 3315 | 4 |  |  |  |
| Elective | 4 |  |  | 0 |
| Spanish <br> elective <br> $3000-5000$ | 4 |  | 0 |  |
|  | 16 | 0 |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: | :--- |
| INTL elective | 4 INTL elective | 4 |
| Upper <br> division <br> elective | 4 INTL 4700 | 4 |
| Elective | 4 Upper <br> division <br> elective | 4 |
| Spanish <br> elective <br> $3000-5000$ | 4 LITR 3500 | 4 |
|  | 16 | 16 |

Total Hours: 125

## 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 8 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.

## Africa

| AFRS 2307 | Africa Today |
| :---: | :---: |
| AFRS 2465 | The Scope and Dynamics of Conflicts in Africa |
| 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 | Africa and the World in Early Times |
| Asia |  |
| $\begin{aligned} & \text { ANTH } 4350 \\ & \text { or INTL } 4350 \end{aligned}$ | Ethnography of Southeast Asia Ethnography of Southeast Asia |
| ASNS 1150 or HIST 1150 | East Asian Studies 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 |
| HIST 2360 | History of Capitalism in East Asia |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |
| Europe |  |
| CLTR 1501 | Introduction to French Culture |
| CLTR 1503 | Introduction to Italian Culture |


| CLTR 1504 | Introduction to Spanish Culture |
| :---: | :---: |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| 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 or INTL 4500 | Latin American Society and Development <br> Latin American Society and Development |
| CLTR 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |
| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| SOCL 1215 | Society and Culture in Russia |

## 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:

## Environment

ENVR 1110 Global Climate Change

ENVR 4515 Sustainable Development
SOCL 1246 Environment and Society
Law, Diplomacy, and Global Governance
INTL $2480 \quad$ Women and World Politics
or WMNS 2480 Women and World Politics
INTL $5200 \quad$ Political Economy: Interdisciplinary Perspectives
COMM 2303 Global and Intercultural Communication
POLS 1155 Comparative Politics
POLS 1160 International Relations
POLS 2370 Religion and Politics
POLS 3405 International Political Economy
POLS 3406 International Law
POLS 3407 International Organizations
POLS 4910 Model United Nations
POLS 4918 Model NATO
POLS 4938 Dialogue of Civilizations: International Politics Abroad

Human Rights and Social Justice

| INTL 2400 | Politics of Islam and Gender |
| :--- | :--- |
| INTL 2480 <br> or WMNS 2480 | Women and World Politics <br> AFAM 2600 |
| Contemporary Issues: Race, Science, <br> and Technology |  |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and <br> Economic Perspective |
| PHIL 5001 | Ethics in the World's Religions |

Conflict and Security

| CRIM 4630 | Political Crime and Terrorism |
| :--- | :--- |
| HIST 1206 3330 | Drug Trade and Drug War. History, <br> Security, Culture |
| JRNL 3300 | Covering Conflicts: Peace, War, and the <br> Media <br> or INTL 3300 |
| PHIL 5001 | Covering Conflicts: Peace, War, and the Media |
| POLS 3408 | International Security |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| POLS 3420 | U.S. National Security Policy |

Globalization
INTL 2240 Global Population and Development
INTL 2300 Religion in International Affairs
INTL $2480 \quad$ Women and World Politics
or WMNS 2480 Women and World Politics
INTL $3200 \quad$ Cities in a Global Context
INTL $5200 \quad$ Political Economy: Interdisciplinary Perspectives
AFAM 2639 Globalism, Racism, and Human Rights
ANTH 2305 Global Markets and Local Culture
ANTH 2315 Religion and Modernity
ECON 1290 History of the Global Economy
ECON 4635 International Economics
ENGL 2450 Postcolonial Literature

| HIST 2211 | The World Since 1945 | GPA Requirement |  |  |
| :---: | :---: | :---: | :---: | :---: |
| HIST 2311 | Colonialism/Imperialism | 2.000 GPA required in the minor |  |  |
| INTB 3310 | Cultural Aspects of International Business | Middle East Studies, Minor |  |  |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective | The minor in Middle East studies is an inter- and cross-disciplinary program, drawing on courses from within the International Affairs |  |  |
| POLS 1160 | International Relations |  |  |  |
| POLS 2370 | Religion and Politics | Program as well as departments and units across the college. The |  |  |
| POLS 3405 | International Political Economy | program provides an in-depth study of the Middle East and North Africa (Arab world, Israel, Iran, and Turkey); its place within the broader |  |  |
| POLS 3406 | International Law | Mediterranean region; and its relations with other world regions. As such, it seeks to enhance students' understanding of this culturally diverse and |  |  |
| POLS 3407 | International Organizations |  |  |  |
| SOCL 3465 | Globalization and the Evolution of Human Societies | politically import advantage of the | egion of the world. Students are encour versity's study-abroad and Dialogue of Ci | to take tions |
| Population, Migration, and Diaspora |  | programs (faculty-led summer programs) in Egypt, Morocco, Tunisia, Jordan, Turkey, Israel and Palestine, and other approved programs in the region. |  |  |
| INTL 2240 | Global Population and Development |  |  |  |
| INTL 2400 | Politics of Islam and Gender |  |  |  |
| INTL 3200 | Cities in a Global Context | Minor Requirements |  |  |
| AFRS 1185 | Gender in the African Diaspora | Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. |  |  |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |  |  |  |
| ANTH 1101 | Peoples and Cultures | Required Courses |  |  |
| ANTH 2350 | Urban Anthropology | Code | Title | Hours |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 | POLS 3465 | Government and Politics in the Middle East | 4 |
| PHIL 1270 | Judaism, Christianity, and Islam: | $\begin{aligned} & \text { or POLS } 3470 \\ & \text { or INTL } 3250 \end{aligned}$ | Arab-Israeli Conflict |  |
|  | Abrahamic Religions |  | Democracy and Development in North Africa and the Mediterranean |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |  |  |
| Development |  | $\begin{aligned} & \text { INTL } 1160 \\ & \text { or HIST } 1290 \end{aligned}$ | Middle East Studies 4 |  |
| INTL 2240 | Global Population and Development |  | Modern Middle East |  |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives | INTL 1150Elective Courses |  |  |
| ANTH 2305 | Global Markets and Local Culture | Elective Cours |  |  |
| ECON 1291 | Development Economics | Elective courses | include courses taken as part of an app |  |
| ECON 3404 | International Food Economics and Policy | used as elective c |  |  |
| ENTR 2206 | Global Social Enterprise | Code | Title | Hours |
| ENVR 4515 | Sustainable Development | Complete two o | following: | 8 |
| or INTB 1209 | International Business and Global | ARAB 1301 | Elementary Arabic Immersion 1 |  |
|  | Social Responsibility | ARAB 1302 | Elementary Arabic Immersion 2 |  |
|  | International Business and Global Social Responsibility | ARAB 2301 | Intermediate Arabic Immersion 1 |  |
|  |  | ARAB 2302 | Intermediate Arabic Immersion 2 |  |
| PHTH 5230 | Global Health | ARAB 3301 | Advanced Arabic Immersion 1 |  |
| POLS 3487 | Politics of Developing Nations | ARAB 3302 | Advanced Arabic Immersion 2 |  |
| Communication and Media |  | CLTR 1502 | Introduction to Arabic Culture |  |
| COMM 2303 | Global and Intercultural Communication | ECON 1292 | Economic History of the Middle East |  |
| INTB 3310 | Cultural Aspects of International Business | HIST 1185 | Introduction to Middle Eastern History |  |
| JRNL 3300 | Covering Conflicts: Peace, War, and the Media | HIST 1290 | Modern Middle East |  |
|  |  | INTL 2100 | Modern Israel |  |
| or INTL 3300 | Covering Conflicts: Peace, War, and the Media | INTL 2200 | America and the Middle East |  |
| JRNL 5360 | Global Reporting | INTL 2400 | Politics of Islam and Gender |  |
| MSCR 2325 | Global Media | INTL 3250 | Democracy and Development in North Africa and the Mediterranean |  |
| MUSC 1140 | Global Pop Music | POLS 3465 | Government and Politics in the Middle East |  |
|  |  |  |  |  |


| POLS 3470 | Arab-Israeli Conflict |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: <br> Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, <br> Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |

## GPA Requirement

2.000 GPA required in the minor

## Jewish Studies

Website (http://www.northeastern.edu/jewishstudies)

## Lori H. Lefkovitz, PhD

Ruderman Professor and Director, Jewish Studies Program
450 Renaissance Park
617.373.8437
617.373 .2942 (fax)

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 crosscultural 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.

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, 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 the arts 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. 31)."

## Pre-approved Template Program in Jewish Studies

Jewish studies offers a preapproved template program that may be paired with another preapproved template program to create a combined major; to see a list of current preapproved template programs, visit the combined majors webpage (http://www.northeastern.edu/registrar/ major-2.html).

Students may request admission to such a combined major via the Combined Major Approval form (http://www.northeastern.edu/ registrar/form-maj-comb.pdf), which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on preapproved template programs, see "Student-Requested Combined Major (p. 33)." For template program requirements, visit the myNortheastern web portal (http://www.myneu.neu.edu), click on the "Self-Service" tab, then on "My Degree Audit."

## Programs

## Bachelor of Arts

- Jewish Studies and Religion (p. 814)


## Minor

- Jewish Studies (p. 818)


## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Jewish Studies Requirements

Code Title Hours

| Required Courses |  | 4 |
| :--- | :--- | :--- |
| PHIL 1285 | Jewish Religion and Culture |  |
| or JWSS 1285 | Jewish Religion and Culture | 4 |
| JWSS 4660 | Jewish Studies Module | 1 |

Jewish Religion and Thought
Complete one course from list A or list B.

Note: If you complete one course from list B, you will be required to complete one fewer course to satisfy the religious studies electives requirement.
List A

| PHIL 1287 | Modern Judaism |
| ---: | :--- |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from <br> the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From <br> Mountain Jews to Crypto-Jews |
| PHIL 2322 | Responses to the Holocaust |
| List B | American Judaism |
| PHIL 1286 | Adam and Eve and Their Interpreters |
| PHIL 2315 | Religion, Nation, and Identity in Modern <br> PHIL 3387 |
| Israel Studies |  |
| Complete one of the following: |  |

Complete one of the following:

| ENGL 2610 | Contemporary Israeli Literature and Art <br> (Abroad) |
| :--- | :--- |
| INTL 2100 | Modern Israel |
| POLS 3470 | Arab-Israeli Conflict |


| HIST 1294 | Strangers in a Strange Land? European <br> Jewish History 1750-1945 |
| :--- | :--- |

or JWSS 1294 Strangers in a Strange Land? European Jewish History 1750-1945

| HIST 2280 | Hitler, Germany, and the Holocaust |
| :---: | :--- |
| HIST 2282 | The Holocaust and Comparative <br> 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:

| ENGL 2610 | Contemporary Israeli Literature and Art <br> (Abroad) |
| :---: | :--- |
| ENGL 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| or JWSS 3678 | Bedrooms and Battlefields: Hebrew Bible and the <br> Origins of Sex, Gender, and Ethnicity |
| ENGL 3685 | Modern and Contemporary Jewish <br> Literature |
| Jewish SWSS 3685 | Modern and Contemporary Jewish Literature |
| Complete three of the following: |  |


| CLTR 3450 | Israeli and Palestinian Film |
| :--- | :--- |
| ENGL 2610 | Contemporary Israeli Literature and Art <br> (Abroad) |
| ENGL 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| or JWSS 3678 | Bedrooms and Battlefields: Hebrew Bible and the <br> Origins of Sex, Gender, and Ethnicity |

ENGL 3685 Modern and Contemporary Jewish Literature
or JWSS 3685 Modern and Contemporary Jewish Literature
HIST 1294 Strangers in a Strange Land? European Jewish History 1750-1945
or JWSS 1294 Strangers in a Strange Land? European Jewish History 1750-1945
HIST 2280 Hitler, Germany, and the Holocaust
HIST 2282 The Holocaust and Comparative Genocide
HIST 2285 America and the Holocaust
or JWSS 2285
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 1270 Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271 Sex in Judaism, Christianity, and Islam
PHIL 1286 American Judaism
PHIL 1287 Modern Judaism
PHIL $2300 \quad$ Mysticism
PHIL 2311 The Kabbalah: Jewish Mysticism from the Zohar to Madonna
PHIL 2313 Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews
PHIL 2315 Adam and Eve and Their Interpreters
PHIL 2322 Responses to the Holocaust
PHIL 3387 Religion, Nation, and Identity in Modern Jewish Thought
PHIL 4546 Advanced Biblical Studies: Hebrew Bible
POLS 2370 Religion and Politics

| POLS 3465 | Government and Politics in the Middle East |  |
| :---: | :---: | :---: |
| POLS 3470 | Arab-Israeli Conflict |  |
| SOCL 1241 | Sociology of Violence |  |
| SOCL 2270 | Race and Ethnic Relations |  |
| Religion Requirements |  |  |
| Code | Title | Hours |
| Required Cours |  |  |
| PHIL 1120 | Understanding the Bible | 4 |
| Religion |  |  |
| Complete two of the following: |  | 8 |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  |
| PHIL 2325 | Ancient Philosophy and Political Thought |  |
| Comparative Religions |  |  |
| Complete one | following: | 4 |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 2300 | Mysticism |  |
| Philosophy or Religion Seminar |  |  |
| Complete one | following: | 4 |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 4903 | Seminar in Religion |  |
| Religious Studies Electives |  |  |
| Complete four of the following: |  | 16 |
| PHIL 1110 | Introduction to Religion |  |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1130 | Ethics: East and West |  |
| PHIL 1120 | Understanding the Bible |  |
| PHIL 1220 | The Meaning of Death |  |
| PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1231 | Image and Icon in South Asia |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1273 | Jainism |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 1276 | Indian Religions |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  |
| PHIL 1285 | Jewish Religion and Culture |  |


| or JWSS 1285 | Jewish Religion and Culture |
| :---: | :---: |
| PHIL 1286 | American Judaism |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 1295 | Religious Perspectives on Health and Healing |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| PHIL 4547 | Seminar. Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 4994 | Internship |

## Integrative Requirements

Code Title Hours

Note: This course may also count as a religion seminar or as a Jewish history course.
Complete one of the following: 4

HIST $1294 \quad$| Strangers in a Strange Land? European |
| :--- |
| Jewish History 1750-1945 |

or JWSS 1294 Strangers in a Strange Land? European Jewish History 1750-1945
HIST 2431 Immigration and Identity in the American Jewish Experience
or JWSS 2431 Immigration and Identity in the American Jewish Experience

## PHIL 4547 Seminar. Apocalypticism

## Hebrew Language Introduction

Complete two courses in Hebrew. These courses also count
8
toward the BA language requirement.

## Jewish Studies and Religion Major Credit Requirement

80 major semester hours required

## 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 Foreign <br> language <br> core course | 4 Vacation | 0 Vacation | 0 |
|  | 4 HIST 2282 | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
| PHIL 1285 or <br> JWSS 1285 | 4 Elective | 4 |  | 0 |
| Foreign <br> language <br> core course | 16 | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHIL 2314 | 4 HBRW 1102 | 4 Vacation | 0 Co-op | 0 |
| PHIL 1275 | 4 Religious <br> studies <br> elective | 4 |  |  |
| HBRW 1101 | 4 Foreign <br> language <br> core course | 4 |  |  |
| Religious <br> studies <br> elective | 4 Elective | 4 | 0 | 0 |
|  | 16 | 16 | 0 |  |


| Year 3 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Co-op | 0 HIST 1294 | 4 Elective | 4 Co-op | 0 |
|  | ENGW 3315 | 4 Elective | 4 |  |
|  | Jewish <br> studies <br> elective | 4 |  |  |
|  | HIST 2280 | 4 | 8 | 0 |


| Year 4 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Fall | MUSC 1132 <br> Co-op | Jewish Elective <br> studies <br> elective | 4 Elective | 4 Co-op |$\quad 0$


| Year 5 | Hours |  |
| :--- | ---: | ---: |
| Fall | Spring <br> 0 <br> Jewish <br> studies <br> elective | 4 |
| Co-op | PHIL 4390 | 4 |
|  | Religious <br> studies <br> elective | 4 |



## Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: | ---: |
| ENGW 3315 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| HBRW 1102 | 4 |  | Elective | 4 |
| Religious <br> studies <br> elective | 4 |  |  |  |
| Foreign <br> language <br> core course | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Jewish <br> studies <br> elective | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| Jewish <br> studies <br> elective | 4 |  |  |  |
| Religious <br> studies <br> elective | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Jewish <br> studies <br> elective | 4 HIST 1294 | 4 |
| Religious <br> studies <br> elective | 4 HIST 2280 | 4 |


| Religious <br> seminar | 4 MUSC 1132 | 4 |
| :--- | :---: | ---: |
| Elective | 4 PHIL 1280 | 4 |
|  | 16 | 16 |

Total Hours: 128

## 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 |
| :--- | :--- | ---: |
| PHIL 1285 | Jewish Religion and Culture | 4 |
| or JWSS 1285 | Jewish Religion and Culture |  |
| JWSS 4660 | Jewish Studies Module | 1 |

## Elective Courses

Code Title Hours
Complete four courses from the following lists. A maximum
of two courses may be taken from the Jewish-studies-related course list:

| Jewish Studies Courses |  |
| :---: | :---: |
| CLTR 3450 | Israeli and Palestinian Film |
| 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 |
| $\text { ENGL } 3685$ | Modern and Contemporary Jewish Literature |
| or JWSS 3685 | Modern and Contemporary Jewish Literature |
| HBRW 1101 | Elementary Hebrew 1 |
| HBRW 1102 | Elementary Hebrew 2 |
| HIST 1294 | Strangers in a Strange Land? European Jewish History 1750-1945 |
| or JWSS 1294 | Strangers in a Strange Land? European Jewish History 1750-1945 |
| HIST 2282 | The Holocaust and Comparative Genocide |
| HIST 2285 | America and the Holocaust |
| or JWSS 2285 | America and the Holocaust |



## GPA Requirement

2.000 GPA required in the minor

## Philosophy and Religion

Website (http://www.northeastern.edu/cssh/philosophy)

## Ronald Sandler

Professor and Chair
371 Holmes Hall
617.373.3636
617.373 .4359 (fax)

Ronald Sandler, Professor and Chair, r.sandler@northeastern.edu John Basl, Assistant Professor and Academic Advisor,
j.bas@@northeastern.edu

Diana Webster, Department Administrative Officer, d.webster@northeastern.edu

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 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 social policy in
such areas as law, medicine, environment, and technology. Course work in philosophy significantly strengthens study in other areas.

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. 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.

## The Philosophy Major

Philosophy majors enter diverse careers, ranging from college-level teaching to law, medicine, and business. The program strives to help students sharpen their critical abilities. The department offers four ways to major in philosophy: the standard major, the concentration in law and ethics, the concentration in ethics, and the concentration in religious studies.

## Major in Religious Studies

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. They also have an opportunity to explore diverse methodological approaches to the study of religions in general. This major is designed to give students the expertise to prepare them for graduate school in religious studies or to enhance their abilities in any career that requires a liberal arts education.

## 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, international affairs, environmental studies, history, English, computer science, criminal justice, 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, theology, and practice; awareness of religious experience within its social, historical, literary, and political contexts; and methods of understanding the key dimensions of religious life with other areas of study in which religion plays a large role. Current combined majors include history and religious studies, international affairs and religious studies, religious studies and African- American studies, and Jewish studies and religion. More information on these majors can be found on the program pages.

## Preapproved Template Programs in Philosophy and in Religious Studies

The Department of Philosophy and Religion offers preapproved combined major templates in philosophy and religious studies. Each template may be paired with another preapproved template to create a combined major.

To see a list of current preapproved templates, visit the combined majors webpage (http://www.northeastern.edu/registrar/major-2.html).

Students may request such a combined major via the Combined Major Approval form (http://www.northeastern.edu/registrar/form-maj-comb.pdf), which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on the preapproved template program, see "Student-Requested Combined Major (p. 33)." For template program requirements, visit the myNortheastern web portal (http://www.myneu.neu.edu), click on the "Self-Service" tab, then on "My Degree Audit."

## Minors

The Department of Philosophy and Religion offers philosophy and religious studies minors, as well as a popular ethics minor. 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. Information on these minors can be found on the program pages.

## Programs

## Bachelor of Arts (BA)

- Philosophy (p. 819)
- Religious Studies (p. 826)
- English and Philosophy (p. 708)
- Environmental Studies and Philosophy (p. 526)
- History and Philosophy (p. 738)
- History and Religious Studies (p. 740)
- International Affairs and Religious Studies (p. 796)
- Jewish Studies and Religion (p. 814)
- Media and Screen Studies and Philosophy (p. 142)
- Political Science and Philosophy (p. 843)
- Religious Studies and African American-Studies (p. 651)


## Bachelor of Science (BS)

- Philosophy (p. 847)
- Computer Science and Philosophy (p. 337)
- Criminal Justice and Philosophy (p. 640)
- Economics and Philosophy (p. 692)
- Physics and Philosophy (p. 592)
- Political Science and Philosophy (p. 859)
- Politics, Philosophy, and Economics (p. 623)


## Minor

- Philosophy (p. 863)
- Religious Studies (p. 863)
- Ethics (p. 864)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 944)

## 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

- 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
- The half major template in philosophy 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## Concentrations

Complete one of the following concentrations:

- Philosophy Generalist requirements (p. 820)
- Concentration in Law and Ethics (p. 820)
- Concentration in Ethics (p. 821)
- Concentration in Religious Studies (p. 822)


## 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.

## Program Requirements

128 total semester hours required

| PHILOSOPHY GENERALIST |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Philosophy Required Courses |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL 2325 | Ancient Philosophy and Political Thought | 4 |
| or POLS 2325 | Ancient Philosophy and Political Though |  |
| PHIL 2330 | Modern Philosophy | 4 |
| Philosophy Advanced Elective/Seminar |  |  |
| 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 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4550 | Philosophy of Economics |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Additional Electives |  |  |
| Complete three additional courses in philosophy and religion. |  | 12 |
| CONCENTRATION IN LAW AND ETHICS |  |  |
| Code | Title | Hours |
| Philosophy Required Courses |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL 2325 | Ancient Philosophy and Political Thought | 4 |
| or POLS 2325 | Ancient Philosophy and Political Though |  |
| PHIL 2330 | Modern Philosophy | 4 |
| PHIL 3435 | Moral Philosophy | 4 |
| Philosophy Advanced Elective/Seminar |  |  |
| Complete two of 5000 level: | following courses with one at the 4000 or | 8 |


| PHIL 3343 | Existentialism |  |
| :---: | :---: | :---: |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar. Apocalypticism |  |
| PHIL 4550 | Philosophy of Economics |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| 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 |  |
| PHIL 1180 | Environmental Ethics |  |
| PHIL 1185 | The Ethics of Food |  |
| PHIL 1195 | Research Ethics |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 1276 | Indian Religions |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  |
| 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 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 2301 | Philosophical Problems of Law and Justice |  |
| PHIL 2303 | Social and Political Philosophy |  |
| PHIL 2325 | Ancient Philosophy and Political Thought |  |
| PHIL 2394 | Chinese Buddhism |  |
| PHIL 2395 | Japanese Buddhism |  |


| PHIL 4390 | Cults and Sects |
| :---: | :--- |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4550 | Philosophy of Economics |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |
| Law-Related Electives |  |
| Complete two courses from social science departments. |  |

These courses are to be chosen in consultation with the department:

| AFAM 2360 | Politics of Poverty |
| :---: | :---: |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| AFRS 3460 | Contemporary Government and Politics in Africa |
| CRIM 2100 | Criminal Due Process |
| CRIM 2200 | Criminology |
| CRIM 3100 | Criminal Law |
| CRIM 3200 | Youth Crime and Justice |
| CRIM 4010 | Gender, Crime, and Justice |
| CRIM 4020 | Race, Crime, and Justice |
| CRIM 4630 | Political Crime and Terrorism |
| 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 1241 | Sociology of Violence |
| SOCL 1245 | Sociology of Poverty |
| SOCL 1246 | Environment and Society |
| SOCL 2358 | Current Issues in Cities and Suburbs |
| SOCL 4518 | Law and Society in a Digital World |

## CONCENTRATION IN ETHICS

Code Title Hours

Philosophy Required Courses
PHIL 1115 Introduction to Logic 4

PHIL 2325 Ancient Philosophy and Political 4 Thought
or POLS 2325 Ancient Philosophy and Political Thought
PHIL 2330 Modern Philosophy 4
PHIL 3435 Moral Philosophy 4

Philosophy Advanced Elective/Seminar
Complete two of the following courses with one at the 4000 or 8 5000 level:

PHIL 3343

## Existentialism

PHIL 3435 Moral Philosophy
PHIL $3460 \quad$ Philosophy and Literature

| PHIL 4390 | Cults and Sects |  |
| :---: | :---: | :---: |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar. Apocalypticism |  |
| PHIL 4550 | Philosophy of Economics |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| 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 1165 | Moral and Social Problems in Healthcare |  |
| PHIL 1170 | Business Ethics |  |
| PHIL 1180 | Environmental Ethics |  |
| PHIL 1185 | The Ethics of Food |  |
| PHIL 1195 | Research Ethics |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 1276 | Indian Religions |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  |
| 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 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 2301 | Philosophical Problems of Law and Justice |  |
| PHIL 2303 | Social and Political Philosophy |  |
| PHIL 2325 | Ancient Philosophy and Political Thought |  |
| PHIL 2394 | Chinese Buddhism |  |
| PHIL 2395 | Japanese Buddhism |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4545 | Religion and Politics in South Asia |  |
| PHIL 4550 | Philosophy of Economics |  |


| PHIL 5001 | Global Justice |
| :--- | :--- |
| PHIL 5011 | Comparative Religious Ethics |

## $\begin{array}{ll}\text { CONCENTRATION IN RELIGIOUS STUDIES } \\ \text { Code } & \text { Title Hours }\end{array}$

Philosophy Required Courses

| PHIL 1115 | Introduction to Logic | 4 |
| :--- | :--- | :--- |
| PHIL 2325 | Ancient Philosophy and Political | 4 |
| or POLS 2325 | Thought | Ancient Philosophy and Political Thought |

5000 level:

| PHIL 3343 | Existentialism |
| :--- | :--- |
| PHIL 3435 | Moral Philosophy |
| PHIL 3460 | Philosophy and Literature |
| PHIL 4390 | Cults and Sects |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4515 | Advanced Logic |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar. Apocalypticism |
| PHIL 4550 | Philosophy of Economics |
| PHIL 4606 | Seminar. Theories and Methods in |
| PHIL 4903 | Religious Studies |
| PHIL 4906 | Seminar in Religion |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |

Religious Studies Courses
Complete three of the following:

| PHIL 1104 | Goddesses, Witches, Saints, and <br> Sinners: Women in Western Religions |
| :--- | :--- |
| PHIL 1110 | Introduction to Religion |
| PHIL 1111 | Introduction to World Religions |
| PHIL 1130 | Ethics: East and West |
| PHIL 1120 | Understanding the Bible |
| PHIL 1220 | The Meaning of Death |
| PHIL 1230 | Sound, Music, and Religion |
| PHIL 1231 | Image and Icon in South Asia |
| PHIL 1250 | Jesus in the Gospels, American Culture, <br> and the Movies |
| PHIL 1260 | Apocalypticism in Film |
| PHIL 1270 | Judaism, Christianity, and Islam: <br> Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 1273 | Jainism |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: <br> Eastern Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1280 | Encountering Islam: Traditions, <br> Debates, and Crosscultural Diversity |


| PHIL 1281 | Islam, Gender, and Fashion |
| :---: | :---: |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1286 | American Judaism |
| PHIL 1287 | Modern Judaism |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 1295 | Religious Perspectives on Health and Healing |
| PHIL 1410 | From Vodou and the Rastas to AfroIslam: African Religions in the Americas |
| PHIL 1666 | The Problem of Evil in Film |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar: Theories and Methods in Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 4992 | Directed Study |
| PHIL 5011 | Comparative Religious Ethics |

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 undergraduatı elective | 4 |  |  |  |
| PHIL 1101 | 4 | Foreign language core course | 4 |  |  |  |


| Foreign <br> language <br> core course | 4 Elective | 4 |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 16 | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Foreign <br> language <br> core course | 4 Elective | 4 Vacation | 0 Co-op | 0 |
| Elective | 4 PHIL 2330 | 4 |  |  |
| PHIL 2325 | 4 Elective | 4 |  |  |
| Elective | 4 PHIL |  |  |  |
| undergraduat |  |  |  |  |
| elective |  |  |  |  |$\quad 4$| EESH 2000 |
| :--- |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 Elective | 4 Elective | 4 Co-op | 0 |
|  | PHIL 1215 or <br> PHIL 1115 | 4 Elective | 4 |  |
|  | Advanced <br> philosophy <br> elective | 4 |  | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 Elective | 4 Elective | 4 Co-op | 0 |
| Philosophy <br> seminar | 4 Upper- <br> division <br> elective | 4 |  |  |
| PHIL <br> undergraduate <br> elective | 4 |  |  |  |
| Upper- <br> division <br> elective | 4 | 8 | 0 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 Elective | 4 |
|  | PHIL <br> undergraduatı <br> elective | 4 |
| Upper- <br> division <br> elective | 4 |  |
| Elective | 4 |  |
| 0 | 16 |  |

[^21]
## Five Years, Three Co-ops in Spring/Summer 1

| Year 1 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Fall | MATH 1215 | 4 Elective | 4 Vacation | 0 Vacation | 00


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Foreign <br> language <br> core course | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Elective | 4 |  |  |  |
| PHIL 2325 | 4 |  |  | 4 |
| Elective | 4 |  |  | 8 |
| EESH 2000 | 1 |  | 0 | 8 |
|  | 17 | 0 | 0 |  |

## 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 | 4 |
|  |  |  | undergraduatı <br> elective |  |


| Upper- <br> division <br> elective | 4 |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Elective | 4 | 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 1215 or | 4 |  |  |  |
| PHIL 1115 | 4 |  |  |  |
| Advanced <br> philosophy <br> elective |  |  |  |  |
| ENGW 3315 | 4 |  |  | 0 |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Elective | 4 Elective | 4 |
| Philosophy <br> seminar | PHIL <br> undergraduatı <br> elective | 4 |
| PHIL | 4Upper- <br> division <br> elective | 4 |
| undergraduate |  |  |


| Upper- <br> division <br> 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/FALLYear 1


| Year 2 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Foreign <br> language <br> core course | 4 Elective | 4 Vacation | 0 Co-op | 0 |
| Elective | 4 PHIL 2330 | 4 |  |  |
| PHIL 2325 | 4 Elective | 4 |  |  |
| Elective | 4 <br> Law-related <br> elective | 4 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 Elective | 4 Elective | 4 Co-op | 0 |
|  | PHIL 1215 or | 4 Elective | 4 |  |
|  | PHIL 1115 |  |  |  |
|  | PHIL 3435 | 4 |  | 0 |
|  | ENGW 3315 | 4 | 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 <br> political <br> elective | 4 Upper- <br> division <br> elective | 4 |  |  |
| Law-related <br> elective <br> Upper- <br> division <br> elective | 4 | 4 | 0 |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | 0 Elective | 4 |


| Philosophy <br> seminar | 4 |
| :--- | :---: |
| Upper- <br> division <br> elective <br> 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 |  | Moral and political elective | 4 |  |  |  |
| PHIL 1101 |  | 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 <br> language <br> core course | 4 Co-op | 0 Co-op | 0 |  |
| Elective | 4 |  |  | 4 |
| PHIL 2325 | 4 |  |  | 4 |
| Elective | 4 |  |  |  |
| EESH 2000 | 1 |  |  | 8 |
|  | 17 | 0 | 0 |  |

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 <br> elective | 4 |  |  |  |
| Upper- <br> division <br> elective | 4 |  |  |  |


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Elective | 4 Co-op | 0 Co-op | 0 |  |
| PHIL 1215 or | 4 |  |  |  |
| PHIL 1115 |  |  |  |  |
| PHIL 3435 | 4 |  |  |  |
| ENGW 3315 | 4 | 0 | 0 | 0 |
|  | 16 |  |  |  |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Elective | 4 Elective | 4 |


| Moral and <br> political <br> elective | 4 Philosophy <br> seminar | 4 |
| :--- | :---: | :---: |
| Law-related <br> elective | 4 Upper- <br> division <br> elective | 4 |
| Upper- <br> division <br> elective | 4 Elective | 4 |
|  | 16 | 16 |
| Total Hours: 129 |  |  |

## Philosophy with Concentration in Religious Studies, BA

 FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALLYear 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| MATH 1215 | 4 Elective | 4 Vacation | 0 Vacation | 0 |
| ENGW 1111 | 4 <br> Religious <br> studies <br> elective | 4 |  |  |
|  | 4 |  |  |  |


| PHIL 1101 | 4 Foreign <br> language <br> core course | 4 |  |
| :--- | :---: | :---: | :--- |
|  | 4 Elective | 4 | 0 |


| 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 |  | Religious studies elective | 4 |  |  |  |  |
|  |  | EESH 2000 | 1 |  |  |  |  |
|  | 16 |  | 17 |  | 0 |  | 0 |


| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | Elective | 4 | Elective | 4 | Co-op | 0 |
|  |  | PHIL 1215 or <br> PHIL 1115 | 4 | Elective | 4 |  |  |
|  |  | PHIL 3435 | 4 |  |  |  |  |
|  |  | ENGW 3315 | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |


| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 Elective | 4 Elective | 4 Co-op | 0 |


|  | Elective | 4 | 8 | 0 |
| :--- | :---: | ---: | :--- | ---: |
| Year 5 | 0 | 16 |  |  |
| Fall | Hours Spring | Hours |  |  |
| Co-op | Religious <br> studies <br> seminar | 4 | Upper- <br> division <br> elective | 4 |

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 |  | 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 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| language <br> core course |  |  |  |  |
| Elective | 4 |  | Elective | 4 |
| PHIL 2325 | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
| EESH 2000 | 1 |  | 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 |
| Religious <br> studies <br> elective | 4 |  |  |  |
| Upper- <br> division <br> 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 1215 or | 4 |  |  |  |
| PHIL 1115 |  |  |  |  |

PHIL 34354

| ENGW 3315 | 4 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
| Year 5 | 16 | Hours |  |  |
| Fall | Hours Spring | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
| Philosophy <br> seminar | Religious <br> studies <br> seminar | 4 | 4 |  |
| Upper- <br> division <br> elective | Upper- <br> division <br> elective | 4 Elective | 4 | 16 |
| Elective | 16 | 4 |  |  |

Total Hours: 129

## Religious Studies, BA

The program in religion offers students the opportunity to acquire an understanding of religious experience within its social, historical, literary, and political context. Students study specific religious traditions such as Judaism, Islam, and Hinduism. Using a comparative approach, they explore themes across faith traditions. Through the major, a student will have the opportunity to study a range of religions and a variety of methods of understanding the key dimensions of religious life.

The religious studies major is designed to provide students with an introduction to a variety of religious traditions along with the analytical tools necessary to explore religious theology and praxis across five categories: comparative religion, traditions that emerge from the ancient Mediterranean and African worlds, traditions that emerge from Asia, religion and culture, and texts. The religious studies major is offered as both a stand-alone major and in combination with other majors.

- 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Religious Studies Major Requirements

Code Title Hours

## Religious Areas

Complete one course from each of the following five religious areas. Note: A course cannot be used to meet the requirement for more than one area.

Comparative Religion

| PHIL 1111 | Introduction to World Religions |
| :---: | :---: |
| PHIL 1130 | Ethics: East and West |
| PHIL 1230 | Sound, Music, and Religion |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 4390 | Cults and Sects |
| Ancient Mediterranean and African World Traditions |  |
| JWSS 1285 | Jewish Religion and Culture |
| PHIL 1111 | Introduction to World Religions |
| PHIL 1120 | Understanding the Bible |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2325 or POLS 2325 | Ancient Philosophy and Political Thought <br> Ancient Philosophy and Political Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| Asian Traditions |  |
| PHIL 1111 | Introduction to World Religions |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |


| PHIL 4393 | Asian Religions in the United States |  |
| :---: | :---: | :---: |
| PHIL 4545 | Religion and Politics in South Asia |  |
| Religion and Culture |  |  |
| JWSS 1285 | Jewish Religion and Culture |  |
| PHIL 1104 | Goddesses, Witches, Saints, and Sinners: Women in Western Religions |  |
| PHIL 1220 | The Meaning of Death |  |
| PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1260 | Apocalypticism in Film |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1285 | Jewish Religion and Culture |  |
| PHIL 1667 | Science Fiction and Film: Moral Dilemmas and Ethical Analysis |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 2315 | Adam and Eve and Their Interpreters |  |
| PHIL 2398 | Religion and Culture in Indian Cinema |  |
| Religious Texts |  |  |
| PHIL 1120 | Understanding the Bible |  |
| PHIL 2315 | Adam and Eve and Their Interpreters |  |
| PHIL 2394 | Chinese Buddhism |  |
| PHIL 2395 | Japanese Buddhism |  |
| PHIL 4395 | Ramayana |  |
| Required Course |  |  |
| Complete one | following: | 4 |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4393 | Asian Religions in the United States |  |
| PHIL 4395 | Ramayana |  |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Religious Studies Electives |  |  |
| Complete three courses in the PHIL subject area, two of which must be numbered above 2000: |  | 12 |
| PHIL 1104 | Goddesses, Witches, Saints, and Sinners: Women in Western Religions |  |
| PHIL 1110 | Introduction to Religion |  |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1120 | Understanding the Bible |  |
| PHIL 1130 | Ethics: East and West |  |
| PHIL 1220 | The Meaning of Death |  |
| PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1231 | Image and Icon in South Asia |  |
| PHIL 1250 | Jesus in the Gospels, American Culture, and the Movies |  |
| PHIL 1260 | Apocalypticism in Film |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1273 | Jainism |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |


| PHIL 1276 | Indian Religions |
| :---: | :---: |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1281 | Islam, Gender, and Fashion |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1286 | American Judaism |
| PHIL 1287 | Modern Judaism |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 1295 | Religious Perspectives on Health and Healing |
| PHIL 1410 | From Vodou and the Rastas to AfroIslam: African Religions in the Americas |
| PHIL 1666 | The Problem of Evil in Film |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 4992 | Directed Study |
| PHIL 5011 | Comparative Religious Ethics |

## Religious Studies Major Credit Requirement

Complete 36 semester hours in the major.

## Program Requirement

128 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 |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 1111 | 4 PHIL 1275 | 4 Vacation | 0 Vacation | 0 |
| PHIL 1120 | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHIL 1276 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Elective | 4 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
|  | 16 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHIL 1280 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Elective | 4 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  | 8 |
|  | 16 | 0 | 0 |  |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHIL 1230 | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| Elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| Elective | 4 |  | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| PHIL 4390 | 4 PHIL 4606 | 4 |
| Religious | 4 Religious | 4 |
| studies | studies <br> elective | elective |

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## English Requirements

Code Title

## 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 $1000 \quad$ English at Northeastern 1

Foundational Courses

| ENGL 1400 | Introduction to Literary Studies | 4 |
| :--- | :--- | ---: |
| ENGL 1160 <br> or ENGL 1410 | Introduction to Rhetoric <br> Introduction to Writing Studies |  |
| Diversity |  |  |
| Complete one of the following courses. This course may also <br> be used to fulfill an additional English requirement below: | 4 |  |
| ENGL 2150 | Literature and Digital Diversity |  |
| ENGL 2296 | Early African-American Literature |  |
| ENGL 2450 | Postcolonial Literature |  |
| ENGL 2451 | Postcolonial Women Writers |  |
| ENGL 2455 | American Women Writers |  |
| ENGL 2460 | Multiethnic Literatures of the U.S. <br> ENGL 2470Asian-American Literature <br> ENGL 2760Writing in Global Contexts <br> ENGL 3663The African-American Novel <br> ENGL 3676Representing Gender and Sexuality in <br> Literature |  |
| ENGL 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |  |

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
Pre-Nineteenth-Century Literature
Complete one of the following:

| ENGL 1600 | Introduction to Shakespeare |
| :--- | :--- |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton |


| ENGL/JWSS 3678 | Bedrooms and Battlefields: Hebrew <br> Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| :--- | :--- |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature

| Complete one of the following: |  |
| :--- | :--- |
| ENGL 2260 | Romantic Poetry |
| ENGL 2330 | The American Renaissance |
| ENGL 2340 | American Realism |
| ENGL 3619 | Emerson and Thoreau |
| ENGL 3720 | 19th-Century Major Figure |
| ENGL 4040 | Topics in 19th-Century Literatures |
| ENGL 2301 | The Graphic Novel |
| ENGL 2410 | Contemporary American Literature |
| ENGL 2440 | The Modern Bestseller |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2610 | Contemporary Israeli Literature and Art <br>  |

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature
ENGL 3730 20th- and 21 st-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 Writing Studies |
| 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 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and |
| LING 2350 | Linguistics |
| Linguistic Analysis 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 1120 Trouble in Utopia
ENGL 1130 Animals, Objects, Humans
ENGL 1450 Reading and Writing in the Digital Ag
ENGL 1500 British Literature to 1800
ENGL 1502 American Literature to 1865
ENGL 1503 American Literature 1865 to Present

| ENGL 2150 | Literature and Digital Diversity |
| :--- | :--- |
| ENGL 2370 | The Modern Short Story |
| ENGL 2380 | The Modern Novel |
| ENGL 2400 | Modern Poetry |
| ENGL 2420 | Contemporary Poetry |
| ENGL 2430 | Contemporary Fiction |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2510 | Horror Fiction |
| ENGL 2520 | Science Fiction |
| ENGL 2600 | Irish Literary Culture (Abroad) |
| ENGL 2620 | What Is Nature? (Abroad) |
| ENGL 2690 | Boston in Literature |
| ENGL 3427 | The Literature of Science |
| ENGL 3487 | Film and Text (Abroad) |
| ENGL 3582 | Children's Literature |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in <br> ENGL 4070 |

Writing
Complete one of the following:

## 4

| ENGL 2700 | Creative Writing |
| :--- | :--- |
| ENGL 2710 | Style and Editing |
| ENGL 2730 | Digital Writing |
| 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 |
| ENGL 3375 | Wractice |
| ENGL 3376 | Creative Nonfiction Boston |
| ENGL 3377 | Poetry Workshop |
| ENGL 3378 | Fiction Workshop |
| ENGL 3380 | Topics in Writing |
| 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.

## Philosophy Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Philosophy Required Courses |  |  |
| PHIL 1115 or PHIL 1215 | 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 three of the following with at least one at the 4000 or
5000 level:

| PHIL 3343 | Existentialism |
| :--- | :--- |
| PHIL 3435 | Moral Philosophy |
| PHIL 3460 | Philosophy and Literature |
| PHIL 4390 | Cults and Sects |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4515 | Advanced Logic |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4550 | Philosophy of Economics |
| PHIL 4606 | Seminar: Theories and Methods in |
| PHIL 4903 | Religious Studies |
| PHIL 4906 | Seminar in Religion |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |
| Philosophy Electives |  |
| Complete three additional electives from the philosophy |  |
| department. |  |

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| PHIL 3435 | Moral Philosophy | 4 |
| ENGL 3619 | Emerson and Thoreau | 4 |
| or ENGL 4100 | Topics in Literary Criticism |  |

## English and Philosophy Combined-Major Credit Requirement

Complete 88 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Environmental Studies Requirements

Note: Principles of Microeconomics (ECON 1116) is a recommended prerequisite for Environmental Economics (ECON 3423), and American Government (POLS 1150) is a recommended prerequisite for Environmental Politics and Policy (POLS 2395).

| Code | Title | Hours |
| :---: | :---: | :---: |
| Social Science Component |  |  |
| ECON 3423 | Environmental Economics | 4 |
| HIST 2342 |  | 4 |
| POLS 2395 | Environmental Politics and Policy | 4 |
| SOCL 1246 | Environment and Society | 4 |
| Science Component |  |  |
| Global Climate Change |  |  |
| ENVR 1110 | Global Climate Change | 4 |
| Earth and Environmental Sciences |  |  |
| Complete one of the following: |  | 4 |
| ENVR 1112 | Environmental Geology |  |
| ENVR 1200 | Dynamic Earth |  |
| Environment |  |  |
| ENVR 1101 | Environmental Science | 4 |
| Quantitative Methods |  |  |
| Complete one of th | following: | 4-5 |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 |  |
| MATH 2280 | Statistics and Software |  |

## Philosophy Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Philosophy Required Courses |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL 1180 | Environmental Ethics | 4 |
| PHIL 2325 | Ancient Philosophy and Political | 4 |
| or POLS 2325 | Thought | Ancient Philosophy and Political Thought |

Philosophy of Science/Environment
Complete one of the following:

| PHIL 1105 | Science and Pseudoscience |
| :--- | :--- |
| PHIL 4510 | Philosophy of Science |

Restricted Electives
Complete two of the following with at least one course at the

[^22]| PHIL 3435 | Moral Philosophy |
| :--- | :--- |
| PHIL 3460 | Philosophy and Literature |
| PHIL 4390 | Cults and Sects |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in <br> PHIL 49ious Studies <br> PHIL 4903Seminar in Religion  <br> PHIL 5001 Topics in Religious Studies <br> PHIL 5011 Comparative Religious Ethics |

Additional Electives
Complete two additional PHIL courses. 8

## Integrative Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| ENVR 5210 | Environmental Planning | 4 |
| ENVR 5250 | Geology and Land-Use Planning | 4 |

## Environmental Studies and Philosophy Combined-Major Credit Requirement

Complete 72 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| History Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| History Colloquium |  |  |
| HIST 1000 | History at Northeastern | 1 |
| HIST 1200 | Historical Research and Writing | 1 |
| HIST 1201 | First-Year Seminar | 4 |
| Introductory Level |  |  |
| Choose one 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 |  |  |
| Choose one course from the following: |  | 4 |
| HIST 2390 | Africa and the World in Early Times |  |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |  |
| HIST 1252 | Japanese Literature and Culture |  |
| HIST 1270 | Ancient Greece |  |
| HIST 1271 | Ancient Rome |  |
| HIST 1285 | Introduction to Russian Civilization |  |
| HIST 2330 | Colonial and Revolutionary America |  |
| Intermediate/Advanced History Cluster |  |  |
| Complete (3) History courses numbered 2303 or above. Cluster is subject to Department approval. |  | 12 |
| Advanced History |  |  |
| Complete one history course 3000 level or above |  | 4 |
| History Capstone Seminar or Senior Project |  |  |
| HIST 4701 | Capstone Seminar |  |
| Public history concentrators may also select from the following: |  |  |
| HIST 4903 | Fieldwork in History 1 |  |

## Philosophy Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| 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 |
| Intermediate/Advanced Electives |  |  |
| Complete three of the following with at least one course at the 4000 or 5000 level: |  | 8 |
| PHIL 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |


| PHIL 4906 | Topics in Religious Studies |  |
| :---: | :---: | :---: |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Additional Electives |  |  |
| Complete three additional PHIL courses. |  | 8 |
| Integrative Courses |  |  |
| Code | Title | Hours |
| Complete one of the following: |  | 4 |
| PHIL 2395 | Japanese Buddhism |  |
| HIST 2308 | Law, Justice, and Society in Modern China |  |

## History and Philosophy Combined-Major Credit Requirement

Complete 85 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

4 All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| History Requirements <br> Code | Title | Hours |
| :--- | :--- | ---: |
| History Colloquium |  | 1 |
| HIST 1000 | History at Northeastern | 1 |
| HIST 1200 | Historical Research and Writing | 4 |
| HIST 1201 | First-Year Seminar |  |
| Introductory Level |  | 4 |
| Choose one course from the 1000 level. |  |  |
| History Seminar and Historical Writing |  |  |


| HIST 2301 | The History Seminar | 4 | PHIL 1290 | Chinese Philosophy and Religion |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HIST 2302 | Historical Writing | 1 | PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| Pre-1800 History Elective |  |  |  |  |  |
| Choose one course from the following: |  | 4 | PHIL 2394 | Chinese Buddhism |  |
| HIST 2390 | Africa and the World in Early Times |  | PHIL 2395 | Japanese Buddhism |  |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |  | PHIL 2398 | Religion and Culture in Indian Cinema |  |
|  |  |  | PHIL 4393 | Asian Religions in the United States |  |
| HIST 1252 | Japanese Literature and Culture |  | PHIL 4545 | Religion and Politics in South Asia |  |
| HIST 1270 | Ancient Greece |  | Religion and Culture |  |  |
| HIST 1271 | Ancient Rome |  | Complete one of the following: |  | 4 |
| HIST 1285 | Introduction to Russian Civilization |  | PHIL 1220 | The Meaning of Death |  |
| HIST 2330 | Colonial and Revolutionary America |  | PHIL 1230 | Sound, Music, and Religion |  |
| Intermediate/Advanced History Cluster |  |  | PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| Complete (3) History courses numbered 2303 or above. Cluster is subject to Department approval. |  | 12 | PHIL 1285 or JWSS 1285 | Jewish Religion and Culture Jewish Religion and Culture |  |
| Advanced History |  |  | PHIL 2100 | The Religious Worlds of Boston: Faith |  |
| Complete one history course 3000 level or above |  | 4 |  | and Devotion in Urban Life |  |
| Religious Studies Requirements |  | Hours | PHIL 2316 | Interpreting the Bible |  |
|  |  | PHIL 4390 | Cults and Sects |  |
| Code <br> Comparative Religion | Title |  | WMNS 1103 | Introduction to Women's, Gender, and |  |
|  |  |  |  | Sexuality Studies |  |
| Complete two of the following: |  |  | 8 | Ethics |  |  |
| PHIL 1130 | Ethics: East and West |  | Complete one of the | following: | 4 |
| PHIL 1230 | Sound, Music, and Religion |  | PHIL 1130 | Ethics: East and West |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  | PHIL 1272 | Ethics in the World's Religions |  |
|  |  |  | PHIL 4606 | Seminar. Theories and Methods in |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |  | Religious Studies |  |
| PHIL 1272 | Ethics in the World's Religions |  | PHIL 5001 | Global Justice |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  | Religious Studies Electives |  |  |
|  |  |  | Complete three of the following, two of which must be numbered above 2000: |  | 12 |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |  |  |  |
|  |  |  | PHIL 1104 | Goddesses, Witches, Saints, and |  |
| PHIL 2315 | Adam and Eve and Their Interpreters |  |  | Sinners: Women in Western Religions |  |
| PHIL 2330 | Modern Philosophy |  | PHIL 1110 | Introduction to Religion |  |
| PHIL 4390 | Cults and Sects |  | PHIL 1120 | Understanding the Bible |  |
| Ancient Mediterranean and African World Traditions |  |  | PHIL 1130 | Ethics: East and West |  |
| Complete one of the following: |  | 4 | PHIL 1220 | The Meaning of Death |  |
| PHIL 1120 | Understanding the Bible |  | PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  | PHIL 1231 | Image and Icon in South Asia |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  | PHIL 1250 | Jesus in the Gospels, American Culture, and the Movies |  |
| PHIL 1285 | Jewish Religion and Culture |  | PHIL 1260 | Apocalypticism in Film |  |
| or JWSS 1285 | Jewish Religion and Culture |  | PHIL 1270 | Judaism, Christianity, and Islam: |  |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |  |  | Abrahamic Religions |  |
|  |  |  | PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 2314 | Biblical Prophets and Their Interpreters |  | PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 2315 | Adam and Eve and Their Interpreters |  | PHIL 1273 | Jainism |  |
| PHIL 2316 | Interpreting the Bible |  | PHIL 1275 | Hinduism, Buddhism, and Beyond: |  |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |  |  | Eastern Religions |  |
|  |  |  | PHIL 1276 | Indian Religions |  |
| PHIL 4390 | Cults and Sects |  | PHIL 1280 | Encountering Islam: Traditions, |  |
| Asian Traditions |  |  |  | Debates, and Crosscultural Diversity |  |
| Complete one of the following: |  | 4 | PHIL 1285 | Jewish Religion and Culture |  |
| PHIL 1272 | Ethics in the World's Religions |  | PHIL 1286 | American Judaism |  |
| PHIL 1276 | Indian Religions |  | PHIL 1287 | Modern Judaism |  |


| PHIL 1290 | Chinese Philosophy and Religion |
| :---: | :---: |
| PHIL 1295 | Religious Perspectives on Health and Healing |
| PHIL 1410 | From Vodou and the Rastas to AfroIslam: African Religions in the Americas |
| PHIL 1666 | The Problem of Evil in Film |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 4992 | Directed Study |
| PHIL 5011 | Comparative Religious Ethics |

## Integrative Requirements

| Code Title | Hours |
| :--- | :--- | ---: |
| Capstone | $4-8$ |
| Choose one of the following options. Public History |  |

concentrators should take HIST 4903 and HIST 4904

| HIST 4701 | Capstone Seminar |
| :--- | :--- |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4606 | Seminar: Theories and Methods in <br> Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |


| PHIL 4906 | Topics in Religious Studies |
| :--- | :--- |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |
| Public History: |  |
| HIST 4903 <br> and HIST 4904 | Fieldwork in History 1 <br> and |
| Integrative Course |  |
| Complete one of the following courses: |  |
| HIST 2370 | Renaissance to Enlightenment |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4390 | Cults and Sects |

## History and Religious Studies Combined-Major Credit Requirement

Complete 78 semester hours in the major.

## Program Requirement

128 total semester hours required

## International Affairs and Religious Studies, BA

Through this combined major, successful undergraduates will develop an awareness of 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 crossdisciplinary 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International

Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| INTL 1101 | Globalization and International Affairs | 4 |
| INTL 3400 | International Conflict and Negotiation | 4 |
| POLS 1160 | International Relations | 4 |
| Complete one of the following: |  | 4 |
| POLS 1155 | Comparative Politics |  |
| ECON 1115 | Principles of Macroeconomics |  |
| HIST 2211 | The World Since 1945 |  |
| INTL 2300 | Religion in International Affairs |  |
| Global Dynamics |  |  |
| 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 major requirements: |  | 8 |
| Environment |  |  |
| ENVR 1110 | Global Climate Change |  |
| ENVR 4515 | Sustainable Development |  |
| SOCL 1246 | Environment and Society |  |
| Law, Diplomacy, and Global Governance |  |  |
| INTL 2480 | Women and World Politics |  |
| or WMNS 2480 | Women and World Politics |  |
| INTL 5200 | Political Economy. Interdisciplinary Perspectives |  |
| COMM 2303 | Global and Intercultural Communication |  |
| POLS 1155 | Comparative Politics |  |
| POLS 1160 | International Relations |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3405 | International Political Economy |  |
| POLS 3406 | International Law |  |
| POLS 3407 | International Organizations |  |
| POLS 4910 | Model United Nations |  |
| POLS 4918 | Model NATO |  |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |  |
| Human Rights and Social Justice |  |  |
| INTL 2400 | Politics of Islam and Gender |  |
| INTL 2480 | Women and World Politics |  |
| or WMNS 2480 | Women and World Politics |  |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |  |
| HIST 2373 | Gender and Sexuality in World History |  |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 5001 | Global Justice |  |
| Conflict and Security |  |  |
| CRIM 4630 | Political Crime and Terrorism |  |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |  |
| 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

| PHIL 5001 | Global Justice |
| :--- | :--- |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| Globalization |  |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 | Women and World Politics |
| or WMNS 2480 | Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary |
|  | Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International |
| Business |  |
| LPSC 2302 | Global Human Rights: A Social and |
| Economic Perspective |  |
| POLS 1160 2370 | International Relations |
| POLS 3405 | Religion and Politics |
| POLS 3406 | International Political Economy |
| POLS 3407 | International Law |
| SOCL 3465 | Globalization and the Evolution of <br> Human Societies |

Population, Migration, and Diaspora

| INTL 2240 | Global Population and Development |
| :--- | :--- |
| INTL 2400 | Politics of Islam and Gender |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases <br> and Health Disparities in the African <br> Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making <br> the Americas, 1492-1804 |

PHIL 1270 Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271 Sex in Judaism, Christianity, and Islam
Development

| INTL 2240 | Global Population and Development |
| :--- | :--- |
| INTL 5200 | Political Economy: Interdisciplinary <br> Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and <br> Policy |


| ENTR 2206 | Global Social Enterprise |
| :---: | :---: |
| ENVR 4515 | Sustainable Development |
| INTB 1203 | International Business and Global Social Responsibility |
| or INTB 1209 | International Business and Global Social Responsibility |
| 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 |
| MUSC 1140 | Global Pop Music |
| International Experiential Learning |  |
| Complete at least o abroad, internationa approved short-term | "international semester" via study internship, international co-op, or two programs abroad. |

## 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:

| Africa |  |
| :---: | :---: |
| AFRS 2307 | Africa Today |
| AFRS 2465 | The Scope and Dynamics of Conflicts in Africa |
| 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 | Africa and the World in Early Times |
| Asia |  |
| $\begin{aligned} & \text { ANTH } 4350 \\ & \text { or INTL } 4350 \end{aligned}$ | Ethnography of Southeast Asia Ethnography of Southeast Asia |
| ASNS 1150 or HIST 1150 | East Asian Studies 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 |
| HIST 2360 | History of Capitalism in East Asia |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |
| Europe |  |
| CLTR 1501 | Introduction to French Culture |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| 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 | Latin American Society and Development |
| CLTR 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean |
|  | Studies |

LITR 4655 Latin American Literature

| 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 2400 | Politics of Islam and Gender |
| INTL 3250 | Democracy and Development in North <br> 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 |
| POLS 3465 | Government and Politics in the Middle <br> East |
| POLS 3470 | Arab-Israeli Conflict |
| PHIL 1270 4915 | Model Arab League |

PHIL 1280 Encountering Islam: Traditions, Debates, and Crosscultural Diversity

| PHIL 1285 | Jewish Religion and Culture |
| :---: | :--- |
| PHIL 1287 | Modern Judaism |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| SOCL 1215 | Society and Culture in Russia |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel two. Note: Completing this requirement satisfies the language requirement for the BA degree.

## Religious Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Comparative Religion |  |  |
| Complete two of the following: |  | 8 |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1130 | Ethics: East and West |  |
| PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 2300 | Mysticism |  |
| PHIL 2315 | Adam and Eve and Their Interpreters |  |
| PHIL 4390 | Cults and Sects |  |
| Ancient Mediterranean and African World Traditions |  |  |
| Complete one of the following: |  | 4 |
| JWSS 1285 | Jewish Religion and Culture |  |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1120 | Understanding the Bible |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  |
| PHIL 1285 | Jewish Religion and Culture |  |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |  |
| PHIL 2314 | Biblical Prophets and Their Interpreters |  |
| PHIL 2315 | Adam and Eve and Their Interpreters |  |
| PHIL 2316 | Interpreting the Bible |  |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |  |
| PHIL 4390 | Cults and Sects |  |
| Asian Traditions |  |  |
| Complete one of the following: |  | 4 |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1276 | Indian Religions |  |
| PHIL 1290 | Chinese Philosophy and Religion |  |
| PHIL 4393 | Asian Religions in the United States |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |


| PHIL 2398 | Religion and Culture in Indian Cinema |
| :--- | :--- |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2394 | Chinese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |

Religion and Culture

| Complete one of the following: |  |
| :---: | :---: |
| JWSS 1285 | Jewish Religion and Culture |
| PHIL 1220 | The Meaning of Death |
| PHIL 1230 | Sound, Music, and Religion |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2316 | Interpreting the Bible |
| PHIL 4390 | Cults and Sects |
| WMNS 1103 | Introduction to Women's, Gender, and Sexuality Studies |

## Ethics

Complete one of the following: 4

| PHIL 1130 | Ethics: East and West |
| :--- | :--- |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 4606 | Seminar: Theories and Methods in <br> Religious Studies |
| PHIL 5001 | Global Justice |

Religious Studies Electives
Complete three of the following, two of which must be 12 numbered above 2000:

| PHIL 1104 | Goddesses, Witches, Saints, and Sinners: Women in Western Religions |
| :---: | :---: |
| PHIL 1110 | Introduction to Religion |
| PHIL 1120 | Understanding the Bible |
| PHIL 1130 | Ethics: East and West |
| PHIL 1220 | The Meaning of Death |
| PHIL 1230 | Sound, Music, and Religion |
| PHIL 1231 | Image and Icon in South Asia |
| PHIL 1250 | Jesus in the Gospels, American Culture, and the Movies |
| PHIL 1260 | Apocalypticism in Film |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 1273 | Jainism |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1286 | American Judaism |
| PHIL 1287 | Modern Judaism |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 1295 | Religious Perspectives on Health and Healing |


| PHIL 1410 | From Vodou and the Rastas to AfroIslam: African Religions in the Americas |
| :---: | :---: |
| PHIL 1666 | The Problem of Evil in Film |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar: Theories and Methods in Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 4992 | Directed Study |
| PHIL 5011 | Comparative Religious Ethics |

## International Affairs and Religious Studies Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Capstone |  | 4 |
| INTL 4700 | Senior Capstone Seminar in <br> International Affairs | 4 |

## International Affairs and Religious Studies Combined-Major Credit Requirement

Complete 76 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Jewish Studies Requirements

| Code <br> Required Courses | Title | Hours |
| :--- | :--- | ---: |
| PHIL 1285 | Jewish Religion and Culture |  |
| or JWSS 1285 | Jewish Religion and Culture |  |$\quad 4$


| List A |  |
| :--- | :--- |
| PHIL 1287 | Modern Judaism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from <br> the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From <br> Mountain Jews to Crypto-Jews |
| PHIL 2322 | Responses to the Holocaust |
| List B | American Judaism |
| PHIL 1286 | Adam and Eve and Their Interpreters |
| PHIL 2315 | Religion, Nation, and Identity in Modern <br> Jewish Thought |
| PHIL 3387 |  |



| 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 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1286 | American Judaism |
| PHIL 1287 | Modern Judaism |
| PHIL 2300 | Mysticism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| POLS 2370 | Religion and Politics |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| SOCL 1241 | Sociology of Violence |
| SOCL 2270 | Race and Ethnic Relations |

## Religion Requirements

Code Title Hours

## Required Course

PHIL $1120 \quad 4$
Complete two of the following: 8

| PHIL 1270 | Judaism, Christianity, and Islam: <br> Abrahamic Religions |
| :--- | :--- |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: <br> Eastern Religions |
| PHIL 1280 | Encountering Islam: Traditions, <br> Debates, and Crosscultural Diversity |
| PHIL 2325 | Ancient Philosophy and Political <br> Thought |

## Comparative Religions

Complete one of the following: 4
PHIL 1111 Introduction to World Religions
PHIL 1230 Sound, Music, and Religion
PHIL 1271 Sex in Judaism, Christianity, and Islam
PHIL 1272 Ethics in the World's Religions
PHIL 2100 The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL $2300 \quad$ Mysticism

## Philosophy or Religion Seminar

Complete one of the following:

| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| :---: | :---: | :---: |
| PHIL 5001 | Global Justice |  |
| PHIL 4903 | Seminar in Religion |  |
| Religious Studies Electives |  |  |
| Complete four of the | following: | 16 |
| PHIL 1110 | Introduction to Religion |  |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1130 | Ethics: East and West |  |
| PHIL 1120 | Understanding the Bible |  |
| PHIL 1220 | The Meaning of Death |  |
| PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1231 | Image and Icon in South Asia |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1273 | Jainism |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 1276 | Indian Religions |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  |
| PHIL 1285 or JWSS 1285 | Jewish Religion and Culture Jewish Religion and Culture |  |
| PHIL 1286 | American Judaism |  |
| PHIL 1290 | Chinese Philosophy and Religion |  |
| PHIL 1295 | Religious Perspectives on Health and Healing |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 2300 | Mysticism |  |
| PHIL 2315 | Adam and Eve and Their Interpreters |  |
| PHIL 2322 | Responses to the Holocaust |  |
| PHIL 2394 | Chinese Buddhism |  |
| PHIL 2395 | Japanese Buddhism |  |
| PHIL 2398 | Religion and Culture in Indian Cinema |  |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |  |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4393 | Asian Religions in the United States |  |
| PHIL 4395 | Ramayana |  |
| PHIL 4545 | Religion and Politics in South Asia |  |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |  |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4904 | Major Figures in Religious Studies |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 4994 | Internship |  |

## Integrative Requirements

| Code | Title Hours |
| :---: | :---: |
| Note: This course may also count as a religion seminar or as a Jewish history course. |  |
| Complete one of the | lowing: |
| HIST 1294 | Strangers in a Strange Land? European Jewish History 1750-1945 |
| or JWSS 1294 | Strangers in a Strange Land? European Jewish History 1750-1945 |
| HIST 2431 | Immigration and Identity in the American Jewish Experience |
| or JWSS 2431 | Immigration and Identity in the American Jewish Experience |
| PHIL 4547 | Seminar. Apocalypticism |
| Hebrew Language Introduction |  |
| Complete two course toward the BA langua | es in Hebrew. These courses also count age requirement. |
| Jewish Studies and Religion Major Credit Requirement <br> 80 major semester hours required |  |
| Program Requirem |  |

128 total semester hours required

## Plan of Study <br> Five Years, Three Co-ops in Summer 2/Fall

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGW 1111 |  | Foreign language core course | 4 | Vacation |  | Vacation | 0 |
| Elective | 4 | HIST 2282 | 4 |  |  |  |  |
| PHIL 1285 or JWSS 1285 | 4 | Elective | 4 |  |  |  |  |
| Foreign language core course | 4 | Elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHIL 2314 | 4 HBRW 1102 | 4 Vacation | 0 Co-op | 0 |
| PHIL 1275 | 4 Religious <br> studies <br> elective | 4 |  |  |
| HBRW 1101 | 4 Foreign <br> language <br> core course | 4 |  |  |
| Religious <br> studies <br> elective | 4 Elective | 4 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 HIST 1294 | 4 Elective | 4 Co-op | 0 |
|  | ENGW 3315 | 4 Elective | 4 |  |
|  | Jewish <br> studies <br> elective | 4 |  |  |
|  |  |  |  |  |


| HIST 2280 | 4 |  |  |
| :--- | ---: | ---: | ---: |
| 0 | 16 | 8 | 0 |


| Year 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | MUSC 1132 | 4 | Elective | 4 | Co-op | 0 |
|  |  | Jewish studies elective | 4 | Elective | 4 |  |  |
|  |  | Religious studies elective | 4 |  |  |  |  |
|  |  | PHIL 2300 | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

## Year 5

| Fall | HoursSpring <br> Co-op | Hours |
| :--- | :---: | ---: |
| Jewish |  |  |
| studies |  |  |
| elective |  |  |$\quad 4$

Total Hours: 128

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

Year 1
$\left.\begin{array}{lcccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { ENGW 1111 } & 4 \text { PHIL 1150 } & 4 & \text { Vacation } & 0 \text { Vacation }\end{array}\right) 0$

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| HBRW 1101 | 4 Co-op | 0 Co-op | 0 Foreign <br> language <br> core course | 4 |
| PHIL 1275 | 4 | Elective | 4 |  |
| PHIL 2300 | 4 |  |  |  |
| PHIL 2314 | 4 |  | 0 | 8 |

Year 3

|  | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 3315 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| HBRW 1102 | 4 |  | Elective | 4 |
| Religious <br> studies <br> elective | 4 |  |  |  |


| Foreign language core course | 4 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 16 |  | 0 |  | 0 |  | 8 |
| Year 4 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Jewish studies elective | 4 | Co-op | 0 | Co-op | 0 | Vacation | 0 |
| Jewish studies elective | 4 |  |  |  |  |  |  |
| Religious studies elective | 4 |  |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 16 |  | 0 |  | 0 |  | 0 |
| Year 5 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |  |
| Jewish studies elective |  | HIST 1294 | 4 |  |  |  |  |
| Religious studies elective |  | HIST 2280 | 4 |  |  |  |  |
| Religious seminar |  | MUSC 1132 | 4 |  |  |  |  |
| Elective | 4 | PHIL 1280 | 4 |  |  |  |  |
|  | 16 |  | 16 |  |  |  |  |

Total Hours: 128

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

NUpath requirements Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), 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), Analyzing and Using Data (AD), and Difference and Diversity (DD), may be met through electives in the major.

## Media and Screen Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| MSCR 1000 | Media and Screen Studies at Northeastern | 1 |
| Introduction to Media Studies |  |  |
| MSCR 1220 | Media, Culture, and Society | 4 |
| Introduction to Screen Theory |  |  |
| MSCR 2220 | Understanding Media and Film | 4 |
| Advanced Theory |  |  |
| MSCR 4623 | Theories of Media and Culture | 4 |

Media and Screen Electives
Complete four of the following:

| MSCR 1230 | Introduction to Film Production |
| :--- | :--- |
| MSCR 1310 | Introduction to Digital Media Culture |
| MSCR 2302 | Advertising and Promotional Culture |
| MSCR 2325 | Global Media |

MSCR 2895 Film Analysis

| MSCR 3210 | Special Topics in Media and Screen <br> Studies |
| :--- | :--- |

MSCR $3420 \quad$ Digital Media Culture
MSCR 3422 Media Audiences
MSCR $3426 \quad$ Popular Music as Media Form

MSCR 3435 Media Industries
MSCR 3437 Media and Identity
CINE $2160 \quad$ Narrative Filmmaking
CINE 2336 American Film and Culture
CINE 3389 Screenwriting
CINE 3392 Gender and Film
CINE 3446 Topics in Documentary Production
ARTD $3480 \quad$ Video: Sound and Image
ARTD 3485 Experimental Video
ARTH 2212 Survey of the Still and Moving Image

| Advanced Media and Screen Electives |  |
| :--- | :--- |
| Complete two of the following: |  |
| MSCR 4208 | TV History |
| MSCR 4602 | Media and Democracy <br> MSCR 4622Special Topics in Media and Screen <br> Studies |
| MSCR 4992 | Directed Study |
| MSCR 4993 | Independent Study |
| CINE 3500 | Film Theory |
| CINE 3920 | Topics in Film Studies |

## Philosophy Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Philosophy Required Courses |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL 2325 | Ancient Philosophy and Political Thought | 4 |
| or POLS 2325 | Ancient Philosophy and Political Tho |  |
| 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 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Philosophy Electives |  |  |
| Complete three ad department. | ional electives from the philosophy | 12 |

## Integrative Requirement

Code Title Hours

CINE 3500 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.

## Program Requirement

128 total semester hours required

## Plan of Study

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| MSCR 1000 | 1 MSCR 2220 | 4 MSCR <br> elective | 4 Vacation |  |


|  | 16 | 16 | 8 |
| :---: | :---: | :---: | :---: |

Year 2
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { EEAM 2000 } & \begin{array}{c}\text { Restricted } \\ \text { PHIL elective }\end{array} & \begin{array}{c}4 \text { MSCR } \\ \text { elective }\end{array} & 4 \text { Co-op }\end{array}\right]$

Year 3
$\left.\begin{array}{llccc}\text { Fall } & \text { Hours } \begin{array}{l}\text { Spring } \\ \text { Co-op }\end{array} & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ & \begin{array}{l}\text { Restricted } \\ \\ \text { PHIL elective } \\ 2\end{array} & 4 & \text { Vacation } & 0 \text { Co-op }\end{array}\right]$

Year 4
$\left.\begin{array}{llccc}\text { Fall } & \text { Hours } \text { Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \text { MSCR 4623 } & 4 & \text { Vacation } & \text { Vacation }\end{array}\right]$

Year 5

| Fall | Hours |
| :--- | ---: |
| Elective | 4 |
| Elective | 4 |
| Elective | 4 |
| Elective | 4 |
|  | 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Political Science |  |  |
| 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/Theory |  |  |
| Complete two of the following: | 8 |  |
| POLS 2325 | Ancient Philosophy and Political |  |
| POLS 2328 | Thought |  |
| POLS 2330 | Modern Political Thought |  |
| POLS 2332 | American Political Thought |  |

## Political Science Upper-Division Electives

Complete two courses in the following range:
POLS 3000 to POLS 5999

## Political Science Electives

Complete two courses in the following range: 8

$$
\text { POLS } 2000 \text { to POLS } 5999
$$

## 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. 844).

- Campaigns and Elections (p. 844)
- Identity, Culture, and Politics (p. 844)
- International Relations and Diplomacy (p. 844)
- Law and Legal Studies (p. 844)
- Public Policy (p. 844)


## Philosophy Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| 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 |
| Philosophy Restricted Electives |  |  |
| Complete two of th | following: | 8 |
| PHIL 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar. Apocalypticism |  |
| PHIL 4550 | Philosophy of Economics |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Additional Electives |  |  |
| Complete four addi | onal electives in philosophy or religion. | 16 |
| Integrative Requirement |  |  |
| Code | Title | Hours |
| Complete the following: |  |  |
| PHIL 5001 | Global Justice | 4 |
| Program Requirement |  |  |



| CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS <br> Code <br> Core Course | Title | Hours |
| :--- | ---: | ---: |
| POLS 3418 | Nationalism |  |
| Electives |  | 4 |
| Complete three of the following: | 12 |  |


| POLS 2360 | Politics of Poverty |
| :--- | :--- |
| POLS 2368 | Music and Politics in America and <br> Abroad |
| POLS 2370 | Religion and Politics |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |
| POLS 3324 | Law and Society |

Code Title HoursComplete one of the following:4

| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International <br>  |

## Core Courses

Complete three of the following: 12

| POLS 3405 | International Political Economy |
| :--- | :--- |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> 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 4500 | U.S. Constitutional Law |
| POLS 4505 | U.S. Civil Liberties |

CONCENTRATION IN PUBLIC POLICY

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Requirement | Public Policy and Administration | 4 |
| POLS 3307 |  | 12 |
| Electives |  |  |
| Complete three of the following: |  |  |
| POLS 2334 | Bureaucracy and Government <br> Organizations |  |
| 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 <br> Suburbs |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 2395 | Environmental Politics and Policy |
| POLS 3425 | U.S. Foreign Policy |

Religious Studies and African-American Studies, BA

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37)

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Religious Studies Major Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Comparative Religion |  |  |
| Complete two of the following: |  | 8 |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1130 | Ethics: East and West |  |
| PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 2300 | Mysticism |  |
| PHIL 2315 | Adam and Eve and Their Interpreters |  |
| PHIL 4390 | Cults and Sects |  |

## Ancient Mediterranean and African World Traditions

Complete one of the following:

| PHIL 1111 | Introduction to World Religions |
| :--- | :--- |
| PHIL 1120 | Understanding the Bible |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1280 | Encountering Islam: Traditions, <br> Debates, and Crosscultural Diversity |
|  |  |


| PHIL 1285 | Jewish Religion and Culture |
| :--- | :--- |
| JWSS 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from <br> the Zohar to Madonna |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 4390 | Cults and Sects |
| Asian Traditions |  |
| Complete one of the following: |  |


| PHIL 1111 | Introduction to World Religions |
| :--- | :--- |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: <br> Eastern Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2100 | The Religious Worlds of Boston: Faith <br> and Devotion in Urban Life |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4393 | Asian Religions in the United States |

Religion and Culture
Complete one of the following: 4

| PHIL 1104 | Goddesses, Witches, Saints, and Sinners: Women in Western Religions |
| :---: | :---: |
| PHIL 1666 | The Problem of Evil in Film |
| PHIL 1667 | Science Fiction and Film: Moral Dilemmas and Ethical Analysis |
| PHIL 1220 | The Meaning of Death |
| PHIL 1230 | Sound, Music, and Religion |
| PHIL 1260 | Apocalypticism in Film |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1285 | Jewish Religion and Culture |
| JWSS 1285 | Jewish Religion and Culture |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 4390 | Cults and Sects |

## Ethics

Complete one of the following:
PHIL 1130 Ethics: East and West
PHIL 1272 Ethics in the World's Religions
PHIL 1666 The Problem of Evil in Film
PHIL 1667 Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL $2100 \quad$ The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4606 Seminar. Theories and Methods in Religious Studies
PHIL 5011 Comparative Religious Ethics

## Religious Studies Electives

Complete three religious studies electives, two of which must 12 be above the 2000 level:

| PHIL 1104 | Goddesses, Witches, Saints, and Sinners: Women in Western Religions |
| :---: | :---: |
| PHIL 1110 | Introduction to Religion |
| PHIL 1111 | Introduction to World Religions |
| PHIL 1120 | Understanding the Bible |
| PHIL 1130 | Ethics: East and West |
| PHIL 1220 | The Meaning of Death |
| PHIL 1230 | Sound, Music, and Religion |
| PHIL 1231 | Image and Icon in South Asia |
| PHIL 1250 | Jesus in the Gospels, American Culture, and the Movies |
| PHIL 1260 | Apocalypticism in Film |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 1273 | Jainism |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1281 | Islam, Gender, and Fashion |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1286 | American Judaism |
| PHIL 1287 | Modern Judaism |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 1295 | Religious Perspectives on Health and Healing |
| PHIL 1410 | From Vodou and the Rastas to AfroIslam: African Religions in the Americas |
| PHIL 1666 | The Problem of Evil in Film |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |


| PHIL 4545 | Religion and Politics in South Asia |  |
| :---: | :---: | :---: |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |  |
| PHIL 4547 | Seminar. Apocalypticism |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4904 | Major Figures in Religious Studies |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 4992 | Directed Study |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Advanced Elective |  |  |
| Complete one of the following: |  | 4 |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4393 | Asian Religions in the United States |  |
| PHIL 4395 | Ramayana |  |
| PHIL 4545 | Religion and Politics in South Asia |  |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4547 | Seminar. Apocalypticism |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4904 | Major Figures in Religious Studies |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5011 | Comparative Religious Ethics |  |

## African-American Studies Requirements

Code Title Hours

## Introductory Courses

AFAM 1101 Introduction to African-American 4
AFAM 1109 Foundations of Black Culture 14
AFRS 1185 Gender in the African Diaspora 4

CLTR 1509
Research
AFRS 3310

## Senior Capstone

AFAM 4700
Electives
Complete three AFAM or AFRS courses at the 2000 level or 12 above.
Note: Electives may not double count for other AFAM or HIST
combined-major requirements.
AFAM 2000 to AFAM 5999
AFRS 2000 to AFRS 5999

## Integrative Requirement

Code Title Hours

Complete one of the following:

| PHIL 1410 | From Vodou and the Rastas to Afro- <br> Islam: African Religions in the Americas |
| :--- | :--- |
| PHIL 3410 | Religion and Spirituality in the African <br> Diaspora |
| PHIL 4390 | Cults and Sects |

## Program Requirement

128 total semester hours required

## 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

- 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
- The half major template in philosophy 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Concentration

Complete one of the following concentrations:

- Philosophy Generalist requirements (p. 847)
- Concentration in Law and Ethics (p. 847)
- Concentration in Ethics (p. 848)
- Concentration in Religious Studies (p. 849)


## 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.

## Program Requirements

128 total semester hours required

| Concentrations |  |  |
| :---: | :---: | :---: |
| PHILOSOPHY GENERALIST |  |  |
| Code | Title | Hours |
| 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 |
| Philosophy Advanced Elective/Seminar |  |  |
| Complete three of or 5000 level: | following courses with one at the 4000 | 12 |
| PHIL 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar. Apocalypticism |  |
| PHIL 4550 | Philosophy of Economics |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Additional Electives |  |  |
| Complete three ad | ional courses in philosophy and religion. | 12 |

## CONCENTRATION IN LAW AND ETHICS

| Code | Title | Hours |
| :--- | :--- | ---: |
| Philosophy | Required Courses |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL 2325 | Ancient Philosophy and Political <br> Thought | 4 |
| or POLS 2325 | Ancient Philosophy and Political Thought |  |


| PHIL 2330 | Modern Philosophy | 4 |
| :---: | :---: | :---: |
| PHIL 3435 | Moral Philosophy | 4 |
| Philosophy Advanced Elective/Seminar |  |  |
| Complete two 5000 level: | following courses with one at the 4000 or | 8 |
| PHIL 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar. Apocalypticism |  |
| PHIL 4550 | Philosophy of Economics |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| 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 |  |
| PHIL 1180 | Environmental Ethics |  |
| PHIL 1185 | The Ethics of Food |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 1276 | Indian Religions |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  |
| 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 2325 | Ancient Philosophy and Political Thought |  |


| PHIL 2394 | Chinese Buddhism |  |
| :---: | :---: | :---: |
| PHIL 2395 | Japanese Buddhism |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4545 | Religion and Politics in South Asia |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Law-Related Electives |  |  |
| Complete two courses from social science departments. These courses are to be chosen in consultation with the department: |  | 8 |
| AFAM 2360 | Politics of Poverty |  |
| AFAM 2639 | Globalism, Racism, and Human Rights |  |
| AFRS 3460 | Contemporary Government and Politics in Africa |  |
| CRIM 2100 | Criminal Due Process |  |
| CRIM 2200 | Criminology |  |
| CRIM 3100 | Criminal Law |  |
| CRIM 3200 | Youth Crime and Justice |  |
| CRIM 4010 | Gender, Crime, and Justice |  |
| CRIM 4020 | Race, Crime, and Justice |  |
| CRIM 4630 | Political Crime and Terrorism |  |
| 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 1241 | Sociology of Violence |  |
| SOCL 1245 | Sociology of Poverty |  |
| SOCL 1246 | Environment and Society |  |
| SOCL 2358 | Current Issues in Cities and Suburbs |  |
| SOCL 4518 | Law and Society in a Digital World |  |

## CONCENTRATION IN ETHICS

Code Title Hours

## Philosophy Required Courses

PHIL 1115 Introduction to Logic 4
PHIL 2325 Ancient Philosophy and Political 4
or POLS 2325 Ancient Philosophy and Political Thought
PHIL 2330 Modern Philosophy 4
PHIL 3435 Moral Philosophy 4
Philosophy Advanced Elective/Seminar
Complete two of the following courses with one at the 4000 or 8

5000 level:
PHIL 3343 Existentialism
PHIL 3435 Moral Philosophy

| PHIL 3460 | Philosophy and Literature |  |
| :---: | :---: | :---: |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4550 | Philosophy of Economics |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| 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 1165 | Moral and Social Problems in Healthcare |  |
| PHIL 1170 | Business Ethics |  |
| PHIL 1180 | Environmental Ethics |  |
| PHIL 1185 | The Ethics of Food |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 1276 | Indian Religions |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  |
| 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 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 2301 | Philosophical Problems of Law and Justice |  |
| PHIL 2303 | Social and Political Philosophy |  |
| PHIL 2325 | Ancient Philosophy and Political Thought |  |
| PHIL 2394 | Chinese Buddhism |  |
| PHIL 2395 | Japanese Buddhism |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4545 | Religion and Politics in South Asia |  |


| PHIL 5001 | Global Justice |
| :--- | :--- |
| PHIL 5011 | Comparative Religious Ethics |

## CONCENTRATION IN RELIGIOUS STUDIES

Code Title Hours

Philosophy Required Courses

| PHIL 1115 | Introduction to Logic | 4 |
| :--- | :--- | :--- |
| PHIL 2325 | Ancient Philosophy and Political | 4 |
| or POLS 2325 | Thought |  |
| PHIL 2330 | Modern Philosophy | 4 |
| PHIL 3435 | Moral Philosophy | 4 |
| Philosophy Advanced Elective/Seminar |  |  |
| Complete two of the following courses with one at the 4000 or | 8 |  |

5000 level:

| PHIL 3343 | Existentialism |
| :--- | :--- |
| PHIL 3435 | Moral Philosophy |
| PHIL 3460 | Philosophy and Literature |
| PHIL 4390 | Cults and Sects |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4515 | Advanced Logic |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar. Apocalypticism |
| PHIL 4550 | Philosophy of Economics |
| PHIL 4606 | Seminar. Theories and Methods in |
| PHIL 4903 | Religious Studies |
| PHIL 4906 | Topinar in Religion |
| PHIL 5001 501 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |

Religious Studies Courses
Complete three of the following:

| PHIL 1104 | Goddesses, Witches, Saints, and <br> Sinners: Women in Western Religions |
| :--- | :--- |
| PHIL 1110 | Introduction to Religion |
| PHIL 1111 | Introduction to World Religions |
| PHIL 1130 | Ethics: East and West |
| PHIL 1120 | Understanding the Bible |
| PHIL 1220 | The Meaning of Death |
| PHIL 1230 | Sound, Music, and Religion |
| PHIL 1231 | Image and Icon in South Asia |
| PHIL 1250 | Jesus in the Gospels, American Culture, <br> and the Movies |
| PHIL 1260 | Apocalypticism in Film |
| PHIL 1270 | Judaism, Christianity, and Islam: <br> Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 1273 | Jainism |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: <br> Eastern Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1280 | Encountering Islam: Traditions, <br> Debates, and Crosscultural Diversity |


| PHIL 1281 | Islam, Gender, and Fashion |
| :---: | :---: |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1286 | American Judaism |
| PHIL 1287 | Modern Judaism |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 1295 | Religious Perspectives on Health and Healing |
| PHIL 1410 | From Vodou and the Rastas to AfroIslam: African Religions in the Americas |
| PHIL 1666 | The Problem of Evil in Film |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 4992 | Directed Study |
| PHIL 5011 | Comparative Religious Ethics |

## Plan of Study

Five Years, Three Co-ops in Summer 2/Fall

| Year 1 | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Fall | 4 Elective | 4 | Vacation | 0 Vacation |$\quad 0$


| 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 |  | 0 |
|  | EESH 2000 | 1 | 0 | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 PHIL 1115 | 4 PHIL <br> undergraduate <br> elective | 4 Co-op | 0 |

## Year 4



Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: |
| Co-op | Philosophy <br> seminar | 4 |
|  | Elective | 4 |
| Upper- <br> division <br> 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 |  | Vacation | 0 | Vacation | 0 |
| ENGW 1111 |  | PHIL undergraduat elective | 4 |  |  |  |  |
| PHIL 1101 | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |


| 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 | 0 | 0 | 8 |


| Year 3 |  |  | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | ---: | ---: | Hours


| Year 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| undergraduate elective |  |  |  |  |  |  |  |
| PHIL 1115 |  |  |  |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
| ENGW 3315 | 4 |  |  |  |  |  |  |
|  | 16 |  | 0 |  | 0 |  | 0 |


| Year 5 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| Advanced <br> philosophy <br> elective | 4 <br> Philosophy <br> seminar | 4 |
| PHIL <br> undergraduat <br> elective | 4 Elective | 4 |
| Upper- <br> division <br> elective | 4 <br> Upper- <br> division <br> elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |
| Total Hours: 129 |  |  |

Total Hours: 129
Philosophy with Concentration in Law and Ethics, 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 |  | Vacation | 0 | Vacation | 0 |
| ENGW 1111 |  | Moral and political elective | 4 |  |  |  |  |
| PHIL 1101 | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |  |

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 <br> Law-related <br> elective | 4 |  |  |
| :--- | :--- | ---: | :--- | :--- |
| EESH 2000 | 1 | 0 | 0 |  |

Year 3 Hours summer 1 Hours summe 2 Hours

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 PHIL 1115 | 4 Elective | 4 Co-op | 0 |
|  | Moral and <br> political <br> elective | 4 Elective | 4 |  |
|  | ENGW 3315 | 4 |  |  |
|  | Elective | 4 |  | 0 | Year 4


| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 PHIL 3435 | 4 Upper- <br> division <br> elective | 4 Co-op | 0 |
| Law-related <br> elective | 4 Elective | 4 |  |  |
| Upper- <br> division <br> elective | 4 |  |  |  |
| Elective | 4 | 8 | 0 |  |

Year 5

| Fall | HoursSpring <br> Co-op | Hours <br> seminar |
| :--- | :---: | :---: |
|  | Elective | 4 |
|  | Upper- <br> division <br> 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 <br> political <br> elective | 4 |  |  |
| PHIL 1101 | 4 Elective | 4 |  | 0 |
| Elective | 4 Law-related |  |  |  |
| elective |  |  |  |  |

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 Upperdivision elective | 4 |
| PHIL 2330 | 4 |  | Elective | 4 |
| Elective | 4 |  |  |  |
| Moral and political elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 8 |
| Year 4 |  |  |  |  |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| Law-related elective | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| PHIL 1115 | 4 |  |  |  |
| Elective | 4 |  |  |  |
| ENGW 3315 | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| PHIL 3435 | 4 Philosophy <br> seminar | 4 |
| Upper- <br> division <br> elective | 4 Elective | 4 |
| Elective | 4 Upper- <br> division <br> elective | 4 |
| Elective | 4 Elective | 4 |

Total Hours: 129
Philosophy with Concentration in Religious Studies, BS
FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL


| 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 |  | 0 |
|  | EESH 2000 | 1 | 0 | 0 |


| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 PHIL 1115 | 4 Upper- <br> division <br> elective | 4 Co-op | 0 |
|  | Religious <br> studies <br> elective | 4 Elective | 4 |  |
| ENGW 3315 | 4 |  | 0 |  |
|  | Elective | 4 | 8 |  |
| 0 | 16 |  |  |  |

Year 4
Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours

Hours Spring Hours Summer 1 Hours Summer 2
Co-
0 PHIL 3435

$$
4 \text { PHIL } \quad 4 \text { Co-op }
$$

0

年

| Religious <br> studies <br> elective | 4 Elective | 4 |
| :--- | :---: | :---: |
| Upper- <br> division <br> elective | 4 |  |
| Elective | 4 | 8 |
| 0 | 16 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 Elective | 4 |
|  | Philosophy <br> seminar | 4 |
|  | Upper- <br> division <br> 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 |


| 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 |  |  | 8 |  |
| EESH 2000 | 1 |  |  |  |  |
|  | 17 | 0 | 0 | 8 |  |


| Year 3 |  |  | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | ---: | ---: | Hours

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Religious <br> studies <br> elective | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| Elective | 4 |  |  |  |
| PHIL 1115 | 4 |  |  |  |
| ENGW 3315 | 4 | 0 | 0 | 0 |
|  | 16 |  |  |  |

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| PHIL 3435 | 4 Philosophy <br> seminar | 4 |
| PHIL <br> undergraduatı <br> elective | PHIL <br> undergraduatı <br> elective | 4 |
| Upper- <br> division <br> elective | 4 Elective | 4 |
| Elective | 4 Upper- <br> division <br> elective | 4 |
| 16 | 16 |  |

Total Hours: 129

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |
|  | op |  |
| Computer Science Fundamental Courses |  |  |

A grade of C - or higher is required in computer science
fundamental courses:

| CS 1800 <br> and CS 1802 | Discrete Structures <br> and Seminar for CS 1800 | 5 |
| :--- | :--- | :---: |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510  <br> and CS 2511 Fundamentals of Computer Science 2 | 5 |  |

Computer Science Required Courses

| CS 2800 | Logic and Computation |  |
| :--- | :--- | :--- |
| and CS 2801 | and Lab for CS 2800 | 5 |
| CS 3000 | Algorithms and Data | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| CS 3800 | Theory of Computation | 4 |
| CS 4500 | Software Development <br> and CS 4501 | 4 |

## Presentation Requirement

THTR 1170 The Eloquent Presenter 1
Computer Science Elective Courses
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be be taken for upper-division electives.
Complete 8 credits of upper-division CS, IS, or DS classes that 8 are not already required. Choose courses within the following ranges:

$$
\begin{aligned}
& \text { CS } 2500 \text { or higher, except CS } 5010 \\
& \text { IS } 2000 \text { or higher, except IS } 4900 \\
& \text { DS } 2000 \text { or higher, except DS } 4900
\end{aligned}
$$

## Philosophy Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Philosophy Required Courses |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL 2325 | Ancient Philosophy and Political | 4 |
|  | Thought |  |
| 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 |

Philosophy Restricted Electives

Take two courses, at least one of which is at the 4000 or 5000 level, from the following:

| PHIL 3343 | Existentialism |
| :--- | :--- |
| PHIL 3435 | Moral Philosophy |
| PHIL 3460 | Philosophy and Literature |
| PHIL 4390 | Cults and Sects |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar. Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in <br> Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |
| Electives |  |
| Take three PHIL courses. |  |

## 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 <br> College Writing | Title | Hours |
| ENGW 1111 First-Year Writing <br> or ENGW 1102 First-Year Writing for Multilingual Writers | 4 |  |

Advanced Writing in the Disciplines
Complete one course from the following:

ENGW $3302 \quad$| Advanced Writing in the Technical |
| :--- |
| Professions |

ENGW $3309 \quad$ Advanced Writing in the Humanities
ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

## Required General Electives

## Code Title

Complete 11 general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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.

## 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 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3500 | 4 | Vacation |  |
| CS 1800 and CS 1802 | 5 | $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | 5 | Elective | 4 |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | PHIL 2325, POLS 2325, or PHIL 2330 | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| PHIL 1115 | 4 |  |  |  |  |  |  |
|  | 19 |  | 18 |  | 8 |  | 0 |

Year 2
Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours
$\left.\begin{array}{lcll}\text { CS 3000 } & 4 \text { CS elective 1 } & \begin{array}{c}4 \text { ENGW 3302, } \\ 3309, \text { or } \\ 3315\end{array} & 4 \text { Co-op }\end{array}\right]$

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | CS 3800 | 4 Elective | 4 Co-op |  |
|  | CS elective 2 | 4 Elective | 4 |  |
|  | PHIL 4515 | 4 |  |  |
|  | Elective | 4 |  |  |
|  | THTR 1170 | 1 |  | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours |
| :--- | :---: | :---: | ---: |
| Co-op | CS 4500 | 4 Elective | 4 |
| PHIL <br> intermediate/ <br> advanced <br> elective | 4 Elective | 4 |  |
| PHIL <br> capstone | 4 |  |  |
|  | 4 | 8 |  |
|  | Elective | 16 |  |

Total Hours: 135

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

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 1200 | 1 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1801 \end{aligned}$ | 4 | $\begin{aligned} & \text { CS } 2800 \\ & \text { and CS } 2801 \end{aligned}$ | 5 |  |  |  |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ |  | PHIL 2325, POLS 2325, or PHIL 2330 | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| $\begin{aligned} & \text { PHIL } 1115 \text { or } \\ & 1215 \end{aligned}$ | 4 |  |  |  |  |  |  |
|  | 18 |  | 18 |  | 0 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| CS 3000 | 4 CS elective 1 | 4 | Vacation | Co-op |  |
| CS 3500 | 4 PHIL elective | 4 |  |  |  |
|  | 1 |  |  |  |  |
| PHIL 1145 | 4 PHIL elective | 4 |  |  |  |
|  | 2 | 4 |  |  |  |
| Elective | 4 Elective | 4 | 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 |  |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |


| Year 4    <br> Fall Hours Spring Hours Sumer 1 Hours Summer 2 | Hours |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | CS elective 2 | 4 Elective | 4 Co-op |  |
|  | PHIL <br> intermediate/ <br> advanced <br> elective | 4 Elective | 4 |  |
|  | Elective | 4 |  |  |
|  | Elective | 4 | 8 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | CS 4500 | 4 |
|  | PHIL | 4 |
|  | capstone |  |
|  | Elective | 4 |
|  | Elective | 4 |
|  | 0 | 16 |

[^23]
## Criminal Justice and Philosophy, 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Criminal Justice Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Criminal Justice Required Courses |  |  |
| CRIM 1100 | Introduction to Criminal Justice | 4 |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| CRIM 3600 | Criminal Justice Research Methods | 4 |
| CRIM 3700 | Criminal Justice Statistics | 4 |

Co-op Integration Seminar
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 2-4
CRIM 3000 are required for the first co-op. CRIM 4000 is required if a second co-op is taken.

| CRIM 2000 | Co-op Integration Seminar 1 |  |
| :---: | :---: | :---: |
| CRIM 3000 | Co-op Integration Seminar 2 |  |
| CRIM 4000 | Co-op Integration Seminar 3 |  |
| Capstone |  |  |
| CRIM 4949 | Senior Capstone Seminar | 4 |
| Major Electives |  |  |
| Thematic Elective |  |  |
| Complete one of the following: |  | 4 |
| CRIM 1300 | The Death Penalty |  |
| CRIM 1400 | Human Trafficking |  |
| CRIM 1500 | Corruption, Integrity, and Accountability |  |
| Survey Elective |  |  |
| Complete one of the following: |  | 4 |
| CRIM 3010 | Criminal Violence |  |
| CRIM 3030 | Global Criminology |  |
| CRIM 3040 | Psychology of Crime |  |
| CRIM 3050 | Organized Crime |  |
| CRIM 3100 | Criminal Law |  |
| CRIM 3200 | Youth Crime and Justice |  |


| CRIM 3300 | Punishment in the Age of Mass Incarceration |  |
| :---: | :---: | :---: |
| CRIM 3400 | Corporate Security: Securing the Private Sector |  |
| CRIM 3500 | Policing a Democratic Society |  |
| System-Wide Electives |  |  |
| CRIM 4010 | Gender, Crime, and Justice |  |
| CRIM 4020 | Race, Crime, and Justice |  |
| Criminal Justice Elective |  |  |
| Complete one add | nal CRIM course. | 4 |
| Philosophy Requirements |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL/POLS 2325 | Ancient Philosophy and Political Thought | 4 |
| PHIL 2303 | Social and Political Philosophy | 4 |
| PHIL 2330 | Modern Philosophy | 4 |
| Intermediate/Advanced Electives |  |  |
| Complete two of the following: |  |  |
| PHIL 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar. Apocalypticism |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |

Philosophy 4000/5000 Elective
Complete one of the following not used to satisfy previous
requirements:

| PHIL 4500 | Theory of Knowledge |
| :--- | :--- |
| PHIL 4510 | Philosophy of Science |
| PHIL 4515 | Advanced Logic |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in <br> Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |

[^24]
## Integrative Requirement

| Code $\quad$ Title | Hours |  |
| :--- | :--- | ---: |
| Philosophy Integrative Course |  |  |
| PHIL 2301 | Philosophical Problems of Law and <br> Justice | 4 |
| Criminal Justice Integrative Course | 4 |  |
| CRIM 1400 | Human Trafficking | 4 |

## Criminal Justice and Philosophy Major Credit Requirement <br> Complete 80 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Economics Requirements

| Code Title | Hours |  |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| Complete one of the following: | 1 |  |
| ECON 1000 | Economics at Northeastern |  |
| PHIL 1000 | Philosophy at Northeastern |  |

## Required Economics Courses

Grades in the following must average a minimum of 2.000:
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 $3520 \quad 4$

| MATH 1231 | Calculus for Business and Economics | 4 |
| :---: | :---: | :---: |
| Economics Electives |  |  |
| Complete two economics electives with not more than one below the 3000 level. |  | 8 |
| Philosophy Requirements |  |  |
| Code | Title | Hours |
| 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 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4510 | Philosophy of Science |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Additional Electives |  |  |
| Complete thr <br> At least one | ional electives in philosophy or religion. numbered 2000 or above. | 12 |

## Integrative Requirements

Code Title Hours

Complete two of the following that have not been used in 8
above requirements:

| PHIL 3435 | Moral Philosophy |
| :--- | :--- |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4550 | Philosophy of Economics |
| PHIL 5001 | Global Justice |
| PHIL 4992 | Directed Study |
| ECON 4992 | Directed Study |

## Major Credit Requirement

Complete 80 semester hours in the major.

## Program Requirement

128 total semester hours required

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Physics Major Requirements

| Code <br> Introductory Physics | Hours |
| :--- | :--- | ---: |
| Physics 1 |  |$\quad$| Complete one of the following: | 5 |
| :--- | :--- |
| PHYS 1161 Physics 1 <br> and PHYS 1162 and Lab for PHYS 1161 |  |
| PHYS 1151 Physics for Engineering 1 <br> and PHYS 1152 and Lab for PHYS 1151 <br> and PHYS 1153 and Interactive Learning Seminar for <br> PHYS 1151 |  |

Physics 2
Complete one of the following: 5
PHYS 1165 Physics 2
and PHYS 1166 and Lab for PHYS 1165
PHYS $1155 \quad$ Physics for Engineering 2
and PHYS 1156 and Lab for PHYS 1155
and PHYS 1157 and Interactive Learning Seminar for PHYS 1155

## Intermediate Physics

| PHYS 2303 | Modern Physics | 4 |
| :--- | :--- | :---: |
| PHYS 2305 | Thermodynamics and Statistical <br> Mechanics | 4 |
| PHYS 2371 <br> and PHYS 2372 | Electronics <br> and Lab for PHYS 2371 | 4 |
| Advanced Physics |  | 4 |
| PHYS 3600 | Advanced Physics Laboratory | 4 |
| PHYS 3602 | Electricity and Magnetism | 4 |
| PHYS 5115 | Quantum Mechanics | 4 |


| MATH 4606 | Mathematical and Computational Methods for Physics |  |
| :---: | :---: | :---: |
| PHYS 5111 | Astrophysics and Cosmology |  |
| PHYS 5113 | Introduction to Particle and Nuclear 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 |  | Hours |
| Philosophy Required Courses |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| $\text { PHIL } 2325$ | 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 |
| Philosophy Advanced Elective |  |  |
| Complete one of the | following: | 4 |
| PHIL 3343 | Existentialism |  |
| PHIL 3435 | Moral Philosophy |  |
| PHIL 3460 | Philosophy and Literature |  |
| PHIL 4390 | Cults and Sects |  |
| PHIL 4500 | Theory of Knowledge |  |
| PHIL 4515 | Advanced Logic |  |
| PHIL 4535 | Philosophy of Mind |  |
| PHIL 4547 | Seminar: Apocalypticism |  |
| PHIL 4606 | Seminar: Theories and Methods in Religious Studies |  |
| PHIL 4903 | Seminar in Religion |  |
| PHIL 4906 | Topics in Religious Studies |  |
| PHIL 5001 | Global Justice |  |
| PHIL 5011 | Comparative Religious Ethics |  |
| Additional Electives |  |  |
| Complete four PHIL courses. |  | 16 |

## Physics/Philosophy Integrative Requirements

Code Title Hours

## Integrative Course Requirements

| PHIL 4510 | Philosophy of Science | 4 |
| :--- | :--- | :--- |
| PHYS 3601 | Classical Dynamics | 4 |

## Breadth Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Mathematics |  |  |
| 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 <br> Algebra for Engineering | 4 |

## Physics and Philosophy Major Credit Requirement

Complete 98 semester hours in the major.

## Program Requirement

132 total semester hours required

## Plan of Study <br> Five Years, Three Co-ops in Summer 2/Fall

Year 1
$\left.\begin{array}{lcccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { PHYS 1000 } & 1 \text { PHYS 1165 } & 4 & \text { Vacation } & 0 \text { Vacation }\end{array}\right) 0$

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 2303 | 4 PHYS 2305 | 4 Vacation | 0 Co-op | 0 |
| PHYS 2371 | 3 MATH 2341 | 4 |  |  |
| PHYS 2372 | 1 PHIL elective | 4 |  |  |
| MATH 2321 | 4 PHIL elective | 4 |  |  |
| PHIL 2330 | 4 EESC 2000 | 1 |  | 0 |
|  | 16 | 17 | 0 |  |

Year 3

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | :---: | ---: | Hours

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 PHYS 3602 | 4 Elective | 4 Co-op | 0 |
|  | PHIL 4510 | 4 Elective | 4 |  |
|  | PHIL elective | 4 |  |  |
|  | ENGW 3307 | 4 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 PHYS 5115 | 4 |
|  | PHIL <br> advanced <br> 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 Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 1000 | 1 PHYS 1165 | 4 MATH 2321 | 4 MATH 2341 | 4 |
| PHYS 1161 | 4 PHYS 1166 | 1 Elective | 4 Elective | 4 |
| PHYS 1162 | 1 PHYS 1167 | 0 |  |  |
| PHYS 1163 | 0 MATH 1342 | 4 |  |  |
| MATH 1341 | 4 PHIL 2325 | 4 |  |  |
| PHIL 1115 or | 4 PHIL 2330 | 4 |  |  |
| 1215 |  |  |  | 8 |
| ENGW 1111 | 4 | 17 | 8 |  |
|  | 18 |  |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| PHYS 2303 | 4 PHYS 2305 | 4 PHYS 3600 | 4 Co-op | 0 |
| PHYS 2371 | $3{\text { PHYS } 3601^{1}}^{2}$ | 4 Elective | 4 |  |
| PHYS 2372 | 1 PHIL elective | 4 |  |  |
| PHIL elective | 4 PHIL elective | 4 |  |  |
| PHIL elective | 4 EESC 2000 | 1 | 8 | 0 |
|  | 16 | 17 |  |  |

Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 | PHYS 3602 | 4 | ENGW 3307 | 4 | Co-op | 0 |
|  |  | PHYS elective | 4 | Elective | 4 |  |  |
|  |  | PHIL 4505 or <br> PHIL 4500 | 4 |  |  |  |  |
|  |  | PHIL 4510 | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 4


Total Hours: 132
1 PHYS 3601 offered spring and fall (even years)

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Political Science |  |  |
| 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/Theory
Complete two of the following: 8

| POLS 2325 | Ancient Philosophy and Political <br> Thought |
| :--- | :--- |
| POLS 2328 | Modern Political Thought |
| POLS 2330 | American Political Thought |
| POLS 2332 | Contemporary Political Thought |

## Political Science Upper-Division Electives

Complete two courses in the following range:
POLS 3000 to POLS 5999

## Political Science Electives

Complete two courses in the following range:

## 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. 860).

- Campaigns and Elections (p. 860)
- Identity, Culture, and Politics (p. 860)
- International Relations and Diplomacy (p. 860)
- Law and Legal Studies (p. 860)
- Public Policy (p. 860)


## Philosophy Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Philosophy Required Courses |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL 2325 | Ancient Philosophy and Political | 4 |
|  | Thought |  |
| or POLS 2325 | Ancient Philosophy and Political Thought |  |
| PHIL 2330 | Modern Philosophy | 4 |

Philosophy Restricted Electives

Additional Electives
Complete four additional electives in philosophy or religion.

## Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| PHIL 5001 | Global Justice | 4 |

## Program Requirement

128 semester hours required

| Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN CAMPAIGNS AND ELECTIONS |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| With advisor approval, a co-op or internship may be substituted in place of POLS 4947: |  |  |
| POLS 3160 | Campaign Strategy | 4 |
| POLS 4947 |  | 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 2355 |  |  |
| POLS 3310 | Public Opinion, Voting, and Elections |  |
| POLS 3162 | Local Campaigns and Elections |  |
| POLS 3320 | Politics and Mass Media |  |
| POLS 3402 |  |  |
| POLS 3304 |  |  |

## CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Course |  |  |
| POLS 3418 | Nationalism | 4 |
| Electives |  | 12 |
| Complete three of the following: |  |  |


| $\begin{aligned} & \text { POLS } 2360 \\ & \text { POLS } 2368 \end{aligned}$ | Politics of Poverty |  |
| :---: | :---: | :---: |
|  | Music and Politics in America and Abroad |  |
| POLS 2370 | Religion 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 |
| Experiential/Practicum Requirement |  |  |
| Complete one of the following: 4 |  |  |
| POLS 4910 | Model United Nations |  |
| POLS 4915 | Model Arab League |  |
| POLS 4918 | Model NATO |  |
| 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 3407 | International Organizations |  |
| 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 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 |

Electives
Complete three of the following: 12

| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> Suburbs |
| POLS 2390 | Science, Technology, and Public Policy |


| POLS 2395 | Environmental Politics and Policy |
| :--- | :--- |
| POLS 3425 | U.S. Foreign Policy |

Politics, Philosophy, and Economics, BS
Website (https://www.northeastern.edu/cssh/ppe)

## Serena Parekh

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Serena Parekh, Associate Professor and Program Director,
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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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).


| ECON 4692 | Senior Economics Seminar |
| :--- | :--- |
| PHIL 5001 | Global Justice |
| POLS 4701 | Political Science Senior Capstone |
| POLS 4703 | Senior Thesis |

## Major Electives

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Complete two of the following: | $8-12$ |

ECON 2000 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 <br> Racial or Gender Justice | Hours |
| :--- | :--- | ---: |
| Complete one of the following: |  |
| AFAM/POLS 2360 Politics of Poverty |  |
| AFAM 2600 | Contemporary Issues: Race, Science, <br> and Technology |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| CRIM 4010 | Gender, Crime, and Justice |
| ECON 4916 | Advanced Selected Topics in <br> Microeconomics |


| HIST 1225 | Gender, Race, and Medicine |  |
| :---: | :---: | :---: |
| HIST 2000 | Native American Resistance: Past and Present |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1281 | Islam, Gender, and Fashion |  |
| PHIL 3500 | Sexuality, Gender, and the Law |  |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |  |
| $\begin{aligned} & \text { SOCL/WMNS } \\ & 1260 \end{aligned}$ | Gender in a Changing Society |  |
| SOCL 2270 | 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/ANTH 2302 | Gender and Sexuality. A Cross-Cultural Perspective |  |
| 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 in Practice and Policy |  |
| 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 or MATH 1241 | Calculus for Business and Economics Calculus 1 | 4 |
| ECON 2350 <br> or POLS 2400 <br> or MATH 2280 | Statistics <br> Quantitative Techniques <br> Statistics and Software | 4 |
| Experiential Learning Requirement |  |  |
| Complete one co-op, study abroad, qualifying Dialogue of Civilizations, or one of the following: |  | 4 |
| ECON 4996 | Experiential Education Directed Study |  |
| ECON 4970 | Junior/Senior Honors Project 1 |  |
| ECON 4971 | Junior/Senior Honors Project 2 |  |
| 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 |  |

## Concentrations

CONCENTRATION IN ENVIRONMENT AND ENERGY POLICY

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete two of the following: | 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: |  |  |
| ECON 3423 | Environmental Economics |  |
| ECON 3425 | Energy Economics |  |
| PHIL 1180 | Environmental Ethics |  |
| PHIL 1185 | The Ethics of Food | 4 |

CONCENTRATION IN INTERNATIONAL POLITICAL ECONOMY
Code Title Hours

| Complete two of the following: |  |
| :--- | :--- |
| ECON 1290 | History of the Global Economy |
| ECON 1291 | Development Economics |
| ECON 2316 | Microeconomic Theory |
| ECON 3404 | International Food Economics and <br> Policy |
| ECON 4635 | International Economics |
| PHIL 1185 | The Ethics of Food |
| PHIL 1170 | Business Ethics |
| POLS 3406 | International Law <br> POLS 3487 |
| PHIL 4545 Politics of Developing Nations | Religion and Politics in South Asia |
| Complete one of the following: |  |
| ECON 1292 | Economic History of the Middle East |
| ECON 1293 | European Economic History |
| HIST 2360 | History of Capitalism in East Asia |
| POLS 3435 | Politics and Governance of Europe and <br> the European Union |
| POLS 3465 | Government and Politics in the Middle <br> East |
| PHIL 4545 | Religion and Politics in South Asia |

CONCENTRATION IN LAW AND JUSTICE

| Code | Title |
| :--- | :--- | ---: |
| Complete three of the following, only two of which may be |  |
| POLS courses: |  |$\quad$| Hours |  |
| ---: | :--- |
| ECON 3424 | Law and Economics |

## Major GPA/Credit Requirement

Complete 68 semester hours in the major with a 3.000 GPA.

## Course Distribution Requirement

Complete at least four courses in each of the following subject areas:
ECON, PHIL, and POLS.

## Program Requirement

128 total semester hours required

| POLS 4505 | U.S. Civil Liberties |  |
| :---: | :---: | :---: |
| WMNS 3500 | Sexuality, Gender, and the Law |  |
| CONCENTRATION IN LOGIC AND GAME THEORY |  |  |
| Code | Title | Hours |
| Required Course |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| Electives |  |  |
| Complete two of the following: |  | 8 |
| ECON 4681 | Information Economics and Game Theory |  |
| PHIL 2001 | Ethics and Evolutionary Games |  |
| PHIL 4515 | Advanced Logic |  |
| TDB: Concept | Game Theory |  |

CONCENTRATION IN POLITICAL PHILOSOPHY
Code Title Hours

## Politics Courses

Complete two of the following:
POLS 2328 Modern Political Thought
POLS 2330 American Political Thought

POLS 2332 Contemporary Political Thought
Philosophy Course
Complete one of the following: 4

| PHIL 2301 | Philosophical Problems of Law and <br> Justice |
| :--- | :--- |
| PHIL 3435 | Moral Philosophy |
| PHIL 3500 | Sexuality, Gender, and the Law |
| PHIL 5001 | Global Justice |


| CONCENTRATION IN PUBLIC AND ECONOMIC POLICY |  |
| :--- | :--- | :--- |
| Code | Title Hours |


| Required Course |  |
| :--- | :--- |
| POLS 3307 | Public Policy and Administration |
| Elective Courses |  |
| Complete two of the following: |  |
| ECON 1240 | Economics of Crime |
| ECON 1281 | Economics of the Creative Industries |
| ECON 3410 | Labor Economics |
| 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 3490 | Public Choice Economics |
| ECON 4680 | Competition Policy and Regulation |
| HIST 3800 | American Conservatism from the New |
| PHIL 1160 | Deal to the Present |
| PHIL 5001 | Introduction to Economic Justice |
| POLS 2340 | Business and Government |
| POLS 2345 | Urban Policies and Politics |
| POLS 2360 | Politics of Poverty |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 2395 | Environmental Politics and Policy |


| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| POLS 2335 | Budgeting and Taxation |
| POLS 2350 | State and Local Politics |
| POLS 2357 | Growth and Decline of Cities and <br> Suburbs |
| POLS 3425 | U.S. Foreign Policy |

## 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
Ancient Philosophy and Political Thought

Modern Philosophy ..... 4
PHIL 2330 Modern Philosophy

## 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's major.

The program in religion offers students the opportunity to acquire an understanding of religious experience within its social, historical, literary, and political context. Students study specific religious traditions such as Judaism, Islam, and Hinduism, and using a comparative approach they explore themes across faith traditions. Through the minor, a student will have the opportunity to study a range of religions and a variety of methods of understanding the key dimensions of religious life.

The religious studies minor is designed to provide the student with an introduction to a variety of religious traditions along with the analytical tools necessary to explore religious theology and praxis across five
categories: comparative religion, traditions that emerge from the ancient Mediterranean and African worlds, traditions that emerge from Asia, religion and culture, and texts. Through this minor, students are exposed to the basic features of the world's religions and the ethical systems that accompany them. They also have an opportunity to explore diverse methodological approaches to the study of religions in general. This minor is designed to help students enhance their abilities in any career that requires a liberal arts education.

## 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 of the following: |  | 16 |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1120 | Understanding the Bible |  |
| PHIL 1220 | The Meaning of Death |  |
| PHIL 1260 | Apocalypticism in Film |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |  |
| PHIL 2394 | Chinese Buddhism |  |
| PHIL 2395 | Japanese Buddhism |  |
| PHIL 4390 | Cults and Sects |  |
| Elective Course |  |  |
| Code | Title | Hours |
| Complete one of the following: |  | 4 |
| PHIL 1104 | Goddesses, Witches, Saints, and Sinners: Women in Western Religions |  |
| PHIL 1110 | Introduction to Religion |  |
| PHIL 1111 | Introduction to World Religions |  |
| PHIL 1120 | Understanding the Bible |  |
| PHIL 1130 | Ethics: East and West |  |
| PHIL 1220 | The Meaning of Death |  |
| PHIL 1230 | Sound, Music, and Religion |  |
| PHIL 1231 | Image and Icon in South Asia |  |
| PHIL 1250 | Jesus in the Gospels, American Culture, and the Movies |  |
| PHIL 1260 | Apocalypticism in Film |  |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |  |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |  |
| PHIL 1272 | Ethics in the World's Religions |  |
| PHIL 1273 | Jainism |  |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |  |
| PHIL 1276 | Indian Religions |  |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |  |
| PHIL 1281 | Islam, Gender, and Fashion |  |


| PHIL 1285 | Jewish Religion and Culture |
| :---: | :---: |
| PHIL 1286 | American Judaism |
| PHIL 1287 | Modern Judaism |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 1295 | Religious Perspectives on Health and Healing |
| PHIL 1410 | From Vodou and the Rastas to AfroIslam: African Religions in the Americas |
| PHIL 1666 | The Problem of Evil in Film |
| PHIL 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2300 | Mysticism |
| PHIL 2311 | The Kabbalah: Jewish Mysticism from the Zohar to Madonna |
| PHIL 2313 | Exploring the Jewish Diaspora-From Mountain Jews to Crypto-Jews |
| PHIL 2314 | Biblical Prophets and Their Interpreters |
| PHIL 2315 | Adam and Eve and Their Interpreters |
| PHIL 2316 | Interpreting the Bible |
| PHIL 2322 | Responses to the Holocaust |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 2398 | Religion and Culture in Indian Cinema |
| PHIL 3387 | Religion, Nation, and Identity in Modern Jewish Thought |
| PHIL 3410 | Religion and Spirituality in the African Diaspora |
| PHIL 4390 | Cults and Sects |
| PHIL 4393 | Asian Religions in the United States |
| PHIL 4395 | Ramayana |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4546 | Advanced Biblical Studies: Hebrew Bible |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4606 | Seminar. Theories and Methods in Religious Studies |
| PHIL 4903 | Seminar in Religion |
| PHIL 4904 | Major Figures in Religious Studies |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 4992 | Directed Study |
| PHIL 5011 | Comparative Religious Ethics |

## 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

Complete four courses from the following list, two of which must be at or above the 2000 level:

| 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 |
| PHIL 1180 | Environmental Ethics |
| PHIL 1185 | The Ethics of Food |
| PHIL 1195 | Research Ethics |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1276 | Indian Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| 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 2100 | The Religious Worlds of Boston: Faith and Devotion in Urban Life |
| PHIL 2301 | Philosophical Problems of Law and Justice |
| PHIL 2325 | Ancient Philosophy and Political Thought |
| PHIL 2303 | Social and Political Philosophy |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 3435 | Moral Philosophy |
| PHIL 4390 | Cults and Sects |
| PHIL 4545 | Religion and Politics in South Asia |
| PHIL 4550 | Philosophy of Economics |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |

## GPA Requirement

2.000 GPA required in the minor

## Political Science

Website (http://www.northeastern.edu/polisci)

## Thomas J. Vicino, PhD

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617.373.5311 (fax)

Jermichael Young, Administrative Secretary, je.young@northeastern.edu
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. 31)."

## 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. 866)
- Environmental Studies and Political Science (p. 527)
- History and Political Science (p. 739)
- Journalism and Political Science (p. 166)
- Media and Screen Studies and Political Science (p. 144)
- Political Science and Communication Studies (p. 154)
- Political Science and Economics (p. 680)
- Political Science and Human Services (p. 757)
- Political Science and International Affairs (p. 800)
- Political Science and Philosophy (p. 843)
- Sociology and Political Science (p. 888)


## Bachelor of Science (BS)

- Political Science (p. 890)
- Biology and Political Science (p. 492)
- Computer Science and Political Science (p. 342)
- Criminal Justice and Political Science (p. 641)
- Political Science and Business Administration (p. 256)
- Political Science and Communication Studies (p. 156)
- Political Science and Economics (p. 686)
- Political Science and Human Services (p. 766)
- Political Science and Philosophy (p. 859)
- Politics, Philosophy, and Economics (p. 623)


## Minors

- Political Science (p. 909)
- American Political Institutions (p. 909)
- International Security Studies (p. 910)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 944)

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

Introduction to College
Complete "Introduction to College" for your major.
Political Science Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Political Science Requirements |  |  |
| 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 2330 | American Political Thought |
| :--- | :--- |
| POLS 2328 | Modern Political Thought |
| POLS 2332 | Contemporary Political Thought |
| Political Science Capstone |  |
| Complete one of the following: |  |

$\begin{array}{ll}\text { POLS } 4701 & \text { Political Science Senior Capstone } \\ \text { POLS } 4703 & \text { Senior Thesis }\end{array}$

## 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 |
| :--- | :--- | ---: |
| Courses |  | 4 |
| Complete one of the following: |  |  |
| POLS 4910 | Model United Nations |  |
| POLS 4915 | Model Arab League |  |
| POLS 4918 | Model NATO |  |
| POLS 4942 | Internship in Politics |  |
| Co-op or Study Abroad |  |  |
| Complete one cooperative education experience or one study- |  |  |
| abroad experience. | 4 |  |

abroad experience.

## 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

## 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. 867).

- American political institutions (p. 867)
- Campaigns and elections (p. 867)
- Comparative politics (p. 867)
- Identity, culture, and politics (p. 867)
- International relations and diplomacy (p. 867)
- Law and legal studies (p. 868)
- Public policy (p. 868)
- Security studies (p. 868)


## Political Science Major Credit Requirement

Complete 52 semester hours in the major.

## Program Requirements

128 total semester hours required


| CONCENTRATION IN COMPARATIVE POLITICS <br> Code <br> Title | Hours |
| :--- | ---: |
| Theoretical Requirement |  |
| Complete one of the following: | 4 |
| POLS $2370 \quad$ Religion and Politics |  |

CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY
Code Title Hours

Experiential/Practicum Requirement
Complete one of the following: 4

| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International <br> Politics Abroad |

## Core Courses

Complete three of the following: 12

| POLS 3405 | International Political Economy |
| :--- | :--- |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> 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 4500 | U.S. Constitutional Law |
| POLS 4505 | U.S. Civil Liberties |

CONCENTRATION IN PUBLIC POLICY
Code $\quad$ Title Hours

| Core Requirement |  | Hours |
| :--- | :--- | ---: |
| POLS 3307 | Public Policy and Administration | 4 |

Complete three of the following: 12

| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> 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 $\quad$ Title

| Complete four of the following: |
| :--- |
| POLS 3408 International Security <br> POLS 3420 U.S. National Security Policy <br> POLS 3423 Terrorism and Counterterrorism <br> POLS 3425 U.S. Foreign Policy <br> POLS 3427 Civil-Military Relations <br> POLS 3430 Revolution, Civil War, and Insurrection <br> POLS 3470 Arab-Israeli Conflict <br> POLS 3487 Politics of Developing Nations <br> POLS 4918 Model NATO |

## 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 |  |  |
| Foreign <br> language <br> core course | 4 POLS 1160 | 4 |  |  |
| POLS 1000 | 1 POLS 1161 | 0 |  |  |


| ENGW 1111 | 4 Foreign <br> language <br> core course | 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 <br> intermediate/ <br> advanced <br> undergraduat, <br> elective | 4 POLS <br> intermediate/ <br> advanced <br> undergraduat <br> elective | 4 Elective | 4 |  |
| Foreign <br> language <br> core course | 4 Elective | 4 |  |  |
| Elective | 1 | 12 | 0 | 0 |
| EESH 2000 | 17 |  |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | 0 ENGW 3315 | 4 ENVR 5210 | 4 Co-op | 0 |
|  | POLS 2400 | 4 Political <br> Theory <br> course | 4 |  |
|  | ENVR 3300 | 4 |  |  |
|  | ENVR 3301 | 1 |  |  |
|  | POLS <br> undergraduate <br> elective | 4 | 8 | 0 |
| 0 | 17 |  | 8 |  |

Year 4


Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Co-op | 0 Elective | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
|  | Elective | 4 |
| 0 | 16 |  |

[^25]
## Five Years, Three Co-ops in Spring/Summer 1

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 1111 | 4 POLS 1155 | 4 Vacation | 0 Vacation | 0 |
| MATH 1251 | 4 POLS 1156 | 0 |  |  |
| POLS 1150 | 4 ECON 1116 | 4 |  |  |
| POLS 1151 | 0 ENVR 1200 | 4 |  |  |
| ENVR 1101 | 4 SOCL 1246 | 4 | 0 | 0 |
|  | 16 | 16 |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| POLS 1160 | 4 Co-op | 0 Co-op | 0 PHIL 3480 | 4 |
| POLS 1161 | 0 |  | ECON 3423 | 4 |
| ENVR 1445 | 4 |  |  |  |
| HIST 2342 | 4 |  |  |  |
| Foreign <br> language <br> core course | 4 |  | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 3315 | 4 Co-op | 0 Co-op | 0 ENVR 5210 |  |$\quad 4$


| Year 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall H | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| ENVR 5250 | 4 | Co-op | 0 | Co-op |  | Vacation | 0 |
| POLS undergradute elective | 4 |  |  |  |  |  |  |
| POLS <br> undergraduate <br> elective |  |  |  |  |  |  |  |
| Foreign langauge core course |  |  |  |  |  |  |  |
|  | 16 |  | 0 |  | 0 |  | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| POLS 2395 | 4 Elective | 4 |
| Foreign <br> language <br> core course | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

[^26]
## 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.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Environmental Studies Requirements

| Code | Title | Hours |
| :--- | :--- | :---: |
| Social Science Component |  |  |
| Philosophy |  | 4 |
| PHIL 1180 | Environmental Ethics | 4 |
| Sociology |  | 4 |
| SOCL 1246 | Environment and Society | 4 |
| Economics |  | 4 |
| ECON 1116 | Principles of Microeconomics | 4 |
| ECON 3423 | Environmental Economics | 4 |

## Science Component

Complete one course in each of the following four subject
areas:
Biology
ENVR 1445 4
Earth and Environmental Sciences
Complete one of the following: 4

| ENVR 1112 | Environmental Geology |  |
| :--- | :--- | ---: |
| ENVR 1200 | Dynamic Earth |  |
| Environment |  | 4 |
| ENVR 1101 | Environmental Science | $4-5$ |
| Quantitative Methods |  |  |
| Complete one of the following: |  |  |
| ENVR 3300 | Geographic Information Systems |  |
| and ENVR 3301 | and Lab for ENVR 3300 |  |
| MATH 2280 | Statistics and Software |  |

## Political Science Requirements

Code Title Hours

## Program Requirement

| Political Science Requirements |  |  |
| :--- | :--- | :--- |
| POLS 1150 | American Government | 4 |
| and POLS 1151 | and Recitation for POLS 1150 |  |
| 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:
$\begin{array}{ll}\text { POLS } 2325 & \begin{array}{l}\text { Ancient Philosophy and Politica } \\ \text { Thought }\end{array}\end{array}$
POLS 2328 Modern Political Thought
POLS 2330 American Political Thought
POLS 2332 Contemporary Political Thought
Political Science Restricted Electives
Complete two of the following:

| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 3307 | Public Policy and Administration |
| POLS 3407 | International Organizations |
| POLS 3487 | Politics of Developing Nations |

Political Science Electives
Complete two POLS courses.

## 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. 528).

- Comparative Politics (p. 528)
- International Relations and Diplomacy (p. 528)
- Law and Legal Studies (p. 528)
- Public Policy (p. 528)


## Integrative Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Integrative Courses |  |  |
| Complete two of the following: |  | 8 |
| ENVR 5210 | Environmental Planning |  |
| ENVR 5250 | Geology and Land-Use Planning |  |
| POLS 2395 | Environmental Politics and Policy |  |
| Capstone Requirement |  |  |
| Complete one of th | following: | 1-8 |
| ENVR 4900 | Earth and Environmental Science Capstone |  |
| ENVR 4997 | Senior Thesis |  |
| POLS 4701 | Political Science Senior Capstone |  |
| POLS 4702 and POLS 4703 | Senior Thesis Preparation and Senior Thesis |  |

## Environmental Studies and Political Science Combined-Major Credit Requirement

Complete 80 semester hours in the major.

128 total semester hours required

## Concentrations

CONCENTRATION IN COMPARATIVE POLITICS

| Code | Title | Hours |
| :--- | :--- | ---: |
| Theoretical Requirement | 4 |  |
| Complete one of the following: |  |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3418 | Nationalism |  |
| POLS 3427 | Civil-Military Relations |  |
| 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 3445 |  |
| POLS 3450 |  |
| POLS 3460 |  |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3475 |  |
| POLS 3480 |  |
| POLS 3485 |  |
| Experiential/Practicum Requirement |  |
| Complete one | ollowing: |

POLS 4915 Model Arab League
POLS 4918 Model NATO
POLS 4937 Dialogue of Civilizations: Government and Politics Abroad

CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

| Code | Title | Hours |
| :--- | :--- | ---: |
| Experiential/Practicum Requirement |  |  |
| Complete one of the following: | 4 |  |
| POLS 4910 | Model United Nations |  |
| POLS 4915 | Model Arab League |  |
| POLS 4918 | Model NATO |  |
| 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 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> the European Union |
| POLS 3470 | Arab-Israeli Conflict |


| CONCENTRATION IN LAW AND LEGAL STUDIES |  |  |
| :--- | :--- | ---: |
| Code <br> Complete four of the following: | Hours |  |
| 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 4500 | U.S. Constitutional Law |  |
| POLS 4505 | U.S. Civil Liberties |  |

## CONCENTRATION IN PUBLIC POLICY Code Hours

| Core Requirement |  |  |
| :--- | :--- | :--- |
| POLS 3307 | Public Policy and Administration |  |


| Electives |  |
| :--- | :--- |
| Complete three of the following: | 12 |


| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> Suburbs |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 2395 | Environmental Politics and Policy |
| POLS 3425 | U.S. Foreign Policy |

Plan of Study
Five Years, Three Co-ops in Spring/Summer 1

| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENGW 1111 | 4 | MATH 1215 | 4 Vacation | 0 Vacation | 0 |
| ENVR 1101 | 4 | PHIL 1180 | 4 |  |  |
| POLS 1150 and POLS 1151 | 4 | POLS 1155 and POLS 1156 | 4 |  |  |
| SOCL 1246 | 4 | Foreign language course | 4 |  |  |
|  | 16 |  | 16 | 0 | 0 |


| Year 2 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| ECON 1116 | 4 | Co-op | 0 | Co-op | 0 | Elective | 4 |
| ENVR 1104, ENVR 1112, or ENVR 1200 | 4 |  |  |  |  | Elective | 4 |
| POLS 1160 <br> and POLS 1161 | 4 |  |  |  |  |  |  |
| Foreign language course | 4 |  |  |  |  |  |  |
|  | 16 |  | 0 |  | 0 |  | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| ECON 3423 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| POLS 2400 | 4 |  | Elective | 4 |
| Foreign <br> language <br> course | 4 |  |  |  |
| Political <br> thought <br> course | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 8 |

Year 4
$\left.\begin{array}{lcccr}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \begin{array}{l}\text { ENGW } 3315 \\ \text { or } 3308\end{array} & 4 \text { Co-op }\end{array} \quad \begin{array}{l}0 \text { Co-op }\end{array}\right)$

## Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ENVR 5250 <br> or POLS | 4 ENVR 1445 | 4 |
| 2395 |  |  |

POLS 4
undergraduate
elective

| $17-20$ | $13-16$ |
| :---: | :---: |
| Total Hours: $130-137$ |  |

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

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGW 1111 | 4 | MATH 1215 | 4 | Vacation | 0 Vacation | 0 |
| ENVR 1101 | 4 | PHIL 1180 | 4 |  |  |  |
| POLS 1150 and POLS 1151 | 4 | POLS 1155 <br> and POLS 1156 | 4 |  |  |  |
| SOCL 1246 | 4 | Foreign language course | 4 |  |  |  |
|  | 16 |  | 16 |  | 0 | 0 |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | ---: | :---: | ---: | ---: |
| ECON 1116 | 4 ECON 3423 | 4 Vacation | 0 Co-op | 0 |



Total Hours: 130-137

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## 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.

History Major 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 from HIST 1001 to HIST 19994

| History Seminar and Historical Writing |  |
| :--- | :--- |
| HIST $2301 \quad$ The History Seminar |  |


| HIST 2301 | The History Seminar | 4 |
| :--- | :--- | :--- |
| HIST 2302 | Historical Writing | 1 |

Pre-1800 History Elective
Complete one of the following:

| HIST 1218 | Pirates, Planters, and Patriots: Making <br> the Americas, 1492-1804 |
| :--- | :--- |
| HIST 1252 | Japanese Literature and Culture |
| HIST 1270 | Ancient Greece |
| HIST 1271 | Ancient Rome |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 2330 | Colonial and Revolutionary America |

Intermediate/Advanced History Cluster
Complete three HIST courses numbered 2300 or above.
Cluster is subject to department approval.

## Advanced History

Complete one HIST course numbered 3000 or above.

## Political Science Major Requirements

Code Title
Political Science Foundation Courses

| Political Science Foundation Courses |  |  |
| :--- | :--- | :---: |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |
| POLS 2400 | Quantitative Techniques | 4 |
| Political Thought |  | 4 |
| Complete one of the following: |  |  |


| POLS 2325 | Ancient Philosophy and Political <br> Thought |
| :--- | :--- |
| POLS 2328 | Modern Political Thought |
| POLS 2330 | American Political Thought |
| POLS 2332 | Contemporary Political Thought |

Political Science Electives
Complete three POLS courses numbered 2300 or above.

## 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 |
| Integrative Course |


| Complete one of the following: | Hours |
| :--- | :--- |
| HIST 1130 | Introduction to the History of the United <br> States |
| HIST 2211 | The World Since 1945 |
| HIST 2282 | The Holocaust and Comparative <br> Genocide |
| HIST 3800 | American Conservatism from the New <br> Deal to the Present |

## Capstone

Complete one of the following. (Public History concentrations
take HIST 4903 \& HIST 4904)

| 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.

## Program Requirements

128 total semester hours required

## Journalism and Political Science, BA

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Journalism Major Requirements

Code Title Hours
Journalism Introductory Course
JRNL $1150 \quad$ Understanding Today's News

Journalism Foundations
Must receive a C or better in the following:
JRNL 1101 Journalism 1: Fundamentals of 5
and JRNL 1102 Reporting
and Journalist's Toolbox
JRNL 2201 Journalism 2: Intermediate Reporting 4
JRNL $2301 \quad$ Visual Storytelling in Journalism 4

JRNL 3610 Digital Storytelling and Social Media 4
Ethics
JRNL $4650 \quad$ Ethics and Issues in Journalism 4
Journalism Electives
$\begin{array}{ll}\text { Take three JRNL courses. } & 12\end{array}$
Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | :--- |
| Political Science Foundation Courses |  |  |
| 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 |  | 4 |
| POLS 2325 | Ancient Philosophy and Political | 4 |
| POLS 2328 | Thought | 4 |
| POLS 2330 | Modern Political Thought | 4 |
| POLS 2332 | Contemporary Political Thought | 4 |
| Political Science Capstone or Thesis | 4 |  |
| Complete one of the following: |  |  |


| POLS 4701 | Political Science Senior Capstone |
| :--- | :--- |
| POLS 4703 | Senior Thesis |

## Political Science Electives <br> Complete two upper-division POLS courses or complete a 8 concentration from the following list: <br> POLS 2300 to POLS 5999 <br> 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. 167).

- American political institutions (p. 167)
- Campaigns and elections (p. 167)
- Comparative politics (p. 168)
- Identity, culture, and politics (p. 168)
- International relations and diplomacy (p. 168)
- Law and legal studies (p. 168)
- Public policy (p. 168)
- Security studies (p. 168)


## 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.
Program Requirement
128 total semester hours required

| Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS |  |  |
| Code | Title | Hours |
| Complete four | following: | 16 |
| POLS 2350 | State and Local Polit |  |
| POLS 3300 | The U.S. Congress |  |
| POLS 3302 | Judicial Process and |  |
| POLS 3305 | The American Presid |  |
| POLS 3307 | Public Policy and Ad |  |
| POLS 3310 | Public Opinion, Vot |  |
| CONCENTRATION IN CAMPAIGNS AND ELECTIONS |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| With advisor approval, a co-op or internship may be substituted in place of POLS 4947: |  |  |
| POLS 3160 | Campaign Strategy | 4 |
| POLS 4947 |  | 4 |
| Campaigns and Elections Electives |  |  |
| If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken. |  |  |
| Complete two | following: | 8 |


| POLS 2345 | Urban Policies and Politics |
| :--- | :--- |
| POLS 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |

CONCENTRATION IN COMPARATIVE POLITICS
Code Title Hours
Theoretical Requirement
Complete one of the following:

| POLS 2370 | Religion and Politics |
| :---: | :--- |
| POLS 3418 | Nationalism |
| POLS 3427 | Civil-Military Relations |
| POLS 3487 | Politics of Developing Nations |
| Regional Requirements |  |
| Complete two of the following: | 8 |


| POLS 3435 | Politics and Governance of Europe and <br> the European Union |
| :--- | :--- |
| POLS 3445 |  |
| POLS 3450 |  |
| POLS 3460 |  |
| POLS 3465 | Government and Politics in the Middle <br> POLS 3475 |
| POLS 3480 |  |
| POLS 3485 |  |

Experiential/Practicum Requirement
Complete one of the following: 4

| POLS 4915 | Model Arab League |
| :--- | :--- |
| POLS 4918 | Model NATO |
| POLS 4937 | Dialogue of Civilizations: Government <br> and Politics Abroad |

CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS Hours
Code Title Hours

| Core Course |  |  |
| :--- | :--- | :--- |
| POLS 3418 | Nationalism |  |

Electives
Complete three of the following: 12

| POLS 2360 | Politics of Poverty |
| :--- | :--- |
| POLS 2368 | Music and Politics in America and <br> Abroad |
| POLS 2370 | Religion and Politics |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |
| POLS 3324 | Law and Society |


| CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY |  |
| :--- | :--- | :--- |
| Code | Title Hours |

Experiential/Practicum Requirement
Complete one of the following:

[^27]| POLS 4915 | Model Arab League |  |
| :---: | :---: | :---: |
| POLS 4918 | Model NATO |  |
| 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 3407 | International Organizations |  |
| 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 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 |
| :--- | :--- | ---: |
| Electives |  |  |
| Complete three of the following: | 12 |  |
| POLS 2334 | Bureaucracy and Government <br> Organizations |  |
| 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 <br> 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 3427 | Civil-Military Relations |  |
| POLS 3430 | Revolution, Civil War, and Insurrection |  |
| POLS 3470 | Arab-Israeli Conflict |  |


| POLS 3487 | Politics of Developing Nations |
| :--- | :--- |
| POLS 4918 | Model NATO |

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## 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. 622).

## Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Political Science |  |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |
| POLS 2400 | Quantitative Techniques | 4 |
| Political Thought |  | 4 |
| Complete one of the following: |  |  |


| POLS 2325 | Ancient Philosophy and Political <br> Thought |
| :---: | :--- |
| POLS 2328 | Modern Political Thought |
| POLS 2330 | American Political Thought |
| POLS 2332 | Contemporary Political Thought |
| Methodology | Research Methods in Political Science |

## Political Science Upper-Division Electives

Complete two courses in the following range:

```
POLS 3300 to POLS 5999
```

Political Science Electives

Complete two courses in the following range:
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. 155).

- American Political Institutions (p. 155)
- Campaigns and Elections (p. 155)
- Identity, Culture, and Politics (p. 155)
- Law and Legal Studies (p. 156)
- Public Policy (p. 156)


## Communication Studies Courses

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses in Political Communication |  |  |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking | 4 |
| COMM 1210 | Persuasion and Rhetoric | 4 |
| Communication Studies Electives |  |  |
| Complete six of the following: |  | 24 |
| COMM 1231 | Principles of Organizational Communication |  |
| COMM 1331 | Legal Argumentation, Advocacy, and Citizenship |  |
| COMM 1412 | Social Movement Communication |  |
| COMM 2301 | Communication Research Methods |  |
| COMM 2303 | Global and Intercultural Communication |  |
| COMM 2501 | Communication Law |  |
| COMM 2551 | Free Speech in Cyberspace |  |
| COMM 3201 | Health Communication |  |
| COMM 3304 | Communication and Inclusion |  |
| COMM 3409 | Advocacy Writing |  |
| COMM 3414 | Great Speakers and Speeches 2, 1930Present |  |
| COMM 3415 | Communication Criticism |  |
| COMM 3451 | Advertising Practices |  |
| COMM 3501 | Free Speech: Law and Practice |  |
| COMM 3532 | Theories of Conflict and Negotiation |  |
| COMM 3610 | Communication, Politics, and Social Change |  |
| COMM 4102 | Health Communication Campaigns |  |
| COMM 4602 | Contemporary Rhetorical Theory |  |
| COMM 4625 | Online Communities |  |
| COMM 4631 | Crisis Communication and Image Management |  |
| COMM 4992 | Directed Study |  |
| COMM 4994 | Internship in Communication |  |


| Integrative Requirements |  |  |
| :--- | :--- | ---: |
| Code <br> Integrative Courses | Title | Hours |
| POLS 3320 | Politics and Mass Media |  |
| or COMM 3320 | Political Communication | 4 |
| POLS 2333 |  | 4 |

## Capstone Requirement

Complete one of the following. This course also counts 4
toward the political science or communication studies elective requirement:

| COMM 4102 | Health Communication Campaigns |
| :--- | :--- |
| COMM 4530 | Communication and Quality of Life |
| COMM 4602 | Contemporary Rhetorical Theory |
| COMM 4625 | Online Communities |
| POLS 4701 | Political Science Senior Capstone |
| POLS 4703 | Senior Thesis |

## Political Science and Communication Studies CombinedMajor Credit Requirement

Complete 72 semester hours in the major.

## Program Requirement

128 total semester hours required

| Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS |  |  |
| Code | Title | Hours |
| Complete four | following: | 16 |
| POLS 2350 | State and Local Politics |  |
| POLS 3300 | The U.S. Congress |  |
| POLS 3302 | Judicial Process and Behavior |  |
| POLS 3305 | The American Presidency |  |
| POLS 3307 | Public Policy and Administration |  |
| POLS 3310 | Public Opinion, Voting, and Elections |  |

CONCENTRATION IN CAMPAIGNS AND ELECTIONS
Code Title Hours

## Required Courses

With advisor approval, a co-op or internship may be substituted in place of POLS 4947:
POLS $3160 \quad$ Campaign Strategy 4
POLS 4947 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 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |

## CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Course |  |  |
| POLS 3418 | Nationalism | 4 |
| Electives |  | 12 |
| Complete three of the following: |  |  |
| POLS 2360 |  | Politics of Poverty |


| POLS 2368 | Music and Politics in America and Abroad |  |
| :---: | :---: | :---: |
| POLS 2370 | Religion and Politics |  |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |  |
| POLS 3324 | Law and Society |  |
| CONCENTRATION IN LAW AND LEGAL STUDIES |  |  |
| Code | Title | Hours |
| Complete four | 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 4500 | U.S. Constitutional Law |  |
| POLS 4505 | U.S. Civil Liberties |  |
| CONCENTRATION IN PUBLIC POLICY |  |  |
| Code | Title | Hours |
| Core Requirem |  |  |
| POLS 3307 | Public Policy and Administration | 4 |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| POLS 2334 | Bureaucracy and Government Organizations |  |
| 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 |  |

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Analyzing and Using Data (AD) 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) and Formal and Quantitative Reasoning (FQ) must be met through general electives.
Media Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| MSCR 1000 | Media and Screen Studies at Northeastern | 1 |
| Required Courses |  |  |
| MSCR 1220 | Media, Culture, and Society | 4 |
| MSCR 2220 | Understanding Media and Film | 4 |
| MSCR 4623 | Theories of Media and Culture | 4 |
| Elective Courses |  |  |
| Complete four of the following: |  | 16 |
| CINE 2160 | Narrative Filmmaking |  |
| CINE 3389 | Screenwriting |  |
| CINE 3392 | Gender and Film |  |
| CINE 3446 | Topics in Documentary Production |  |
| CINE 3920 | Topics in Film Studies |  |
| MSCR 1230 | Introduction to Film Production |  |
| MSCR 1310 | Introduction to Digital Media Culture |  |
| MSCR 2302 | Advertising and Promotional Culture |  |
| MSCR 2325 | Global Media |  |
| MSCR 2895 | Film Analysis |  |
| MSCR 3210 | Special Topics in Media and Screen Studies |  |
| MSCR 3420 | Digital Media Culture |  |
| MSCR 3422 | Media Audiences |  |
| MSCR 3426 | Popular Music as Media Form |  |
| MSCR 3435 | Media Industries |  |
| MSCR 3437 | Media and Identity |  |
| ARTD 3480 | Video: Sound and Image |  |
| ARTD 3485 | Experimental Video |  |
| ARTH 2212 | Survey of the Still and Moving Image |  |
| Advanced Elective Courses |  |  |
| Complete two o | following: | 8 |

CINE 3500 Film Theory

| MSCR 4208 | TV History |
| :--- | :--- |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen |
|  | Studies |
| MSCR 4992 | Directed Study |
| MSCR 4993 | Independent Study |

## Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |
| POLS 2400 | Quantitative Techniques |  |
| Political Thought |  | 4 |


| POLS 2328 | Modern Political Thought |
| :--- | :--- |
| POLS 2330 | American Political Thought |
| POLS 2332 | Contemporary Political Thought |


| Politics in Media/Art | 8 |
| :--- | :--- |
| Complete two courses. Consult academic advisor for <br> additional courses. | 8 |


| POLS 2368 | Music and Politics in America and <br> Abroad |
| :--- | :--- |
| Elective Courses |  |
| Complete two POLS courses or complete a concentration. | 8 |

## 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. 145).

- Identity, Culture, and Politics (p. )
- Law and Legal Studies (p. )

Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  | 4 |
| MSCR 4602 | Media and Democracy | 4 |
| POLS 3320 | Politics and Mass Media |  |

## 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

128 total semester hours required

| Concentrations |  |
| :---: | :---: |
| CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS |  |
| Code Title | Hours |
| Core Course |  |
| POLS 3418 Nationalism | 4 |
| Electives |  |
| Complete three of the following: | 12 |
| POLS 2360 Politics of Poverty |  |


| POLS 2368 | Music and Politics in America and <br> Abroad |
| :--- | :--- |
| POLS 2370 | Religion and Politics |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |
| POLS 3324 | Law and Society |

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 4500 | U.S. Constitutional Law |  |
| POLS 4505 | U.S. Civil Liberties |  |

## Plan of Study

Year 1

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MSCR 1000 | 1 | MSCR 2220 | 4 | MSCR <br> elective | 4 | Vacation |  |
| MSCR 1220 |  | POLS 1155 <br> and <br> POLS 1156 | 4 | Elective | 4 |  |  |
| POLS 1150 <br> and POLS 1151 | 4 | MSCR elective | 4 |  |  |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |  |  |
| Elective | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: | ---: |
| POLS 1160 <br> and | 4 Co-op | Co-op | Elective | 4 |
| POLS 1161 |  |  |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| Political <br> thought <br> elective | M MSCR <br> elective | 4 Vacation | 0 Co-op |  |
| Advanced <br> MSCR <br> elective | 4 Politics in <br> media/art <br> elective | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
| Elective | 4 Elective | 4 | 0 | 0 |


| Year 4 <br> Fall | Hours Spring | Hours Summer 1 |  |  |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | Politics in <br> media/art <br> elective | 4 | Vacation | Vacation |
|  | POLS |  |  |  |
| elective | 4 |  |  |  |
|  | Elective | 4 |  |  |
|  | MSCR 4602 | 4 | 0 | 0 |

## Year 5

| Fall | Hours |
| :--- | ---: |
| MSCR 4623 | 4 |
| POLS 3320 | 4 |
| POLS | 4 |
| elective | 4 |
| Elective | 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Political Science Requirements <br> Code <br> Title | Hours |  |
| :--- | ---: | ---: |
| 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: |  |  |
| POLS 2330 | American Political Thought |  |
| POLS 2325 | Ancient Philosophy and Political <br> Thought |  |
| POLS 2328 | Modern Political Thought |  |

POLS 3300 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. 681).

- American Political Institutions (p. 681)
- Campaigns and Elections (p. 681)
- International Relations and Diplomacy (p. 681)
- Public Policy (p. 681)


## Economics Requirements for BA

Code Title Hours
Breadth Courses

| MATH 1231 | Calculus for Business and Economics | 4 |
| :--- | :--- | :--- |
| CS 1100 | Computer Science and Its Applications | 4 |

## Required Economics Courses

Grades in the required economics courses and in Quantitative
Techniques (POLS 2400) or Statistics (ECON 2350) must
average a minimum of 2.000 :

| 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 | 12 |  |
| Complete three economics electives with no more than one <br> below 2990. |  |  |

## Supporting Courses

Complete either of the statistics and departmental elective combinations listed below:

| COMBINATION A |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Statistics |  |  |
| POLS 2400 | Quantitative Techniques | 4 |
| Economics |  |  |
| Complete one of the following: |  | 4 |
| ECON 3404 | International Food Economics and Policy |  |
| ECON 3420 | Urban Economic Issues |  |
| ECON 3423 | Environmental Economics |  |
| ECON 3425 | Energy Economics |  |
| ECON 3440 | Public Finance |  |
| ECON 3490 | Public Choice Economics |  |
| ECON 4634 | Comparative Economics |  |
| ECON 4635 | International Economics |  |
| COMBINATION B |  |  |
| Code | Title | Hours |
| Statistics |  |  |
| ECON 2350 | Statistics | 4 |
| Political Science |  |  |
| Complete one course in the following range: |  | 4 |
| POLS 2401 to POLS 5999 |  |  |
| Integrative Requirements |  |  |
| Code | Title | Hours |
| Senior Seminar/Capstone |  |  |
| Complete one of | following: | 4 |
| ECON 4692 | Senior Economics Seminar |  |
| POLS 4701 | Political Science Senior Capstone |  |
| POLS 4703 | Senior Thesis |  |

## Program Requirement

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

CONCENTRATION IN CAMPAIGNS AND ELECTIONS
Code Title Hours

## Required Courses

With advisor approval, a co-op or internship may be substituted in place of POLS 4947:

| POLS 3160 | Campaign Strategy | 4 |
| :--- | :--- | :--- |
| POLS 4947 | 4 |  |

[^28]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 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |


| CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY |  |  |
| :--- | :--- | :--- | :--- |
| Code | Title |  |
| Hours |  |  |

## Experiential/Practicum Requirement

Complete one of the following: 4

| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International <br>  |

## Core Courses

Complete three of the following: 12

| POLS 3405 | International Political Economy |
| :--- | :--- |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> the European Union |
| POLS 3470 | Arab-Israeli Conflict |

Code Title HoursCore Requirement
POLS 3307 Public Policy and Administration 4

## Electives

Complete three of the following: 12

| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> Suburbs |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 2395 | Environmental Politics and Policy |
| POLS 3425 | U.S. Foreign Policy |

## Plan of Study <br> Four Years, No Co-op

Year 1

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 1111 | 4 MATH 1231 | 4 Vacation | 0 Vacation | 0 |
| POLS 1155 | 4 POLS 1150 | 4 |  |  |


| POLS 1156 | 0 POLS 1151 | 0 |  |  |
| :--- | :--- | ---: | :--- | :--- |
| ECON 1115 | 4 CS 1100 | 4 |  |  |
| Elective | 4 ECON 1116 | 4 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| POLS 1160 | 4 POLS 2400 | 4 Vacation | 0 Vacation | 0 |
| POLS 1161 | 0 ECON 2315 | 4 |  |  |
| ECON <br> undergraduate <br> elective | 4 POLS <br> undergraduate <br> elective | 4 |  |  |
| POLS <br> undergraduat <br> elective | 4 Elective | 4 |  |  |
| Elective | 4 | 16 | 0 | 0 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| ENGW 3315 | 4 | Elective | 4 | Vacation |  | Vacation | 0 |
| ECON 2316 | 4 | POLS <br> intermed <br> advanced <br> undergra <br> elective | 4 |  |  |  |  |
| Theory course |  |  |  |  |  |  |  |
| undergraduat elective |  |  |  |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| ECON 2560 | 4 POLS 4701 | 4 |
| POLS <br> intermediate/ <br> advanced <br> undergraduatı <br> elective | 4 ECON <br> intermediate/ <br> advanced <br> undergraduatı <br> elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 128

## Political Science and Human Services, BA

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Core Courses in Political Science |  |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 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 | es in the following range: | 12 |
| POLS 2330 t | S 5999 |  |

## Supporting Course for Political Science Title

| Mathematics |
| :--- |
| Complete one of the following to fulfill the prerequisite for |
| POLS 2400 |
| MATH 1213 |
| MATH 1215 |
| MATeractive Mathematics |
| MATH 1231 1241 | Catculus for Business and Economics | Calculus 1 |
| :--- |


| Human Services Requirements <br> Code <br> Required Courses |  | Hours |
| :--- | :--- | ---: |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and <br> Social Change | 4 |
|  |  |  |

## Human Services Internship

HUSV $4994 \quad$ Human Services Internship 6

Human Services \& Diverse Populations
Complete one of the following:

| HUSV 2350 | Ethnic Relations, Cultural Identity, and <br> Human Services |
| :--- | :--- |
| HUSV 2800 | Sexual Orientation and Gender <br> Expression in Practice and Policy |


| HUSV 4866 | Intercultural Studies through Human Services |  |
| :---: | :---: | :---: |
| Human Services Electives |  |  |
| Complete two HUSV courses. |  | 8 |
| Organization |  |  |
| SOCL 3440 | Sociology of Human Service Organizations | 4 |
| Integrative Requirements |  |  |
| Code | Title | Hours |
| Integrative Courses |  |  |
| POLS 3307 | Public Policy and Administration | 4 |
| HUSV 3900 | Introduction to Social Policy | 4 |
| Research Methods |  |  |
| Complete one of the following: |  | 4 |
| POLS 2399 | Research Methods in Political Science |  |
| HUSV 3700 | Research Methods for Human Services |  |
| Capstone \& 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 <br> or POLS 4703 Senior Thesis |  |  |
| HUSV 1000 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 PO | S 5999 |  |

## Political Science and Human Services Combined-Major Credit Requirement <br> Complete 86 semester hours in the major.

## Program Requirement

128 total semester hours required

## 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 crossdisciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; political processes, institutions, and actors; and statesociety 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Political Science Requirements |  |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |
| POLS 2400 | Quantitative Techniques | 4 |
| Political Theory |  | 4 |
| Complete one of the following: |  |  |
| 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 advisor in order for it to be added to your record. Requirements for the concentrations are listed below (p. 803).

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Political Science Electives |  |
| Complete four political science courses at or above POLS | 16 |
| 2300 |  |

- Concentration in Campaigns and Elections (p. 803)
- Concentration in Comparative Politics (p. 803)
- Concentration in Identity, Culture, and Politics (p. 803)
- Concentration in International Relations and Diplomacy (p. 803)
- Concentration in Security Studies (p. 804)


## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Courses |  |  |
| INTL 1101 | Globalization and International Affairs | 4 |
| INTL 3400 | International Conflict and Negotiation | 4 |
| HIST 2211 | The World Since 1945 | 4 |


| ECON 1115 | Principles of Macroeconomics | 4 | INTL 3200 | Cities in a Global Context |
| :---: | :---: | :---: | :---: | :---: |
| or ECON 1116 | Principles of Microeconomics |  | INTL 5200 | Political Economy: Interdisciplinary |
| Global Dynamics |  |  |  | Perspectives |
| 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 major requirements. One course must be numbered 2000 or above: |  | 8 | AFAM 2639 | Globalism, Racism, and Human Rights |
|  |  | ANTH 2305 | Global Markets and Local Culture |
|  |  | ANTH 2315 | Religion and Modernity |
|  |  | ECON 1290 | History of the Global Economy |
| Environment |  |  |  | ECON 4635 | International Economics |
| ENVR 1110 | Global Climate Change |  |  | ENGL 2450 | Postcolonial Literature |
| ENVR 4515 | Sustainable Development |  |  | HIST 2211 | The World Since 1945 |
| SOCL 1246 | Environment and Society |  | HIST 2311 | Colonialism/Imperialism |
| Law, Diplomacy, and Global Governance |  |  | INTB 3310 | Cultural Aspects of International |
| INTL 2480 | Women and World Politics |  |  | Business |
| or WMNS 2480 | Women and World Politics |  | LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| INTL 5200 | Political Economy: Interdisciplinary |  |  |  |
|  | Perspectives |  | POLS 1160 | International Relations |
| COMM 2303 | Global and Intercultural Communication |  | POLS 2370 | Religion and Politics |
| POLS 1155 | Comparative Politics |  | POLS 3405 | International Political Economy |
| POLS 1160 | International Relations |  | POLS 3406 | International Law |
| POLS 2370 | Religion and Politics |  | POLS 3407 | International Organizations |
| POLS 3405 | International Political Economy |  | SOCL 3465 | Globalization and the Evolution of |
| POLS 3406 | International Law |  |  | Human Societies |
| POLS 3407 | International Organizations |  | opulation, Migratio | and Diaspora |
| POLS 4910 | Model United Nations |  | INTL 2240 | Global Population and Development |
| POLS 4918 | Model NATO |  | INTL 2400 | Politics of Islam and Gender |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |  | INTL 3200 | Cities in a Global Context |
|  |  |  | AFRS 1185 | Gender in the African Diaspora |
| Human Rights and Social Justice |  |  | AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| INTL 2400 | Politics of Islam and Gender |  |  |  |
| INTL 2480 | Women and World Politics |  |  |  |
| or WMNS 2480 | Women and World Politics |  | ANTH 1101 | Peoples and Cultures |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |  | ANTH 2350 | Urban Anthropology |
|  |  |  | HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| HIST 2373 | Gender and Sexuality in World History |  |  |  |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |  | PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1272 | Ethics in the World's Religions |  | PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 5001 | Global Justice |  | evelopment |  |
| Conflict and Security |  |  | INTL 2240 | Global Population and Development |
| CRIM 4630 | Political Crime and Terrorism |  | INTL 5200 | Political Economy: Interdisciplinary |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |  |  | Perspectives |
|  |  |  | ANTH 2305 | Global Markets and Local Culture |
| HIST 3330 | The Global Cold War |  | ECON 1291 | Development Economics |
| JRNL 3300 | Covering Conflicts: Peace, War, and the Media |  | ECON 3404 | International Food Economics and Policy |
| or INTL 3300 | Covering Conflicts: Peace, War, and the Media |  | ENTR 2206 | Global Social Enterprise |
| PHIL 5001 | Global Justice |  | ENVR 4515 | Sustainable Development |
| POLS 3408 | International Security |  | INTB 1203 | International Business and Global <br> Social Responsibility <br> International Business and Global Social Responsibility |
| POLS 3420 | U.S. National Security Policy |  | or INTB 1209 |  |
| POLS 3430 | Revolution, Civil War, and Insurrection |  |  |  |
| Globalization |  |  |  |  |
| INTL 2240 | Global Population and Development |  | PHTH 5230 | Global Health |
| INTL 2300 | Religion in International Affairs |  | POLS 3487 | Politics of Developing Nations |
| INTL 2480 | Women and World Politics |  | ommunication and | edia |
|  | Women and World Politics |  | COMM 2303 | Global and Intercultural Communication |


| INTB 3310 | Cultural Aspects of International <br> Business |
| :--- | :--- |
| JRNL 3300 | Covering Conflicts: Peace, War, and the <br> Media |
| or INTL 3300 | Covering Conflicts: Peace, War, and the 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:

## Africa

| AFRS 2307 | Africa Today |
| :---: | :---: |
| AFRS 2465 | The Scope and Dynamics of Conflicts in Africa |
| 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 | Africa and the World in Early Times |
| Asia |  |
| ANTH 4350 or INTL 4350 | Ethnography of Southeast Asia <br> Ethnography of Southeast Asia |
| ASNS 1150 or HIST 1150 | East Asian Studies 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 |
| HIST 2360 | History of Capitalism in East Asia |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |

PHIL 4545 Religion and Politics in South Asia

## Europe



LITR 4655 Latin American Literature

| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |

Russia
HIST 1285 Introduction to Russian Civilization
HIST 1286 History of the Soviet Union
SOCL 1215 Society and Culture in Russia
International Affairs Foreign Language Requirement
Complete course work in a language through at least intermediate-
level two. Note: Completing this requirement satisfies the language
requirement for the BA degree.
Integrative Requirements

| Code |  |
| :--- | :--- |
| Capstone | Title |
| Complete one of the following: | Hours |
| POLS 4701 | Political Science Senior Capstone |
| POLS 4703 | Senior Thesis |
| INTL 4700 | Senior Capstone Seminar in <br> International Affairs |

## Political Science and International Affairs Combined-Major Credit Requirement

Complete 76 semester hours in the major.

## Program Requirement

128 total semester hours required

CONCENTRATION IN COMPARATIVE POLITICS
Code Title Hours

Theoretical Requirement
Complete one of the following: 4

| POLS 2370 | Religion and Politics |
| :--- | :--- |
| POLS 3418 | Nationalism |
| POLS 3427 | Civil-Military Relations |
| POLS 3487 | Politics of Developing Nations |

Regional Requirements
Complete two of the following:

POLS $3435 \quad$| Politics and Governance of Europe and |
| :--- |
| the European Union |

POLS 3445
POLS 3450

POLS 3460

| POLS 3465 | Government and Politics in the Middle |
| :--- | :--- |
| East |  |

POLS 3475
POLS 3480
POLS 3485
Experiential/Practicum Requirement
Complete one of the following: 4

| POLS 4915 | Model Arab League |
| :--- | :--- |
| POLS 4918 | Model NATO |
| POLS 4937 | Dialogue of Civilizations: Government <br> and Politics Abroad |

$\begin{array}{lll}\text { CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS } \\ \text { Code } & \text { Title Hours }\end{array}$
Core Course
POLS 3418 Nationalism 4
Electives
Complete three of the following: 12

| POLS 2360 | Politics of Poverty |
| :--- | :--- |
| POLS 2368 | Music and Politics in America and <br> Abroad |
| POLS 2370 | Religion and Politics |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |
| POLS 3324 | Law and Society |
| CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY |  |
| Code | Title |

Experiential/Practicum Requirement
Complete one of the following: 4

| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International <br>  |

Core Courses
Complete three of the following:

| POLS 3405 | International Political Economy |
| :--- | :--- |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> the European Union |
| POLS 3470 | Arab-Israeli Conflict |

## 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 3427 | Civil-Military Relations |


| POLS 3430 | Revolution, Civil War, and Insurrection |
| :--- | :--- |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 3487 | Politics of Developing Nations |
| POLS 4918 | Model NATO |

## Plan of Study

Five Years, Three Co-ops in Summer 2/Fall
Year 1


Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: |
| 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

Year 4

| INTL <br> undergraduate <br> elective | 4 |  |  |  |
| :--- | ---: | ---: | :--- | :--- |
| ENGW 3315 | 4 | 0 | 0 | 0 |

Year 5


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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Political Science |  |  |
| 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/Theory
Complete two of the following:
POLS 2325 Ancient Philosophy and Political Thought
POLS 2328 Modern Political Thought
POLS 2330 American Political Thought
POLS 2332 Contemporary Political Thought
Political Science Upper-Division Electives
Complete two courses in the following range:
POLS 3000 to POLS 5999
Political Science Electives
Complete two courses in the following range:
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. 844).

- Campaigns and Elections (p. 844)
- Identity, Culture, and Politics (p. 844)
- International Relations and Diplomacy (p. 844)
- Law and Legal Studies (p. 844)
- Public Policy (p. 844)


## Philosophy Requirements

Code Title Hours

Philosophy Required Courses

| PHIL 1115 | Introduction to Logic | 4 |
| :---: | :--- | :---: |
| PHIL 2325 | Ancient Philosophy and Political | 4 |
| or POLS 2325 | Thought |  |
| PHIL 2330 | Modern Philosophy | 4 |


| Philosophy Restricted Electives |
| :--- |
| Complete two of the following: |


| PHIL 3343 | Existentialism |
| :--- | :--- |
| PHIL 3435 | Moral Philosophy |
| PHIL 3460 | Philosophy and Literature |
| PHIL 4390 | Cults and Sects |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4515 | Advanced Logic |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar: Apocalypticism |
| PHIL 4550 | Philosophy of Economics |
| PHIL 4606 | Seminar: Theories and Methods in |
| PHIL 4903 | Religious Studies |
| PHIL 4906 | Seminar in Religion |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |
| Additional Electives |  |
| Complete four additional electives in philosophy or religion. | 16 |


| Integrative Requirement |  |
| :--- | ---: | ---: |
| Code Title | Hours |
| Complete the following: |  |
| PHIL $5001 \quad$ Global Justice | 4 |

## Program Requirement

128 semester hours required

| Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN CAMPAIGNS AND ELECTIONS |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| With advisor approval, a co-op or internship may be substituted in place of POLS 4947: |  |  |
| POLS 3160 | Campaign Strategy | 4 |
| POLS 4947 |  | 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 P |  |
| POLS 2355 |  |  |
| POLS 3310 | Public Opinion, Votin |  |
| POLS 3162 | Local Campaigns and |  |
| POLS 3320 | Politics and Mass M |  |
| POLS 3402 |  |  |
| POLS 3304 |  |  |

CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

| Code | Title | Hours |
| :--- | :--- | :--- |
| Core Course |  |  |


| Electives |  |
| :--- | :--- |
| Complete three of the following: | 12 |


| POLS 2360 | Politics of Poverty |
| :--- | :--- |
| POLS 2368 | Music and Politics in America and <br> Abroad |
| POLS 2370 | Religion and Politics |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |
| POLS 3324 | Law and Society |


| CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY |  |  |
| :--- | :--- | :--- |
| Code | Title |  |
| Hours |  |  |

## Experiential/Practicum Requirement

Complete one of the following:
Hours

| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International <br>  |

## Core Courses

Complete three of the following:
12

| POLS 3406 | International Law |
| :--- | :--- |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> 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 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

Electives
Complete three of the following: 12

| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> Suburbs |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 2395 | Environmental Politics and Policy |
| POLS 3425 | U.S. Foreign Policy |

## 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

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Sociology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Sociology Required Courses |  |  |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |

Sociology Introductory Electives
Complete two courses in the following range: 8
SOCL 1200 to SOCL 1999
Sociology Intermediate Elective
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 <br> and Research Methods in Political <br> and POLS 2399 |
|  | Science |

## Political Science Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Political Science Required Courses |  |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |
| POLS 2330 | American Political Thought | 4 |
| Political Science Electives |  |  |
| Complete two of the following: |  | 8 |
| POLS 2345 | Urban Policies and Politics |  |
| POLS 3320 | Politics and Mass Media |  |
| POLS 3402 |  |  |
| POLS 3418 | Nationalism |  |
| Political Science Upper-Level Electives |  |  |
| Complete two courses in the following range: |  | 8 |
| POLS 3000 to POLS 5999 |  |  |
| Political Science Electives |  |  |
| Complete two | s in the following range: | 8 |

## 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. 889).

- American Political Institutions
- Campaigns and Elections
- Identity, Culture, and Politics
- Public Policy


## 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 | "The Wire" and the Study of Urban <br> Inequalities | 4 |
| POLS 3324 | Law and Society | 4 |

## Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Program Requirement

128 total semester hours required

## 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 3305 | The American Presidency |  |
| POLS 3307 | Public Policy and Administration |  |
| POLS 3310 | Public Opinion, Voting, and Elections |  |
| CONCENTRATION IN CAMPAIGNS AND ELECTIONS |  |  |
| Code | Title | Hours |

## Required Courses

With advisor approval, a co-op or internship may be substituted in place of POLS 4947:
POLS $3160 \quad$ Campaign Strategy 4
POLS 4947 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:

| POLS 2345 | Urban Policies and Politics |
| :--- | :--- |
| POLS 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |


| POLS 3402 |  |  |
| :---: | :---: | :---: |
| POLS 3304 |  |  |
| CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS |  |  |
| Code | Title | Hours |
| Core Course |  |  |
| POLS 3418 | Nationalism | 4 |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| POLS 2360 | Politics of Poverty |  |
| POLS 2368 | Music and Politics in America and Abroad |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |  |
| POLS 3324 | Law and Society |  |
| CONCENTRATION IN PUBLIC POLICY |  |  |
| Code | Title | Hours |
| Core Requirement |  |  |
| POLS 3307 | Public Policy and Administration | 4 |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| POLS 2334 | Bureaucracy and Government Organizations |  |
| 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 |  |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Introduction to College

Complete "Introduction to College" for your major.

## Political Science Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Political Science Requirements |  |  |
| 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 |  | 4 |
| Complete one of the following: | 4 |  |
| POLS 2330 | American Political Thought |  |
| POLS 2328 | Modern Political Thought |  |
| POLS 2332 | Contemporary Political Thought |  |
| Political Science | Capstone |  |
| POLS 4701 | Political Science Senior Capstone | 4 |
| or POLS 4703 | Senior Thesis |  |

## Political Science Experiential Learning Requirement Code <br> Title <br> 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 |
| Co-op or Study Abroad |  |
| Complete one cooperative education experience or one study- |  |
| abroad experience. |  |

## 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.

## 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. 891).

- American Political Institutions (p. 891)
- Campaigns and Elections (p. 891)
- Comparative Politics (p. 891)
- Identity, Culture, and Politics (p. 891)
- International Relations and Diplomacy (p. 891)
- Law and Legal Studies (p. 891)
- Public Policy (p. 892)
- Security Studies (p. 892)
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.
Program Requirements
128 total semester hours required

## Concentrations

CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS
Code 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 3305 | The American Presidency |
| POLS 3307 | Public Policy and Administration |
| POLS 3310 | Public Opinion, Voting, and Elections |

CONCENTRATION IN CAMPAIGNS AND ELECTIONS
Code Title Hours
Required Courses
With advisor approval, a co-op or internship may be
substituted in place of POLS 4947:

| POLS 3160 | Campaign Strategy |
| :--- | :--- |
| POLS 4947 | 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: |  |
| POLS 2345 | Urban Policies and Politics |
| POLS 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 | 8 |

CONCENTRATION IN COMPARATIVE POLITICS
Code Title

| Theoretical Requirement |
| :--- |
| Complete one of the following: <br> POLS 2370$\quad$ Religion and Politics |
| POLS 3418 |
| POLS 3427 |$\quad$ Nationalism $\quad 4$

## Regional Requirements

Complete two of the following:

| POLS 3435 | Politics and Governance of Europe and the European Union |  |
| :---: | :---: | :---: |
| POLS 3445 |  |  |
| POLS 3450 |  |  |
| POLS 3460 |  |  |
| POLS 3465 | Government and Politics in the Middle East |  |
| POLS 3475 |  |  |
| POLS 3480 |  |  |
| POLS 3485 |  |  |
| 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 $\quad$ Title Hours

| Core Course |  |  |
| :--- | :--- | :--- |
| POLS 3418 | Nationalism |  |


| Electives | 12 |
| :--- | :--- |
| Complete three of the following: | 12 |


| POLS 2360 | Politics of Poverty |
| :--- | :--- |
| POLS 2368 | Music and Politics in America and <br> Abroad |
| POLS 2370 | Religion and Politics |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |

POLS 3324 Law and Society
CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code Title Hours
Experiential/Practicum Requirement
Complete one of the following: 4

| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International |

## Core Courses

Complete three of the following: 12

| POLS 3405 | International Political Economy |
| :--- | :--- |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> 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 4500 | U.S. Constitutional Law |
| POLS 4505 | U.S. Civil Liberties |

## CONCENTRATION IN PUBLIC POLICY <br> Code Title Hours

| Core Requirement |  | 4 |
| :--- | :--- | :--- |
| POLS 3307 | Public Policy and Administration |  |


| Electives |  |
| :--- | :--- |
| Complete three of the following: | 12 |


| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> 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 3427 | Civil-Military Relations |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 3487 | Politics of Developing Nations |
| POLS 4918 | Model NATO |

## 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 |  | 0 |
| ENGW 1111 | 4 POLS 1161 | 0 | 0 |  |
|  | 17 | 16 |  |  |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| POLS 2399 | 4 POLS 2400 | 4 Vacation | 0 Co-op | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | Political <br> theory <br> course | POLS <br> intermediate/ <br> advanced <br> undergraduate <br> elective | 4 Co-op | 0 |

Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Co-op | ENGW 3315 | 4 Upper- <br> division <br> elective | 4 Co-op | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | 0 POLS 4701 | 4 |
|  | POLS <br> intermediate/ <br> advanced <br> undergraduat <br> elective | 4 |
| Upper- <br> divison <br> elective <br> 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 Vacation | 0 |
| POLS 1156 | 0 POLS 1151 | 0 |  |  |
| Elective | 4 MATH 1215 | 4 |  |  |
| Elective | 4 Elective | 4 |  |  |
| POLS 1000 | 1 POLS 1160 | 4 |  | 0 |
| ENGW 1111 | 4 POLS 1161 | 0 | 0 |  |
|  | 17 | 16 |  |  |

Year 2


Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Political theory course | 4 Co-op | 0 Co-op | 0 | POLS <br> intermediate/ <br> advanced <br> undergraduate <br> elective | 4 |
| 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 Vacation | 0 |  |
| POLS <br> intermediate/ <br> advanced <br> undergraduat <br> elective | 4 |  |  |  |  |
| Upper- <br> division <br> elective | 4 |  |  |  |  |
| Elective | 4 | 0 | 0 | 0 |  |

Year 5
Fall Hours Spring Hours

POLS 4 POLS 47014
intermediate/
advanced
undergraduate
elective

| POLS <br> intermediate/ <br> advanced <br> undergraduatı <br> elective | 4 POLS <br> intermediate/ <br> advanced <br> undergraduatı <br> elective | 4 |
| :--- | :--- | :---: |
| Upper- <br> division <br> elective | 4 Upper- <br> divison <br> elective | 4 |
| Elective | 16 | 4 Elective |

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. Course work 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Biology Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Introduction to College |  |  |
| BIOL 1000 | Biology at Northeastern | 1 |
| or POLS 1000 | Political Science at Northeastern |  |
| Biology |  |  |
| Foundations |  |  |
| BIOL 1107 and BIOL 1108 | Foundations of Biology and Lab for BIOL 1107 | 5 |
| Inquiries |  |  |
| BIOL 2299 | Inquiries in Biological Sciences | 4 |
| Genetics |  |  |


| BIOL 2301 <br> and BIOL 2302 | Genetics and Molecular Biology and Lab for BIOL 2301 | 5 |
| :---: | :---: | :---: |
| Project Lab |  |  |
| BIOL 2309 | Biology Project Lab | 4 |
| Biochemistry |  |  |
| BIOL 3611 <br> and BIOL 3612 | Biochemistry <br> and Lab for BIOL 3611 | 5 |
| Organismal and Population Biology Elective |  |  |
| Complete one of the following: |  | 4-5 |
| BIOL 2321 <br> and BIOL 2322 | Microbiology and Lab for BIOL 2321 |  |
| BIOL 2327 | Human Parasitology |  |
| BIOL 3401 | Comparative Vertebrate Anatomy |  |
| EEMB 2302 and EEMB 2303 | Ecology and Lab for EEMB 2302 |  |
| EEMB 2400 | Introduction to Evolution |  |
| EEMB 2616 and EEMB 2617 | Invertebrate Zoology and Lab for EEMB 2616 |  |
| EEMB 2700 <br> and EEMB 2701 | Marine Biology <br> and Lab for EEMB 2700 |  |


| Mathematics | Calculus and Differential Equations for | 4 |
| :--- | :--- | :--- |
| MATH 1251 | Biology 1 |  |

## Chemistry

## General Chemistry

| CHEM 1161 and CHEM 1162 and CHEM 1163 | General Chemistry for the Biological Sciences and Lab for CHEM 1161 and Recitation for CHEM 1161 | 5 |
| :---: | :---: | :---: |
| Organic Chemistry |  |  |
| CHEM 2311 <br> and CHEM 2312 | Organic Chemistry 1 and Lab for CHEM 2311 | 5 |
| CHEM 2313 <br> and CHEM 2314 | Organic Chemistry 2 <br> 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 |
| Intermediate or Advanced Science |  |  |
| Complete one course from the following: |  |  |


| 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 |

Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Political Science |  |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |

5 Complete one of the following: 4-5

| POLS 2400 | Quantitative Techniques |
| :--- | :--- |
| ENVR 2500 Biostatistics <br> and ENVR 2501 and Lab for ENVR 2500 |  |

Political Thought
Complete one of the following: 4

| POLS 2328 | Modern Political Thought |
| :--- | :--- |
| POLS 2330 | American Political Thought |
| POLS 2332 | Contemporary Political Thought |

Political Science Upper-Division Electives
Complete four of the following: 16

| POLS 2340 | Business and Government |
| :--- | :--- |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 2395 | Environmental Politics and Policy |
| POLS 2399 | Research Methods in Political Science |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |
| POLS 3324 |  |
| Political Science Elective and Society |  |
| Complete one additional course in political science numbered |  | 2300 or above.

## 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 . ).

- Law and legal studies
- Public policy
- Security studies


## Integrative Requirement and Capstone

Note: Science, Technology, and Public Policy (POLS 2390) cannot be used both as an integrative course and as an elective above.

| Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative Requirement |  |  |
| POLS 2390 | Science, Technology, and Public Policy | 4 |
| or POLS 2395 | Environmental Politics and Policy |  |
| Capstone |  | 4 |
| BIOL 4701 | Biology Capstone |  |
| or POLS 4701 | Political Science Senior Capstone |  |

## Program Requirement

136 total semester hours required

## Concentrations

## 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 |

## Statistics

| 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 |
| Electives |  |  |
| Complete three | following: | 12 |
| POLS 2334 | Bureaucracy and Government Organizations |  |
| 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 3427 | Civil-Military Relations |  |
| POLS 3430 | Revolution, Civil War, and Insurrection |  |
| POLS 3470 | Arab-Israeli Conflict |  |
| POLS 3487 | Politics of Developing Nations |  |
| POLS 4918 | Model NATO |  |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Introduction to College |  |  |
| POLS 1000 | Political Science at Northeastern | 1 |
| or BUSN 1102 | Personal Skill Development for Business |  |

## Poltical 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 <br> Thought |
| POLS 2328 | Modern Political Thought |
| POLS 2332 | Contemporary Political Thought |

Political Science Restricted Electives
Complete two of the following: 8

| POLS 3307 | Public Policy and Administration |
| :--- | :--- |
| POLS 2335 | Budgeting and Taxation |
| POLS 2340 | Business and Government |
| POLS 2345 | Urban Policies and Politics |
| POLS 3405 | International Political Economy |
| POLS 3487 | Politics of Developing Nations |

## Statistics

| POLS 2400 | Quantitative Techniques |
| :---: | :--- |$\quad 4$

## Political Science Electives

Complete two courses in the following range, or complete a 8
political science concentration as outlined below:
POLS 3300 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. 258).

- American Political Institutions (p. 258)
- Identity, Culture, and Politics (p. 259)
- Law and Legal Studies (p. 259)


## Business Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Accounting |  |  |
| ACCT 1201 | Financial Accounting and Reporting | 4 |
| ACCT 2301 | Managerial Accounting | 4 |
| Finance |  | 4 |
| FINA 2201 | Financial Management |  |


| Marketing <br> MKTG 2201 <br> Organizational Behavior <br> ORGB 3201$\quad$ Organizational Behavior |
| :--- | ---: |
| Business Concentration |
| Complete one of the following business concentrations. Requirements for <br> the concentrations are listed below (p. 257). |

- Accounting (p. 257)
- Entrepreneurship and Innovation (p. 257)
- Finance (p. 257)
- Management (p. 258)
- Management Information Systems (p. 258)
- Marketing (p. 258)
- Supply Chain Management (p. 258)


## Supporting Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Mathematics |  |  |
| MATH 1231 <br> or MATH 1341 | Calculus for Business and Economics <br> Calculus 1 for Science and Engineering | 4 |
| Economics | Principles of Macroeconomics | 4 |
| ECON 1115 |  |  |
| or ECON 1116 | Principles of Microeconomics | 4 |
| Computer Science | Computer Science and Its Applications | 4 |
| CS 1100 | Professional Development for Business <br> Co-op Preparation | 1 |
| BUSN 1103 | Co-op |  |
| or EESH 2000 | Professional Development for Co-op |  |


| Code | Title | Hours |
| :---: | :---: | :---: |
| Senior Capstone |  |  |
| $\begin{aligned} & \text { POLS } 4701 \\ & \text { or STRT } 4501 \end{aligned}$ | Political Science Senior Capstone Strategy in Action | 4 |

The following course is fulfilled through the political science requirement:

POLS 1160

## 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

## Program Requirement

128 total semester hours required

## Business Concentrations

CONCENTRATION IN ACCOUNTING
Code Title Hours

| Required Courses |  | 4 |
| :--- | :--- | ---: |
| ACCT 3401 | Financial Reporting and Analysis 1 | 4 |
| ACCT 4501 | Financial Reporting and Analysis 2 |  |
| Electives |  | 8 |
| Complete two of the following: |  |  |
| ACCT 3403 | Accounting Information Systems |  |
| ACCT 3416 | Strategic Cost Analysis for Decision |  |
| ACCT 4412 | Making |  |
| ACCT 4414 | Income Tax Determination and |  |

## CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION Code $\quad$ Title Hours

| Note: The following courses do not count toward this |
| :--- |
| concentration: |
| ENTR 1201 | | The Entrepreneurial Universe |
| :--- |
| ENTR 3308 | | Business Economic History of South |
| :--- |
| Africa |

## Introductory Course

ENTR $2301 \quad$ Innovation! 4
or ENTR 2303 Entrepreneurial Marketing and Selling

## Capstone Course

Complete one of the following: 4

| ENTR 4501 | Business Planning for Technology <br> Ventures |
| :--- | :--- |
| ENTR 4503 | Business Planning for Small and <br> Medium Enterprises |
| ENTR 4505 | Entrepreneurial Growth Strategy for <br> Technology Ventures |
| ENTR 4506 | Advanced Studies in Social Enterprise |
| Electives |  |

Note: Only one non-ENTR course may be used as an elective.
Complete two of the following:
8

| ENTR 2206 | Global Social Enterprise |
| :--- | :--- |
| ENTR 2215 | Understanding Family Enterprise |


| ENTR 3220 | International Entrepreneurship and <br> Innovation Consulting |
| :--- | :--- |
| ENTR 3305 | Entrepreneurial Strategy and Business <br> Model Design |
| ENTR 3306 | Global Entrepreneurship <br> Lean Design and Development for <br> Entrepreneurs |
| ENTR 3330 | Management of Operations and Growth <br> in Small- and Medium-Sized Enterprises |
| ENTR 3401 | Managing Operations in a Technology- <br> Based Startup Firm |
| ENTR 3403 Impact Investing and Social Finance |  |

## CONCENTRATION IN FINANCE

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Course |  |  |
| FINA 3301 | Corporate Finance | 4 |
| or FINA 3303 | Investments |  |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| ENTR 3520 | Impact Investing and Social Finance |  |
| or FINA 2720 | Sustainability in the Business Environment |  |
| 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 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 4983 | Special Topics in Finance |  |
| FINA 4602 | Turnaround Management |  |
| FINA 4604 | Fixed-Income Securities |  |
| FINA 4608 | Advanced Financial Strategy |  |
| FINA 4610 | Entrepreneurial Finance, Innovation Valuation, and Private Equity |  |

## CONCENTRATION IN MANAGEMENT

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Course |  |  |
| MGMT 4501 | Skills for Managerial Success | 4 |

## Electives

Note: Only one non-MGMT course may be used as an elective.
Complete three of the following:

| MGMT 3302 | Negotiating in Business |
| :--- | :--- |
| MGMT 3315 | Managing Organizational Change and <br> Disruption |
| MGMT 3330 | Developing Leaders for Global <br> Sustainability |
| MGMT 3340 | Managing Healthcare Organizations: <br> Critical Challenges and New <br> Approaches |
| MGMT 3350 | Managing a Diverse Workforce |
| MGMT 3360 | Law and the Legal Process |
| MGMT 3420 | Managing Human Capital <br> Locally |
| MGMT 3510 | Project Management <br> MGMT 3530 Management Practices of Great <br> Organizations |
| MGMT 4310 | Human Resources and Workforce <br> Analytics |
| MGMT 4410Understanding Family Enterprise |  |
| ENTR 2215 | Social Responsibility of Business in an <br> Age of Inequality |
| ENTR 2414 4225 | Corporate Entrepreneurship through <br> Global Growth, Acquisitions, and <br> Alliances |

CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS
Code Title Hours

## Required Courses

MISM 3403 Data Management in the Enterprise 4
MISM 4501 Business Systems Integration 4

## Electives

Note: Only one non-MISM course may be used as an elective.
Complete two of the following: 8

| MISM 2510 | Fundamentals of Information Analytics |
| :--- | :--- |
| MISM 3305 | Information Resource Management |
| MISM 3404 | Data Communications |
| MISM 3406 | Introduction to Web Design, Practices, <br> and Standards |
| MISM 3501 | Information Visualization for Business |
| MISM 3515 | Data Mining for Business |
| MKTG 4508 | Digital Marketing |
| SCHM 3301 | Global Supply Chain Strategy |
| SCHM 3305 | Sourcing and Procurement |
| SCHM 3308 | Supply Chain Analytics |


| CONCENTRATION IN MARKETING |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Required Courses |  |  |
| MKTG 3401 | Marketing Research | 4 |
| MKTG 3301 or MKTG 4506 | Marketing Management Consumer Behavior | 4 |
| Electives |  |  |
| 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 | Marketing in the Service Sector |  |
| 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 |  |


| CONCENTRATION IN SUPPLY CHAIN MANAGEMENT |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Required Courses |  |  |
| SCHM 3301 | Global Supply Chain Strategy | 4 |
| SCHM 3305 | Sourcing and Procurement | 4 |
| SCHM 3310 | Logistics and Transportation Management | 4 |

## Elective

Complete one of the following:
SCHM 3308 Supply Chain Analytics
SCHM 3320 Demand Planning and Forecasting
SCHM 3330 Sustainability and Supply Chain Management
SCHM $4401 \quad$ Advanced Problems in Supply Chain Management

| Political Science Concentrations (Optional) |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS |  |  |
| Code | Title | Hours |
| Complete four | following: | 16 |
| POLS 2350 | State and Local |  |
| POLS 3300 | The U.S. Con |  |
| POLS 3302 | Judicial Proc |  |
| POLS 3305 | The American |  |
| POLS 3307 | Public Policy |  |
| POLS 3310 | Public Opinio |  |
| CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS |  |  |
| Code | Title | Hours |
| Core Course |  |  |
| POLS 3418 | Nationalism | 4 |
| Electives |  |  |


| Complete three of the following: |  | 12 |
| :---: | :---: | :---: |
| POLS 2360 | Politics of Poverty |  |
| POLS 2368 | Music and Politics in America and Abroad |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |  |
| POLS 3324 | Law and Society |  |
| 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 4500 | U.S. Constitutional Law |  |
| POLS 4505 | U.S. Civil Liberties |  |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

Code Title Hours

## Core Courses in Political Science

POLS 1150 American Government 4

POLS 1155 Comparative Politics 4
POLS 1160 International Relations 4
POLS $2400 \quad$ Quantitative Techniques 4

## Political Thought

| Complete one of the following: |  |  |
| :--- | :--- | :--- |
| POLS 2325 | Ancient Philosophy and Political <br> Thought | 4 |
| POLS 2328 | Modern Political Thought |  |

Political Science Upper-Division Electives
Complete two courses in the following range: 8
POLS 3300 to POLS 5999
Political Science Electives
Complete two courses in the following range:
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. 157).

- American Political Institutions (p. 157)
- Campaigns and Elections (p. 157)
- Identity, Culture, and Politics (p. 157)
- Law and Legal Studies (p. 157)
- Public Policy (p. 157)


## Communication Studies Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Political Communication |  |  |
| COMM 1101 | Introduction to Communication Studies | 4 |
| COMM 1112 | Public Speaking | 4 |
| COMM 1210 | Persuasion and Rhetoric | 4 |

Communication Studies Electives
Complete six of the following:

| COMM 1231 | Principles of Organizational <br> Communication |
| :--- | :--- |
| COMM 1331 | Legal Argumentation, Advocacy, and <br> Citizenship |
| COMM 1412 | Social Movement Communication |
| COMM 2301 | Communication Research Methods |
| COMM 2303 | Global and Intercultural Communication |
| COMM 2501 | Communication Law |
| COMM 2551 | Free Speech in Cyberspace |
| COMM 3201 | Health Communication |
| COMM 3304 | Communication and Inclusion |
| COMM 3409 | Advocacy Writing |
| COMM 3414 | Great Speakers and Speeches 2, 1930- <br> Present |
| COMM 3415 | Communication Criticism |
| COMM 3451 | Advertising Practices |
| COMM 3501 | Free Speech: Law and Practice |
| COMM 3532 | Theories of Conflict and Negotiation |
| COMM 3610 | Communication, Politics, and Social <br> Change |
| COMM 4102 | Health Communication Campaigns |


| COMM 4602 | Contemporary Rhetorical Theory |
| :--- | :--- |
| COMM 4625 | Online Communities |
| COMM 4631 | Crisis Communication and Image <br> Management |
| COMM 4992 | Directed Study |
| COMM 4994 | Internship in Communication |

## Integrative Requirements

Code Title Hours

Integrative Courses

| POLS 3320 | Politics and Mass Media | 4 |
| :---: | :--- | :---: |
| or COMM 3320 | Political Communication |  |
| POLS 2333 |  | 4 |

## Capstone Requirement

Complete one of the following. This course also counts 4
toward the political science or communication studies elective requirement:

| COMM 4102 | Health Communication Campaigns |
| :--- | :--- |
| COMM 4530 | Communication and Quality of Life |
| COMM 4602 | Contemporary Rhetorical Theory |
| COMM 4625 | Online Communities |
| POLS 4701 | Political Science Senior Capstone |
| POLS 4703 | Senior Thesis |

## Political Science and Communication Studies CombinedMajor Credit Requirement

Complete 72 semester hours in the major.

## Program Requirements

128 total semester hours required

| Concentrations |
| :--- |
| CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS |
| Code Title  <br> Complete four of the following: Hours  <br> POLS 2350 State and Local Politics 16 <br> POLS 3300 The U.S. Congress  <br> POLS 3302 Judicial Process and Behavior  <br> POLS 3305 The American Presidency  <br> POLS 3307 Public Policy and Administration  <br> POLS 3310 Public Opinion, Voting, and Elections  |

CONCENTRATION IN CAMPAIGNS AND ELECTIONS
Code Title Hours

## Required Courses

With advisor approval, a co-op or internship may be substituted in place of POLS 4947:
POLS 3160 Campaign Strategy 4
POLS 4947 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 2355

| POLS 3310 | Public Opinion, Voting, and Elections |
| :--- | :--- |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |


| CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Core Course |  |  |
| POLS 3418 | Nationalism | 4 |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| POLS 2360 | Politics of Poverty |  |
| POLS 2368 | Music and Politics in America and Abroad |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |  |
| POLS 3324 | Law and Society |  |


| 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 4500 | U.S. Constitutional Law |
| POLS 4505 | U.S. Civil Liberties |

## CONCENTRATION IN PUBLIC POLICY

| Code | Title | Hours |
| :--- | :--- | :--- |
| Core Requirement |  |  |


| POLS 3307 | 4 |
| :--- | :---: |
| Electives | Public Policy and Administration |
| Complete three of the following: | 12 |


| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> Suburbs |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 2395 | Environmental Politics and Policy |
| POLS 3425 | U.S. Foreign Policy |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Criminal Justice Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Criminal Justice Core Requirements |  |  |
| CRIM 1100 | Introduction to Criminal Justice | 4 |
| CRIM 2100 | Criminal Due Process | 4 |
| CRIM 2200 | Criminology | 4 |
| Thematic Electives |  |  |
| 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 |  |
| Survey Elective |  |  |
| Complete one of the following: |  | 4 |
| CRIM 3010 to CRIM 3500 |  |  |
| System-Wide Elective |  |  |
| Complete one of the following: |  | 4 |
| CRIM 4010 | Gender, Crime, and Justice |  |
| CRIM 4020 | Race, Crime, and Justice |  |
| Computer Science |  |  |
| CS 1100 | Computer Science and Its Applications | 4 |
| Mathematics |  |  |
| Complete one of | following: | 4 |
| MATH 1215 | Mathematical Thinking |  |
| MATH 1231 | Calculus for Business and Economics |  |
| MATH 1241 | Calculus 1 |  |

$\begin{array}{ll}\text { Political Science Requirements } \\ \text { Tode } & \\ \text { Title }\end{array}$

## 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 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 |  |
| Research Methods |  |  |
| CRIM 3600 | Criminal Justice Research Methods | 4 |
| CRIM 3700 | Criminal Justice Statistics | 4 |
| Criminal Justice Electives |  |  |
| Complete two courses in the following range: 8 |  |  |
| CRIM 4001 to CRIM 4999 |  |  |
| Political Science Electives |  |  |
| Complete five | s in the following range: | 20 |

POLS 2300 to POLS 5999
OPTION B
Code

| Research Methods |  | 4 |
| :--- | :--- | :--- |
| POLS 2399 | Research Methods in Political Science | 4 |
| POLS 2400 | Quantitative Techniques | 4 |


| Criminal Justice Electives |
| :--- |
| Complete three courses in the following range: |

CRIM 4001 to CRIM 4999
Political Science Electives
Complete four courses in the following range:
POLS 2300 to POLS 5999

## OPTION C

| Code Title | Hours |
| :--- | ---: |
| Research Methods |  |
| Complete one of the following sequences: | 8 |


| CRIM 3600 | Criminal Justice Research Methods |
| :--- | :--- |
| and POLS 2400 | and Quantitative Techniques |
| CRIM 3700 | Criminal Justice Statistics <br> and Research Methods in Political <br> and POLS 2399 <br> Science |

Criminal Justice Electives
Complete two courses in the following range: 8
CRIM 4001 to CRIM 4999

## Political Science Electives

Complete four courses in the following range:
POLS 2300 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. 643).

- American Political Institutions (p. 643)
- Campaigns and Elections (p. 643)
- Identity, Culture, and Politics (p. 643)
- Law and Legal Studies (p. 643)
- Security Studies (p. 643)


## Integrative Requirement

Code Title Hours

Senior Capstone Requirement

| CRIM 4949 | Senior Capstone Seminar | 4 |
| :---: | :--- | :--- |
| or POLS 4701 | Political Science Senior Capstone |  |

Due Process
CRIM $2100 \quad$ Criminal Due Process 4
Integrative Elective Courses
Complete two of the following: 8

| CRIM 3100 | Criminal Law |
| :--- | :--- |
| CRIM 4100 | Juvenile Law |
| 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.

## Program Requirement

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 3305 | The American Presidency |
| POLS 3307 | Public Policy and Administration |
| POLS 3310 | Public Opinion, Voting, and Elections |

## CONCENTRATION IN CAMPAIGNS AND ELECTIONS

## Code Title Hours

## Required Courses

With advisor approval, a co-op or internship may be substituted in place of POLS 4947:
POLS $3160 \quad$ Campaign Strategy 4
POLS $4947 \quad 4$

## 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:
POLS $2345 \quad$ Urban Policies and Politics
POLS 2355
POLS 3310 Public Opinion, Voting, and Elections

| POLS 3162 | Local Campaigns and Elections |
| :--- | :--- |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |


| CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Core Course |  |  |
| POLS 3418 | Nationalism | 4 |
| Electives |  |  |
| Complete three of the following: |  | 12 |
| POLS 2360 | Politics of Poverty |  |
| POLS 2368 | Music and Politics in America and Abroad |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy |  |
| POLS 3324 | Law and Society |  |
| 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 4500 | U.S. Constitutional Law |  |
| POLS 4505 | U.S. Civil Liberties |  |

## 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 3427 | Civil-Military Relations |  |
| POLS 3430 | Revolution, Civil War, and Insurrection |  |
| POLS 3470 | Arab-Israeli Conflict |  |
| POLS 3487 | Politics of Developing Nations |  |
| POLS 4918 | Model NATO |  |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

Code Title Hours

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 <br> Thought |
| POLS 2328 | Modern Political Thought |
| POLS 2332 | Contemporary Political Thought |

Political Science Restricted Electives
Complete two of the following: 8

| POLS 3307 | Public Policy and Administration |
| :--- | :--- |
| POLS 2335 | Budgeting and Taxation |
| POLS 2340 | Business and Government |
| POLS 2345 | Urban Policies and Politics |
| POLS 2357 | Growth and Decline of Cities and <br> Suburbs |
| POLS 2360 | Politics of Poverty |
| POLS 3405 | International Political Economy |
| POLS 3487 | Politics of Developing Nations |

## Political Science Electives

Complete two courses from the following range, or complete 8 a concentration as outlined below:

POLS 3300 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. 687).

- American Political Institutions (p. 687)
- Campaigns and Elections (p. 687)
- International Relations and Diplomacy (p. 687)
- Public Policy (p. 687)


## Economics Requirements for BS

| Code | Title | Hours |
| :--- | :--- | ---: |
| Breadth Courses |  |  |
| MATH 1231 | Calculus for Business and Economics | 4 |
| CS 1100 | Computer Science and Its Applications | 4 |

## Required Economics Courses

Grades in the required economics courses and in Quantitative
Techniques (POLS 2400) or Statistics (ECON 2350) must
average a minimum of 2.000 :

| 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 three economics electives with no more than one <br> below 2990 |  |  |

## Supporting Courses

Complete either of the statistics and departmental elective combinations listed below:

| COMBINATION A |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Statistics |  |  |
| POLS 2400 | Quantitative Techniques | 4 |
| Economics |  |  |
| Complete one of the following: |  | 4 |
| ECON 3404 | International Food Economics and Policy |  |
| ECON 3420 | Urban Economic Issues |  |
| ECON 3423 | Environmental Economics |  |
| ECON 3425 | Energy Economics |  |
| ECON 3440 | Public Finance |  |
| ECON 3490 | Public Choice Economics |  |
| ECON 4634 | Comparative Economics |  |
| ECON 4635 | International Economics |  |
| COMBINATION B |  |  |
| Code | Title | Hours |
| Statistics |  |  |
| ECON 2350 | Statistics | 4 |
| Political Science |  |  |
| Complete one cour | in the following range: | 4 |

## POLS 2401 to POLS 5999

## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Senior Seminar/Capstone |  |  |
| Complete one of the following: | 4 |  |
| ECON 4692 | Senior Economics Seminar |  |
| POLS 4701 | Political Science Senior Capstone |  |
| POLS 4703 | Senior Thesis |  |

## Program Requirement

128 total semester hours required

| Concentrations |  |  |
| :---: | :---: | :---: |
| CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS |  |  |
| Code | Title | Hours |
| Complete four | following: | 16 |
| POLS 2350 | State and Local Poli |  |
| POLS 3300 | The U.S. Congress |  |
| POLS 3302 | Judicial Process and |  |
| POLS 3305 | The American Presid |  |
| POLS 3307 | Public Policy and Ad |  |
| POLS 3310 | Public Opinion, Votin |  |
| CONCENTRATION IN CAMPAIGNS AND ELECTIONS |  |  |
| Code | Title | Hours |
| Required Courses |  |  |
| With advisor approval, a co-op or internship may be substituted in place of POLS 4947: |  |  |
| POLS 3160 | Campaign Strategy | 4 |
| POLS 4947 |  | 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 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |

Code Title Hours
Experiential/Practicum Requirement
Complete one of the following: ..... 4

| POLS 4910 | Model United Nations |
| :--- | :--- |
| POLS 4915 | Model Arab League |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International <br> Politics Abroad |

Core Courses
Complete three of the following: 12

| POLS 3405 | International Political Economy |
| :--- | :--- |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> the European Union |
| POLS 3470 | Arab-Israeli Conflict |

CONCENTRATION IN PUBLIC POLICY
Code Title Hours

## Core Requirement

POLS 3307 Public Policy and Administration

| Electives |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Complete three of the following: |  |  |  |  | 12 |
| POLS 2334 |  | Bureaucracy and Government Organizations |  |  |  |
| 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 |  |  |  |
| Plan of Study |  |  |  |  |  |
| Four Years, No Co-op |  |  |  |  |  |
| Year 1 |  |  |  |  |  |
| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| ENGW 1111 | 4 MATH 1231 |  | 4 Vacation | 0 Vacation | 0 |
| POLS 1155 | 4 POLS 1150 |  | 4 |  |  |
| POLS 1156 | 0 POLS 1151 |  | 0 |  |  |
| ECON 1115 | 4 CS 1100 |  | 4 |  |  |
| Elective | 4 ECON 1116 |  | 4 |  |  |
| 16 |  |  | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| POLS 1160 | 4 POLS 2400 | 4 Vacation | 0 Vacation | 0 |
| POLS 1161 | 0 ECON 2315 | 4 |  |  |
| ECON <br> undergraduate <br> elective | 4 <br> undergraduate <br> elective | 4 |  |  |
| POLS <br> undergraduat <br> elective | 4 Elective | 4 | 0 | 0 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| ENGW 3315 | 4 | Elective | 4 | Vacation | 0 | Vacation | 0 |
| ECON 2316 | 4 | POLS <br> intermed <br> advance <br> undergra <br> elective | 4 |  |  |  |  |
| Political Theory course | 4 | Elective | 4 |  |  |  |  |
| ECON <br> undergraduat elective | 4 | Elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |


| Year 4 |  |  |
| :--- | ---: | ---: |
| Fall | Hours Spring | Hours |
| ECON 2560 | 4 POLS 4701 | 4 |


| POLS <br> intermediate/ <br> advanced <br> undergraduatı <br> elective | 4 ECON <br> intermediate/ <br> advanced <br> undergraduat <br> elective | 4 |
| :--- | :--- | :---: |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 128

## Political Science and Human Services, 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Political Science |  |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |
| POLS 2400 | Quantitative Techniques | 4 |
| Political Thought |  | 4 |
| Complete one of the following: | 4 |  |
| POLS 2325 | Ancient Philosophy and Political |  |
| POLS 2328 | Thought |  |
| POLS 2330 | Modern Political Thought |  |
| POLS 2332 | American Political Thought |  |

Political Science Electives
Complete three courses in the following range: 12

## POLS 2330 to POLS 5999

## Total Hours

## Supporting Course for Political Science

| Code | Title | Hours |
| :--- | :--- | ---: |
| Mathematics |  |  |
| Complete one of the following to fulfill the prerequisite for | 4 |  |
| POLS 2400 |  |  |
| MATH 1213 | Interactive Mathematics |  |
| MATH 1215 | Mathematical Thinking |  |


| MATH 1231 | Calculus for Business and Economics |  |
| :--- | :--- | ---: |
| MATH 1241 | Calculus 1 |  |
| Human Services | Requirements |  |
| Code <br> Required Courses | Title | Hours |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and | 4 |
|  | Social Change |  |

Human Services Internship
HUSV 4994 Human Services Internship 6

Human Services \& Diverse Populations
Complete one of the following:

| HUSV 2350 | Ethnic Relations, Cultural Identity, and <br> Human Services |
| :---: | :--- |
| HUSV 2800 | Sexual Orientation and Gender <br> Expression in Practice and Policy |
| HUSV 4866 | Intercultural Studies through Human <br> Services |
| Human Services Electives |  |
| Complete two HUSV courses. <br> Organization | Sociology of Human Service <br> SOCL 3440 |
| Organizations |  |


| Supporting Course for Human Services |  |  |
| :---: | :---: | :---: |
| Code | Title | Hours |
| Organization |  |  |
| SOCL 3440 | Sociology of Human Service Organizations | 4 |

## Integrative Requirements

Code Title

Hours
Integrative Courses

| POLS 3307 | Public Policy and Administration | 4 |
| :--- | :--- | :--- |
| HUSV 3900 | Introduction to Social Policy | 4 |

Research Methods
Complete one of the following:

| POLS 2399 | Research Methods in Political Science |
| :--- | :--- |
| HUSV 3700 | Research Methods for Human Services |

## Capstone \& 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 $4701 \quad$ Political Science Senior Capstone or POLS 4703 Senior Thesis

HUSV 1000 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.

## Program Requirement

128 total semester hours required

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | :--- |
| Core Courses in Political Science |  |  |
| 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/Theory
Complete two of the following: 8

| POLS 2325 | Ancient Philosophy and Political <br> Thought |
| :--- | :--- |
| POLS 2328 | Modern Political Thought |
| POLS 2330 | American Political Thought |
| POLS 2332 | Contemporary Political Thought |


| Political Science Upper-Division Electives |
| :--- |
| Complete two courses in the following range: |

POLS 3000 to POLS 5999
Political Science Electives

Complete two courses in the following range:
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. 860).

- Campaigns and Elections (p. 860)
- Identity, Culture, and Politics (p. 860)
- International Relations and Diplomacy (p. 860)
- Law and Legal Studies (p. 860)
- Public Policy (p. 860)

Philosophy Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Philosophy Required |  |  |
| PHIL 1115 | Introduction to Logic | 4 |
| PHIL 2325 | Ancient Philosophy and Political | 4 |
|  | Thought |  |
| 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 8
the 4000 or 5000 level:

| PHIL 3343 | Existentialism |
| :--- | :--- |
| PHIL 3435 | Moral Philosophy |
| PHIL 3460 | Philosophy and Literature |
| PHIL 4390 | Cults and Sects |
| PHIL 4500 | Theory of Knowledge |
| PHIL 4510 | Philosophy of Science |
| PHIL 4515 | Advanced Logic |
| PHIL 4535 | Philosophy of Mind |
| PHIL 4547 | Seminar. Apocalypticism |
| PHIL 4550 | Philosophy of Economics |
| PHIL 4606 | Seminar. Theories and Methods in |
| RHIL 4903 | Semigious Studies in Religion |
| PHIL 4906 | Topics in Religious Studies |
| PHIL 5001 | Global Justice |
| PHIL 5011 | Comparative Religious Ethics |
| Additional Electives |  |
| Complete four additional electives in philosophy or religion. |  |

Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| PHIL 5001 | Global Justice | 4 |

## Program Requirement

128 semester hours required

8 Concentrations
CONCENTRATION IN CAMPAIGNS AND ELECTIONS
Code Title Hours

## Required Courses

With advisor approval, a co-op or internship may be substituted in place of POLS 4947:

| POLS 3160 | Campaign Strategy | 4 |
| :--- | :--- | :--- |
| POLS 4947 | 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 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |

$\begin{array}{ll}\text { CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS } \\ \text { Code } & \text { Title Hours }\end{array}$

| Code | Title | Hours |
| :--- | ---: | ---: |
| Core Course |  |  |
| POLS 3418 | Nationalism | 4 |
| Electives |  |  |
| Complete three of the following: | 12 |  |


| POLS 2360 | Politics of Poverty |
| :--- | :--- |
| POLS 2368 | Music and Politics in America and |
|  | Abroad |

POLS 2370 Religion 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 |
| :--- | :--- | ---: |
| Experiential/Practicum Requirement |  |  |
| Complete one of the following: | 4 |  |
| POLS 4910 | Model United Nations |  |
| POLS 4915 | Model Arab League |  |
| POLS 4918 | Model NATO |  |
| POLS 4938 | Dialogue of Civilizations: International <br> Politics Abroad |  |

## Core Courses

Complete three of the following: 12

| POLS 3405 | International Political Economy |
| :--- | :--- |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3435 | Politics and Governance of Europe and <br> 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 4500 | U.S. Constitutional Law |  |
| POLS 4505 | U.S. Civil Liberties |  |

CONCENTRATION IN PUBLIC POLICY

| Code Title |
| :--- |
| Core Requirement |


| Core Requirement |  | 4 |
| :--- | :--- | :--- |
| POLS 3307 | Public Policy and Administration |  |

Electives
Complete three of the following:

| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> Suburbs |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 2395 | Environmental Politics and Policy |
| POLS 3425 | U.S. Foreign Policy |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Computer Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Computer Science Overview |  |  |
| CS 1200 | Leadership Skill Development | 1 |
| CS 1210 | Professional Development for CCIS Co- | 1 |

Computer Science Fundamental Courses
A grade of C - or higher is required in computer science fundamental courses.

| CS 1800 <br> and CS 1802 | Discrete Structures <br> and Seminar for CS 1800 | 5 |
| :--- | :--- | :---: |
| CS 2500 | Fundamentals of Computer Science 1 |  |
| and CS 2501 | and Lab for CS 2500 | 5 |
| CS 2510  <br> and CS 2511 Fundamentals of Computer Science 2 <br> CS 2800 and Lab for CS 2510 | 5 |  |
| and CS 2801 | Logic and Computation <br> and Lab for CS 2800 | 5 |
| Computer Science Required Courses |  |  |
| CS 3000 | Algorithms and Data | 4 |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| IS 2000 | Principles of Information Science | 4 |

Presentation Requirement
THTR $1170 \quad$ The Eloquent Presenter 1

Computer Science Elective Courses
With advisor 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, IS, and DS courses
that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
IS 2000 or higher, except IS 4900
DS 2000 or higher, except DS 4900

## Political Science Courses

| Code | Title | Hours |
| :--- | :--- | ---: |
| Political Science Requirements |  |  |
| 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 |  | 4 |
| Complete one of the following: |  |  |
| POLS 2325 | Ancient Philosophy and Political |  |
| POLS 2328 | Thought |  |
| POLS 2330 | Modern Political Thought |  |
| POLS 2332 | Contemporary Political Thought |  |

Political Science Capstone
POLS $4701 \quad$ Political Science Senior Capstone 4
Political Science Electives
Complete four courses in the following range:

## Integrative Requirement <br> Code Title

Integrative Requirement
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 Course

| Code | Title | Hours |
| :---: | :---: | :---: |
| Complete one of the following: |  | 4 |
| SOCL 4528 | Computers and Society |  |
| SOCL 3485 | Environment, Technology, and Society |  |
| SOCL 1280 | The 21 st-Century Workplace |  |
| ANTH 3418 | Wired/Unwired: Cybercultures and Technopolitics |  |
| PHIL 1145 | Technology and Human Values |  |
| IA 5240 | Cyberlaw: Privacy, Ethics, and Digital Rights |  |
| INSH 2102 | Bostonography: The City through Data, Texts, Maps, and Networks |  |

## Computer Science Writing Requirement Code Title Hours

| College Writing |  | 4 |
| :--- | :--- | :--- |
| ENGW 1111 | First-Year Writing |  |
| or ENGW 1102 | First-Year Writing for Multilingual Writers | 4 |

Advanced Writing in the Disciplines
Complete one of the following:

| ENGW 3302 | Advanced Writing in the Technical <br> Professions |
| :--- | :--- |
| ENGW 3308 | Advanced Writing in the Social <br> Sciences |
| ENGW 3311 | Advanced Writing for Prelaw <br> ENGW 3315Interdisciplinary Advanced Writing in <br> the Disciplines |

## Required General Electives

Code Title
Complete seven general electives.

## Major GPA Requirement

Minimum 2.000 GPA required in all CS 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.

## Program Requirement

133 total semester hours required

## 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | CS 3200 | 4 | Vacation |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | IS 2000 | 4 | CS 3500 | 4 |  |  |
| CS 1200 | , | ENGW 1111 | 4 |  |  |  |  |
| POLS 1150 <br> and POLS 1151 | 4 | POLS 1160 <br> and <br> POLS 1161 | 4 |  |  |  |  |
| POLS 1155 and POLS 1156 | 4 |  |  |  |  |  |  |
|  | 19 |  | 17 |  | 8 |  | 0 |



Year 3

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | CS elective 2 | 4 | Elective | 4 | Co-op |  |
|  |  | POLS elective 2 | 4 | Elective | 4 |  |  |
|  |  | POLS <br> elective 3 | 4 |  |  |  |  |
|  |  | Computing and social issues requirement | 4 |  |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

Year 4


| POLS <br> integrative <br> 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 |
| $\begin{aligned} & \text { CS } 1800 \\ & \text { and CS } 1802 \end{aligned}$ | 5 | $\begin{aligned} & \text { CS } 2510 \\ & \text { and CS } 2511 \end{aligned}$ | 5 | Vacation |  | Vacation |  |
| $\begin{aligned} & \text { CS } 2500 \\ & \text { and CS } 2501 \end{aligned}$ | 5 | IS 2000 | 4 |  |  |  |  |
| CS 1200 | 1 | ENGW 1111 | 4 |  |  |  |  |
| POLS 1150 and POLS 1151 | 4 | POLS 1160 <br> and POLS 1161 | 4 |  |  |  |  |
| $\begin{aligned} & \text { POLS } 1155 \\ & \text { and } \\ & \text { POLS } 1156 \end{aligned}$ | 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 | 4 | CS 3200 | 4 |  |  |  |  |
| POLS 2399 | 4 | POLS 2400 | 4 |  |  |  |  |
| POLS theory elective | 4 | POLS elective 1 | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  | 16 |  | 17 |  | 0 |  | 0 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op |  | CS elective 1 |  | $\begin{aligned} & \text { ENGW 3302, } \\ & 3308,3311 \text {, } \\ & \text { or } 3315 \end{aligned}$ | 4 | Co-op |  |
|  |  | POLS elective 2 | 4 | Elective | 4 |  |  |
|  |  | Computing and social issues requirement | 4 |  |  |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  |  | THTR 1170 | 1 |  |  |  |  |
|  | 0 |  | 17 |  | 8 |  | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :---: | :---: | :---: |
| Co-op | CS elective 2 | 4 Elective | 4 Co-op |  |
|  | POLS <br> elective 3 | 4 Elective | 4 |  |
| POLS <br> integrative <br> requirement | 4 |  |  |  |
|  | Elective | 4 | 8 | 0 |
| 0 | 16 |  |  |  |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Co-op | CS elective 3 | 4 |
|  | POLS 4701 | 4 |
|  | POLS | 4 |
|  | elective 4 |  |
|  | Elective | 4 |
| Total Hours: 134 | 16 |  |
| 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 coursesAmerican government, comparative politics, and international relationsas 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 <br> Complete four of the following: | Hours |
| :--- | :--- | ---: |
| POLS 2334 | Bureaucracy and Government <br> Organizations |
| 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 3305 | The American Presidency |
| 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:

| 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 |
| POLS 4918 | Model NATO |

## GPA Requirement

2.000 GPA required in the minor

## Sociology and Anthropology

Website (http://www.northeastern.edu/socant)

## Matthew O. Hunt, PhD

Professor and Chair
500 Holmes Hall
617.373.2686
617.373 .2688 (fax)

Mary Ramsey, Administrative Assistant, m.ramsey@northeastern.edu
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.

## Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 31)."

## Preapproved Template Program in Cultural Anthropology

The Department of Sociology and Anthropology offers a preapproved template program in cultural anthropology. The template program may be paired with another preapproved template program to create a combined major; to see a list of current preapproved template programs, visit the combined majors webpage (http://www.northeastern.edu/registrar/ major-2.html).

Students may request admission to such a combined major via the Combined Major Approval form (http://www.northeastern.edu/ registrar/form-maj-comb.pdf), which requires approval by both disciplines/colleges together with an approved curriculum. For additional information on preapproved template programs, see "Student-Requested Combined Major (p. 33)." For template program requirements, visit the myNortheastern web portal (http://www.myneu.neu.edu), click on the "Self-Service" tab, then on "My Degree Audit."

## PlusOne Program (MA) in Sociology

Sociology 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 sociology. Students interested in this option should consult with the departmental advisor by the end of the sophomore year.

## Programs

Bachelor of Arts (BA)

- Sociology (p. 911)
- Cultural Anthropology (p. 913)
- Sociology and Cultural Anthropology (p. 915)
- Communication Studies and Sociology (p. 120)
- Cultural Anthropology and Theatre (p. 211)
- English and Cultural Anthropology (p. 703)
- History and Cultural Anthropology (p. 734)
- Human Services and Sociology (p. 758)
- International Affairs and Cultural Anthropology (p. 790)
- Media and Screen Studies and Sociology (p. 146)
- Sociology and Environmental Studies (p. 530)
- Sociology and International Affairs (p. 805)
- Sociology and Political Science (p. 888)


## Bachelor of Science (BS)

- Sociology (p. 933)
- Cultural Anthropology (p. 937)
- Sociology and Cultural Anthropology (p. 939)
- Computer Science and Sociology (p. 344)
- Human Services and Sociology (p. 767)
- Linguistics and Cultural Anthropology (p. 507)


## Minors

- Sociology (p. 943)
- Cultural Anthropology (p. 943)


## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 944)

## Sociology, BA

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Sociology Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Sociology |  |  |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2320 | Statistical Analysis in Sociology | 4 |
| SOCL 2321 | Research Methods in Sociology | 4 |
| Cultural Anthropology |  |  |
| ANTH 1101 | Peoples and Cultures | 4 |
| ANTH 2305 | Global Markets and Local Culture | 4 |

Advanced Methods Requirement
Complete one of the following: 4

| ANTH 3410 | Ethnographic Field Experience |
| :--- | :--- |
| CRIM 4800 | Crime Mapping |
| DA 5030 | Introduction to Data Mining/Machine <br> Learning |
| DS 4100 | Data Collection, Integration, and <br> Analysis |
| DS 4400 | Machine Learning and Data Mining 1 |
| HINF 5301 | Personal Health Technologies: Field <br> Deployment and System Evaluation |
| POLS 2400 | Quantitative Techniques |
| SOCL 2323 | Ethnographic Methods |
| SOCL 3487 | Applied Sociology: Practice and Theory |
| Senior Seminar | Senior Seminar |
| SOCL 4600 |  |

## Required Sociology Electives

| Code Title | Hours |
| :--- | ---: |
| Introductory-Level Electives |  |
| Complete one course in the following range: | 4 |

SOCL 1100 to SOCL 1999
Intermediate-Level Electives
Complete two courses in the following range: 8
SOCL 2000 to SOCL 3999
Elective in Social Change
Complete one of the followiing: 4

| SOCL 1260 | Gender in a Changing Society |
| :--- | :--- |
| SOCL 1280 | The 21st-Century Workplace |
| SOCL 2268 | Social Movements |
| SOCL 2450 | Class, Power, and Social Change |

Elective in Social Inequality
Complete one of the following:
SOCL 1245 Sociology of Poverty

SOCL 1275 Social Stratification
SOCL 2205 Law and Social Justice
SOCL 2270 Race and Ethnic Relations

## Advanced-Level Elective

Complete one course in the following range:

## SOCL 4000 to SOCL 4999

## Social Science Electives

Complete three social science courses in the following

## Sociology Experiential Learning Requirement

| Code | Title <br> Complete one of the following courses or a study abroad or a <br> co-op: | Hours |
| :--- | :--- | ---: |
| SOCL 3487 | Applied Sociology: Practice and Theory |  |
| SOCL 4971 | Junior/Senior Honors Project 2 |  |
| SOCL 3488 | Doing Sociology in the City Abroad |  |

## 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.

## 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 | S SOCL 1200- <br> level elective | 4 Vacation | 0 Vacation | 0 |
| SOCL 1101 | 4 SOCL 1200- <br> level elective | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 |  |  |
| MATH 1215 | 4 Elective | 4 |  | 0 |
| ANTH 1101 | 4 | 16 | 0 | 0 |

## Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| SOCL 2300 | 4 Foreign <br> language <br> core course | 4 Vacation | 0 Co-op | 0 |


| Year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Co-op | 0 | ENGW 3315 | 4 | Elective | 4 | Co-op | 0 |
|  |  | Foreign language core course | 4 | SOCL <br> intermediate elective | 4 |  |  |
|  |  | Elective | 4 |  |  |  |  |
|  |  | SOCL <br> intermediate elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |

Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | Foreign language core course | 4 | Elective | 4 | Co-op | 0 |
|  |  | Elective |  | Social <br> science <br> elective | 4 |  |  |
|  |  | SOCL <br> intermediate elective | 4 |  |  |  |  |
|  |  | Social science elective | 4 |  |  |  |  |
|  | 0 |  | 16 |  | 8 |  | 0 |
| Year 5 |  |  |  |  |  |  |  |
| Fall | Hours | Spring | Hours |  |  |  |  |
| Co-op | 0 | SOCL 4600 | 4 |  |  |  |  |
|  |  | SOCL <br> advanced elective | 4 |  |  |  |  |
|  |  | Social science 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 |
| SOCL 1000 | 1 | SOCL 1200level elective | 4 Vacation | 0 Vacation | 0 |
| SOCL 1101 | 4 | SOCL 1200level elective | 4 |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |
| MATH 1215 | 4 | Elective | 4 |  |  |
| ANTH 1101 | 4 |  |  |  |  |
|  | 17 |  | 16 | 0 | 0 |

Year 2

| $\begin{aligned} & \text { Fall } \\ & \text { SOCL } 2300 \end{aligned}$ | Hours Spring <br> 4 Co-op | Hours Summer 1 0 Co-op | Hours Summer 2 <br> 0 Elective | Hours |
| :---: | :---: | :---: | :---: | :---: |
| SOCL 2320 | 4 |  | Foreign language core course | 4 |
| Social science elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| EESH 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Foreign | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| language <br> core course |  |  |  |  |


| ENGW 3315 | 4 |  | SOCL <br> intermediate <br> elective | 4 |
| :--- | :---: | :---: | :---: | ---: |
| SOCL <br> 1200-Level <br> elective | 4 |  |  |  |
| SOCL 2321 | 4 |  |  |  |

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).
Cultural Anthropology Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Cultural Anthropology |  |  |
| 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 <br> 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 24 count toward this requirement with prior permission from the department.
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.
${ }^{1}$ 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.

## 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 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 |  | 16 | 0 | 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 |  | Anthropology elective | 4 |  |  |
|  |  | EESH 2000 | 1 |  |  |
|  | 16 |  | 17 | 0 | 0 |


| 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 |

Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | 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 |


| Year 5 |  |  |
| :--- | :---: | ---: |
| Fall | Hours Spring | Hours |
| Co-op | 0 ANTH 4600 | 4 |
|  | Elective | 4 |
|  | Anthropology | 4 |
|  | elective |  |
|  | Elective | 4 |
| 0 | 16 |  |

[^29]
## 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

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| ANTH 2305 | 4 Co-op | 0 Co-op | 0 Elective | 4 |
| Foreign <br> language <br> core course | 4 |  | Elective | 4 |
| ENGW 3315 | 4 |  |  |  |
| Anthropology <br> elective | 4 |  |  | 8 |
|  | 16 | 0 | 0 |  |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Advanced <br> area ANTH | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| $4500-$ ANTH <br> 4515 |  |  |  |  |
| Anthropology <br> elective | 4 |  |  |  |
| Social <br> science <br> elective | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | ---: | ---: |
| Advanced | 4 ANTH 4600 | 4 |
| area ANTH |  |  |
| $4500-$ ANTH |  |  |
| 4515 |  |  |


| Anthropology <br> elective | 4 Elective | 4 |
| :--- | :--- | :--- |
| Elective | 4 Elective | 4 |
| Anthropology <br> elective | 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Sociology Major Requirements

| Code Title | Hours |
| :---: | :---: |
| Required Sociology |  |
| SOCL 1101 Introduction to Sociology | 4 |
| SOCL 2300 Social Theory | 4 |
| SOCL 2321 Research Methods in Sociology | 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  <br> Code Title | Hours |  |
| :--- | :--- | ---: |
| Cultural Anthropology |  | 4 |
| 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 <br>  <br>  <br> 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.

## 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 <br> Required Course | Title | Hours |
| :--- | :--- | ---: |
| ANTH 2305 | Global Markets and Local Culture | 4 |
| Capstone | Senior Seminar |  |
| SOCL 4600 |  |  |
| or ANTH 4600 | Senior Seminar | 4 |

## Sociology and Cultural Anthropology Major Grade Requirement <br> 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.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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.

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).
Communication Studies Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Communication Studies Common Requirements |  |  |
| COMM 1000 | Communication Studies at |  |
|  | Northeastern |  |


| COMM 3414 | Great Speakers and Speeches 2, 1930- <br> Present |
| :--- | :--- |
| 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 | Communication, Politics, and Social <br> Change |
| COMM 4535 | Nonverbal Social Interaction |
| COMM 4605 | Youth and Communication Technology |
| COMM 4631 | Crisis Communication and Image <br> Management |

Communication Studies Electives
Complete three COMM courses.

## Sociology Requirements

Code Title Hours

Required Sociology Courses

| SOCL 1101 | Introduction to Sociology | 4 |
| :--- | :--- | :--- |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2320 | Statistical Analysis in Sociology | 4 |
| SOCL 2321 | Research Methods in Sociology | 4 |

Introductory Electives
Complete two of the following: 8

| SOCL 1120 | Society and Health |
| :--- | :--- |
| SOCL 1220 | Sociology of Boston |
| SOCL 1228 | Social Problems |
| SOCL 1241 | Sociology of Violence |
| SOCL 1245 | Sociology of Poverty |
| SOCL 1255 | Sociology of the Family |
| SOCL 1260 | Gender in a Changing Society |
| SOCL 1275 | Social Stratification |
| SOCL 1285 | Deviant Behavior and Social Control |
| SOCL 1290 | Juvenile Delinquency |
| SOCL 1295 | Drugs and Society |

Intermediate-Level Elective
Complete one of the following: 4

| SOCL 2205 | Law and Social Justice |
| :--- | :--- |
| SOCL 2268 | Social Movements |
| SOCL 2270 | Race and Ethnic Relations |
| SOCL 2358 | Current Issues in Cities and Suburbs |
| SOCL 2450 | Class, Power, and Social Change |
| SOCL 3440 | Sociology of Human Service <br> Organizations |
| SOCL 3408 | Sociology of Organizations |
| SOCL 3441 | Sociology of Health and Illness |
| SOCL 3465 | Globalization and the Evolution of <br> Human Societies |
| SOCL 3485 | Environment, Technology, and Society |
| SOCL 3487 | Applied Sociology: Practice and Theory |

Advanced-Level Elective
Complete one of the following:

SOCL 4514 | "The Wire" and the Study of Urban |
| :--- |
| Inequalities |

| SOCL 4518 | Law and Society in a Digital World |
| :--- | :--- |
| SOCL 4520 | Race, Class, and Gender |
| SOCL 4523 | Sexualities |
| SOCL 4528 | Computers and Society |
| SOCL 4580 | Special Topics in Sociology |
| SOCL 4992 | Directed Study |

## Capstone and Integrative Requirements



## 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.

## 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 |
| COMM 1000 | 1 ENGW 1111 | 4 Communication <br> studies <br> elective | 4 Vacation | 0 |


| 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17 |  |  | 16 |  | 8 |  | 0 |
| Year 2 |  |  |  |  |  |  |  |
| Fall Hour | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| Communication studies cluster course | 4 | Elective | 4 | Vacation | 0 | Co-op | 0 |
| Foreign language core course |  | Communicati studies elective | 4 |  |  |  |  |
| Introductory sociology elective |  | Foreign language core course | 4 |  |  |  |  |
| Elective |  | Introductory sociology elective | 4 |  |  |  |  |
|  |  | EEAM 2000 | 1 |  |  |  |  |
| 16 |  |  | 17 |  | 0 |  | 0 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :--- | :--- | :---: | ---: |
| Co-op | 0Communication <br> studies <br> writing- <br> intensive <br>  <br>  <br>  <br> Intermediate <br> sociology <br> elective | 4 Elective | 4 Co-op | 0 |

Year 4
Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours
Co-op 0 Communication 4 Vacation 0 Co-op 0
studies
writing-
intensive

| $\begin{array}{l}\text { Communicati، } \\ \text { studies } \\ \text { elective }\end{array}$ | 4 |  |  |
| :--- | :--- | :--- | :--- |
| $\begin{array}{l}\text { Integrative } \\ \text { course }\end{array}$ | 4 | 4 | 0 |
| $\begin{array}{l}\text { Advanced } \\ \text { sociology } \\ \text { elective }\end{array}$ | 16 | 0 | 0 |

Year 5
Fall
Co-op

| Hours | Spring Hours |  |
| :---: | :---: | :---: |
| 0 | Communication studies or sociology capstone | 4 |
|  | Communicati studies or sociology capstone 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 Hour | Hours | Summer 1 | Hours | Summer 2 | Hours |
| COMM 1000 | 1 | Communication studies foundation course | 4 | Foreign language core course | 4 | Vacation | 0 |
| COMM 1101 | 4 | ENGW 1111 | 4 | Elective | 4 |  |  |
| COMM 1112 <br> or 2301 | 4 | SOCL 2320 | 4 |  |  |  |  |
| SOCL 1101 | 4 | SOCL 2321 | 4 |  |  |  |  |
| SOCL 2300 | 4 |  |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 |  | 0 |

## Year 2

| Fall Hour | Hours Spring | Hours Summer 1 | Hours | Summer 2 Hours |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Communication studies cluster course | $4 \text { Co-op }$ | 0 Co-op | 0 | Communication studies elective | 4 |
| Introductory sociology elective | 4 |  |  | Introductory sociology elective | 4 |
| Foreign language core course | 4 |  |  |  |  |
| EEAM 2000 | 1 |  |  |  |  |
| Elective | 4 |  |  |  |  |
|  | 17 | 0 | 0 |  | 8 |

Year 3

| Fall Hou | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| Communication studies writingintensive | $4 \text { Co-op }$ | 0 Co-op | 0 Vacation | 0 |
| Communicatis studies elective | 4 |  |  |  |
| Foreign language core course | 4 |  |  |  |
| Intermediate sociology elective | 4 |  |  |  |
|  | 16 | 0 | 0 | 0 |


| Year 4 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Hour | s Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| Communication studies elective | 4 Co-op | 0 | Co-op | 0 Vacation | 0 |
| Elective | 4 |  |  |  |  |
| Advanced sociology elective | 4 |  |  |  |  |


| Advanced <br> writing in the <br> disciplines <br> course | 4 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 16 | 0 | 0 | 0 |

Year 5

| Fall | Hours Spring | Hours |
| :--- | :---: | :---: |
| Communication | 4 Communication | 4 |
| studies | studies or <br> sociology <br> capstone |  |
| writing- <br> intensive | 4 Communicati، <br> studies or <br> sociology <br> capstone <br> elective | 4 |
| Integrative <br> requirement | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 16 | 16 |
|  |  |  |

## 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. Successful students 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## 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 <br> Development |
| ANTH 4505 | Native North Americans |
| ANTH 4510 | Anthropology of Africa |
| ANTH 4515 | Culture and Politics in Modern India |

Anthropology Electives
Complete six courses in the following range. Two studyabroad courses may count toward this requirement with prior permission from the department:

ANTH 2300 to ANTH 4999

## Social Science Electives

Complete three social science courses from the following
subject areas:
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 |
| :--- | :--- | ---: |
| Foundational Stages |  | 4 |
| 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 |  |

## Theatre Texts and Context

Complete one of the following: 4

| THTR 2300 | Classics of Global Theatre |
| :--- | :--- |
| THTR 2315 | Rebels of Modern Drama |
| THTR 2320 | America Onstage: Dramatizing the <br> Dream |
| THTR 2340 | Theatre and Society |
| Making Theatre |  |
| THTR 1100 | Production Experience 1 |
| THTR 2000 | Production Experience 2 |
| THTR 4702 | Capstone Rehearsal and Performance |

Intermediate or Advanced Technique
Complete two of the following:

| 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 |
| THTR 3450 | Theatre |
| THTR 3550 | Directing for the Stage |
| THTR 3570 | Musical Theatre Performance |

## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative Courses |  |  |
| THTR 4702 | Capstone Rehearsal and Performance | 4 |
| ANTH 2300 | Reading Culture through Ethnography | 4 |

## Cultural Anthropology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Program Requirement

128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## English Requirements

Code Title Hours

## 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

Foundational Courses
ENGL 1400 Introduction to Literary Studies 4
ENGL $1160 \quad$ Introduction to Rhetoric 4
or ENGL 1410 Introduction to Writing Studies

## Diversity

Complete one of the following courses. This course may also 4
be used to fulfill an additional English requirement below:

| ENGL 2150 | Literature and Digital Diversity |
| :--- | :--- |
| ENGL 2296 | Early African-American Literature |
| ENGL 2450 | Postcolonial Literature |
| ENGL 2451 | Postcolonial Women Writers |
| ENGL 2455 | American Women Writers |
| ENGL 2460 | Multiethnic Literatures of the U.S. |
| ENGL 2470 | Asian-American Literature |
| ENGL 2760 | Writing in Global Contexts |
| ENGL 3663 | The African-American Novel |
| ENGL 3676 | Representing Gender and Sexuality in <br> Literature |
| ENGL 3678 | Bible and the Origins of Sex, Gender, <br> and Ethnicity |
| ENGL/JWSS 3685Modern and Contemporary Jewish <br> Literature |  |
| Pre-Nineteenth-Century Literature |  |

Complete one of the following: 4

| ENGL 1600 | Introduction to Shakespeare |
| :--- | :--- |
| ENGL 1700 | Global Literature to 1500 |
| ENGL 2240 | 17th-Century British Literature |
| ENGL 2296 | Early African-American Literature |
| ENGL 3618 | Milton <br> ENGL/JWSS 3678 Bedrooms and Battlefields: Hebrew <br> and Ethnicity |
| ENGL 4000 | Topics in Early Literatures |
| ENGL 4010 | Topics in Shakespeare |
| ENGL 4020 | Topics in 17th- and 18th-Century <br> Literatures |

Nineteenth-, Twentieth-, and Twenty-First-Century Literature
Complete one of the following:
ENGL 2260 Romantic Poetry
ENGL 2330 The American Renaissance
ENGL 2340 American Realism
ENGL 3619 Emerson and Thoreau
ENGL 3720 19th-Century Major Figure
ENGL $4040 \quad$ Topics in 19th-Century Literatures
ENGL 2301 The Graphic Novel
ENGL 2410 Contemporary American Literature
ENGL 2440 The Modern Bestseller
ENGL $2600 \quad$ 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:

| ENGL 1140 | Grammar. The Architecture of English |
| :--- | :--- |
| ENGL 1160 | Introduction to Rhetoric |
| ENGL 1410 | Introduction to Writing Studies |
| 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 <br>  <br>  <br> Writing |
| ENGL 3700 | Narrative Medicine |
| ENGL 4100 | Topics in Literary Criticism |
| ENGL 4400 | Opening the Archive |
| ENGL 4410 | Research in Rhetoric and Writing |
| LING 1150 | Introduction to Language and <br>  <br> Linguistics |
| LING 3350 3450 | Linguistic Analysis |
| LING 3452 | Syntax |
| LING 3454 | Semantics |
| LING 3456 | Language and Gender of English |
| LING 3458 | Topics in Linguistics |

## Comparative Literature

Complete one of the following:
ENGL 1120 Trouble in Utopia
ENGL 1130 Animals, Objects, Humans
ENGL 1450 Reading and Writing in the Digital Age
ENGL 1500 British Literature to 1800
ENGL 1502 American Literature to 1865
ENGL 1503 American Literature 1865 to Present
ENGL 2150 Literature and Digital Diversity
ENGL 2370 The Modern Short Story
ENGL 2380 The Modern Novel
ENGL 2400 Modern Poetry
ENGL 2420 Contemporary Poetry
ENGL 2430 Contemporary Fiction
ENGL 2450 Postcolonial Literature
ENGL 2451 Postcolonial Women Writers
ENGL 2455 American Women Writers
ENGL 2460 Multiethnic Literatures of the U.S.
ENGL 2470 Asian-American Literature
ENGL 2510 Horror Fiction
ENGL 2520 Science Fiction
ENGL $2600 \quad$ Irish Literary Culture (Abroad)
ENGL $2620 \quad$ What Is Nature? (Abroad)
ENGL 2690 Boston in Literature
ENGL 3427 The Literature of Science
ENGL 3487 Film and Text (Abroad)
ENGL $3582 \quad$ Children's Literature
ENGL 3663 The African-American Novel
ENGL 3676 Representing Gender and Sexuality in Literature
ENGL 4070 Topics in Genre

## Writing

Complete one of the following: 4
ENGL $2700 \quad$ Creative Writing
ENGL 2710 Style and Editing
ENGL 2730 Digital Writing
ENGL $2740 \quad$ Writing and Community Engagement
ENGL $2760 \quad$ Writing in Global Contexts
ENGL $2770 \quad$ Writing to Heal

| ENGL 2780 | Visual Writing: Writing Visuals |
| :---: | :--- |
| ENGL 2850 | Writing for Social Media: Theory and <br> Practice |
| ENGL 3375 | Writing Boston |
| ENGL 3376 | Creative Nonfiction |
| ENGL 3377 | Poetry Workshop |
| ENGL 3378 | Fiction Workshop |
| ENGL 3380 | Topics in Writing |
| ENGL 3382 | Publishing in the 21st Century |
| ENGL 3384 | The Writer's Marketplace |
| Capstone |  |
| ENGL 4710 | Capstone Seminar <br> or ENGL 4720 |
| Capstone Project | 4 |
| Complish Electives |  |

## Cultural Anthropology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Foundation Courses |  | 4 |
| 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 |  |

Area Courses
Additional "area courses" taken may count as anthropology electives.

Complete two of the following:

| ANTH 4350 | Ethnography of Southeast Asia |
| :--- | :--- |
| ANTH 4500 | Latin American Society and <br> 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

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.

## 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
Complete one of the following:

| ENGL 2450 | Postcolonial Literature |
| :--- | :--- |
| ENGL 2470 | Asian-American Literature |

Cultural Anthropology Integrative Courses
Complete one of the following:

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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## History Requirements

Code Title Hours

History Colloquium

| 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 | 4 |

HIST $2302 \quad$ Historical Writing 1

Pre-1800 History Elective
Complete one course from the following: 4

| HIST 2390 | Africa and the World in Early Times |
| :--- | :--- |
| HIST 1218 | Pirates, Planters, and Patriots: Making | the Americas, 1492-1804


| HIST 1252 | Japanese Literature and Culture |
| :--- | :--- |
| HIST 1270 | Ancient Greece |
| HIST 1271 | Ancient Rome |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 2330 | Colonial and Revolutionary America |
| 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.

## 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.

## Cultural 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 |

Area Courses
Complete two courses from the following: 8

| ANTH 4350 | Ethnography of Southeast Asia |
| :--- | :--- |
| ANTH 4500 | Latin American Society and <br> 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- 12
abroad course may count toward this requirement.
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.

## Program Requirement

128 total semester hours required

## Plan of Study <br> Sample Five Years, Three Co-ops in Summer 2/Fall

 Year 1| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: | :---: |
| HIST 1000 | HIST <br> elective or <br> integrative 1 | 4 Vacation | Vacation |  |
| HIST 1200 | 1 <br> HIST <br> elective or <br> integrative 2 | 4 |  |  |
| HIST 1201 | 4 ANTH 2305 | 4 |  |  |
| ENGW 1111 | 4 Elective | 4 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| HIST 2301 | H HIST <br> elective or <br> integrative 3 | 4 Vacation | Co-op |  |

Year 3
$\left.\begin{array}{llccc} & \text { Hours } \begin{array}{l}\text { Spring }\end{array} & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \begin{array}{l}\text { HIST } \\ \text { elective or } \\ \text { integrative 5 }\end{array} & 4 \text { Elective } & 4 \text { Co-op }\end{array}\right]$

Year 4


## Anthropology Major Grade Requirement

A GPA of 2.000 for major courses is required.

| Year 5 |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall | Hours | Spring | Hours |
| Co-op |  | HIST | 4 |
|  |  | capstone or |  |
|  |  | HIST senior |  |
|  |  | project |  |
|  |  | or ANTH |  |
|  |  | capstone |  |
|  |  | HIST | 4 |
|  |  | elective or |  |
|  |  | integrative 7 |  |
|  |  | 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

| Human Services Requirements <br> Code <br> Human Services Overview | Hours |
| :--- | ---: |
| HUSV 1101 | Human Services Professions |


| HUSV 2300 | Counseling in Human Services | 4 |
| :---: | :---: | :---: |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and Social Change | 4 |
| Policy |  |  |
| HUSV 3900 | Introduction to Social Policy | 4 |
| Research Methods |  |  |
| Complete option A or | option B: | 4 |
| Option A |  |  |
| HUSV 3700 | Research Methods for Human Services |  |
| Option B |  |  |
| Complete the followin | g and one additional HUSV course: |  |
| SOCL 2321 | Research Methods in Sociology |  |
| Organization |  |  |
| SOCL 3440 | Sociology of Human Service Organizations | 4 |


| Human Services Internship |  |
| :--- | :--- |
| HUSV $4994 \quad$ Human Services Internship |  |

Human Services Elective
Complete one additional HUSV course. ..... 4
Senior Capstone
${ }^{1}$ 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 |
| :--- | :--- | ---: |
| Required Sociology Courses |  |  |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2320 | Statistical Analysis in Sociology | 4 |
| SOCL 3440 | Sociology of Human Service | 4 |
|  | Organizations |  |

## Introductory Electives

Complete two of the following: 8

| SOCL 1120 | Society and Health |
| :--- | :--- |
| SOCL 1220 | Sociology of Boston |
| SOCL 1228 | Social Problems |
| SOCL 1241 | Sociology of Violence |
| SOCL 1245 | Sociology of Poverty |
| SOCL 1246 | Environment and Society |
| SOCL 1255 | Sociology of the Family |
| SOCL 1260 | Gender in a Changing Society |
| SOCL 1275 | Social Stratification |
| SOCL 1285 | Deviant Behavior and Social Control |
| SOCL 1290 | Juvenile Delinquency |
| SOCL 1295 | Drugs and Society |
| ANTH 1101 | Peoples and Cultures |

## Intermediate-Level Elective

Complete one of the following:
SOCL $2205 \quad$ Law and Social Justice
SOCL 2268 Social Movements

SOCL 2270 Race and Ethnic Relations

| SOCL 2358 | Current Issues in Cities and Suburbs |  |
| :---: | :---: | :---: |
| SOCL 2450 | Class, Power, and Social Change |  |
| SOCL 3441 | Sociology of Health and Illness |  |
| SOCL 3487 | Applied Sociology: Practice and Theory |  |
| ANTH 2302 | Gender and Sexuality: A Cross-Cultural Perspective |  |
| ANTH 2305 | Global Markets and Local Culture |  |
| ANTH 2350 | Urban Anthropology |  |
| Advanced-Level Elective |  |  |
| Complete one of the following: |  | 4 |
| SOCL 4514 | "The Wire" and the Study of Urban Inequalities |  |
| SOCL 4518 | Law and Society in a Digital World |  |
| SOCL 4520 | Race, Class, and Gender |  |
| SOCL 4523 | Sexualities |  |
| SOCL 4580 | Special Topics in Sociology |  |
| 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 |  |
| ANTH 4580 | Special Topics in Anthropology |  |
| Senior Seminar ${ }^{2}$ |  |  |
| SOCL 4600 | Senior Seminar | 4 |

2 With permission of the sociology head advisor, 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 <br> Code Title <br> HUSV 2350 Ethnic Relations, Cultural Identity, and Human Services

## 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.
Program Requirement
128 total semester hours required

## International Affairs and Cultural Anthropology, BA

Through this combined major, successful undergraduates will 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 statesociety 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| INTL 1101 | Globalization and International Affairs | 4 |
| INTL 3400 | International Conflict and Negotiation | 4 |
| POLS 1160 | International Relations | 4 |
| ECON 1115 or HIST 2211 | Principles of Macroeconomics The World Since 1945 | 4 |
| Global Dynamics |  |  |
| 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 major requirements: |  | 8 |
| Environment |  |  |
| ENVR 1110 | Global Climate Change |  |
| ENVR 4515 | Sustainable Development |  |
| SOCL 1246 | Environment and Society |  |
| Law, Diplomacy, and Global Governance |  |  |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |  |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |  |
| COMM 2303 | Global and Intercultural Communication |  |
| POLS 1155 | Comparative Politics |  |
| POLS 1160 | International Relations |  |
| POLS 2370 | Religion and Politics |  |
| POLS 3405 | International Political Economy |  |
| POLS 3406 | International Law |  |
| POLS 3407 | International Organizations |  |
| POLS 4910 | Model United Nations |  |


| POLS 4918 | Model NATO |
| :---: | :---: |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |
| Human Rights and Social Justice |  |
| INTL 2400 | Politics of Islam and Gender |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |
| HIST 2373 | Gender and Sexuality in World History |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| PHIL 1272 | Ethics in the World's Religions |
| PHIL 5001 | Global Justice |
| Conflict and Security |  |
| CRIM 4630 | Political Crime and Terrorism |
| HIST 1206 | Drug Trade and Drug War. History, Security, Culture |
| 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 |
| PHIL 5001 | Global Justice |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| Globalization |  |
| INTL 2240 | Global Population and Development |
| INTL 2300 | Religion in International Affairs |
| INTL 2480 or WMNS 2480 | Women and World Politics Women and World Politics |
| INTL 3200 | Cities in a Global Context |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| AFAM 2639 | Globalism, Racism, and Human Rights |
| ANTH 2305 | Global Markets and Local Culture |
| ANTH 2315 | Religion and Modernity |
| ECON 1290 | History of the Global Economy |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| HIST 2211 | The World Since 1945 |
| HIST 2311 | Colonialism/Imperialism |
| INTB 3310 | Cultural Aspects of International Business |
| 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 |
| POLS 3407 | International Organizations |
| SOCL 3465 | Globalization and the Evolution of Human Societies |
| Population, Migration, and Diaspora |  |

INTL 2240 Global Population and Development

| INTL 2400 | Politics of Islam and Gender |
| :---: | :---: |
| INTL 3200 | Cities in a Global Context |
| AFRS 1185 | Gender in the African Diaspora |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |
| ANTH 1101 | Peoples and Cultures |
| ANTH 2350 | Urban Anthropology |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| Development |  |
| INTL 2240 | Global Population and Development |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |
| ANTH 2305 | Global Markets and Local Culture |
| ECON 1291 | Development Economics |
| ECON 3404 | International Food Economics and Policy |
| ENTR 2206 | Global Social Enterprise |
| ENVR 4515 | Sustainable Development |
| INTB 1203 or INTB 1209 | International Business and Global Social Responsibility <br> International Business and Global Social Responsibility |
| 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 |
| MUSC 1140 | Global Pop Music |

## 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
8

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:

## Africa

| AFRS 2307 | Africa Today |
| :--- | :--- |
| AFRS 2465 | The Scope and Dynamics of Conflicts in <br> Africa |
| 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 | Africa and the World in Early Times |
| Asia |  |
| ANTH 4350 or INTL 4350 | Ethnography of Southeast Asia <br> Ethnography of Southeast Asia |
| ASNS 1150 or HIST 1150 | East Asian Studies 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 |
| HIST 2360 | History of Capitalism in East Asia |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |
| Europe |  |
| CLTR 1501 | Introduction to French Culture |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| 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 or INTL 4500 | Latin American Society and Development <br> Latin American Society and Development |
| CLTR 1505 | Introduction to Latin American Culture |
| CLTR 1240 | Latin American Film |
| HIST 1187 | Introduction to Latin American History |
| LACS 1220 | Latino, Latin American, and Caribbean Studies |
| LITR 4655 | Latin American Literature |


| 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 2400 | Politics of Islam and Gender |
| 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 |
| POLS 3465 | Government and Politics in the Middle East |
| POLS 3470 | Arab-Israeli Conflict |
| POLS 4915 | Model Arab League |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1280 | Encountering Islam: Traditions, Debates, and Crosscultural Diversity |
| PHIL 1285 | Jewish Religion and Culture |
| PHIL 1287 | Modern Judaism |
| Russia |  |
| HIST 1285 | Introduction to Russian Civilization |
| HIST 1286 | History of the Soviet Union |
| SOCL 1215 | Society and Culture in Russia |

## International Affairs Foreign Language Requirement

Complete course work in a language through at least intermediatelevel two. Note: Completing this requirement satisfies the language requirement for the BA degree.

## Anthropology Major Requirements

Code Title Hours

Cultural Anthropology
ANTH 1101 Peoples and Cultures 4

ANTH 3421 Foundations of Anthropological Theory 4
ANTH $3410 \quad$ Ethnographic Field Experience 4
Anthropology Electives
Complete three courses in the following range, one of which 12 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

## Advanced Area Courses

Complete two of the following: 8

| ANTH 4350 | Ethnography of Southeast Asia |
| :--- | :--- |
| ANTH 4500 | Latin American Society and <br> Development |
| ANTH 4505 | Native North Americans |
| ANTH 4510 | Anthropology of Africa |
| ANTH 4515 | Culture and Politics in Modern India |

## Integrative Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Global Markets |  |  |
| ANTH 2305 | Global Markets and Local Culture | 4 |
| Capstone |  | 4 |
| ANTH 4600 | Senior Seminar |  |
| 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.
Program Requirement
128 total semester hours required

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

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 |  |
| :--- | :--- | ---: |
| $\left.\begin{array}{llr}\text { Code } & \text { Title } & \text { Hours } \\ \text { Introduction to College } & \\ \text { MSCR } 1000 & \text { Media and Screen Studies at } & \\ & \text { Northeastern } & 1\end{array}\right]$ |  |

Introduction to Media Studies

| MSCR 1220 | Media, Culture, and Society | 4 |
| :--- | :--- | ---: |
| Introduction to Screen Theory |  |  |
| MSCR 2220 | Understanding Media and Film | 4 |
| Advanced Theory |  |  |
| MSCR 4623 | Theories of Media and Culture | 4 |

Media and Screen Electives

| Complete four of the following: |  |
| :--- | :--- |
| MSCR 1230 | Introduction to Film Production |
| MSCR 1310 | Introduction to Digital Media Culture |
| MSCR 2302 | Advertising and Promotional Culture |
| MSCR 2325 | Global Media |
| MSCR 2895 | Film Analysis |
| MSCR 3210 | Special Topics in Media and Screen <br> Studies |
| MSCR 3422 | Media Audiences |
| MSCR 3426 | Popular Music as Media Form |
| MSCR 3435 | Media Industries |
| MSCR 3437 | Media and Identity |
| CINE 2160 | Narrative Filmmaking |
| CINE 3389 | Screenwriting |
| CINE 3392 | Gender and Film |
| CINE 3446 | Topics in Documentary Production |
| CINE 3920 | Topics in Film Studies |
| ARTD 3480 | Video: Sound and Image |
| ARTD 3485 | Experimental Video |
| ARTH 2212 | Survey of the Still and Moving Image |

Advanced Media and Screen Electives
Complete two of the following: 8

| MSCR 4208 | TV History |
| :--- | :--- |
| MSCR 4602 | Media and Democracy |
| MSCR 4622 | Special Topics in Media and Screen <br>  <br> Studies |
| MSCR 4992 | Directed Study |
| MSCR 4993 | Independent Study |
| CINE 3389 | Screenwriting |
| CINE 3392 | Gender and Film |
| CINE 3500 | Film Theory |

## Sociology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Core Courses in Sociology |  |  |
| ANTH 1101 | Peoples and Cultures | 4 |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2320 | Statistical Analysis in Sociology | 4 |
| SOCL 2321 | Research Methods in Sociology | 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 1275 | Social Stratification |  |
| SOCL 1280 | The 21 st-Century Workplace |  |
| SOCL 2205 | Law and Social Justice |  |
| SOCL 2268 | Social Movements |  |
| SOCL 2270 | Race and Ethnic Relations |  |
| SOCL 2450 | Class, Power, and Social Change |  |

Foundational Competency-Courses Numbered 3000 to 4999
Complete one of the following:

| ANTH 3120 | Consumer Cultures |
| :--- | :--- |
| ANTH 3418 | Wired/Unwired: Cybercultures and <br> Technopolitics |
| ANTH 4580 | Special Topics in Anthropology <br> SOCL 3465Globalization and the Evolution of <br> 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 <br> Integrative Courses   |  |  |
| MSCR 3437 | Media and Identity | 4 |
| SOCL 1246 | Environment and Society | 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.

## Program Requirement

128 total semester hours required

## Plan of Study

| Fall | Hours | Spring | Hours | Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MSCR 1000 | 1 | MSCR 2220 |  | Foreign language core course | 4 Vacation |  |
| MSCR 1220 | 4 | MSCR elective | 4 | Elective | 4 |  |
| SOCL 1101 |  | Foreign language core course | 4 |  |  |  |
| ANTH 1101 | 4 | SOCL 2300 | 4 |  |  |  |
| ENGW 1111 | 4 |  |  |  |  |  |
|  | 17 |  | 16 |  | 8 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |  |
| :--- | :---: | :---: | :---: | :---: | ---: |
| MSCR <br> elective | 4 Co-op | Co-op | Elective | 4 |  |
| Advanced <br> MSCR <br> elective | 4 | Elective | 4 |  |  |
| Foreign <br> language <br> core course | 4 |  |  |  |  |
| EEAM 2000 | 1 | 4 | 0 | 0 | 8 |
| SOCL 2320 | 17 |  |  |  |  |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SOCL 2321 | 4 Co-op | Co-op | Vacation |  |
| SOCL <br> foundational <br> competency <br> elective 1 | 4 |  |  |  |
| MSCR <br> elective | 4 |  |  |  |
| Elective | 4 | 0 | 0 | 0 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| SOCL | 4c MSCR 3437 | 4 Vacation | Vacation | 0 |
| foundational |  |  |  |  |

foundational competency
elective 2

| MSCR <br> elective | 4 MSCR 4623 | 4 |  |
| :--- | :---: | :---: | :---: |
| Advanced <br> MSCR <br> elective | 4 SOCL <br> foundational <br> competency <br> elective | 4 |  |
| SOCL 1246 | 4 Elective | 4 | 0 |

Year 5

| Fall | Hours |
| :--- | ---: |
| SOCL 4600 | 4 |
| Elective | 4 |
| Elective | 4 |
| Elective | 4 |
|  | 16 |
| Total Hours: $126-130$ |  |

Total Hours: 126-130

## Sociology and Environmental Studies, BA

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Sociology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Sociology Courses |  |  |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2321 | Research Methods in Sociology | 4 |
| ANTH 2305 | Global Markets and Local Culture | 4 |
| Statistics |  | 4 |
| Complete one of the following: |  |  |


| SOCL 2320 | Statistical Analysis in Sociology |
| :--- | :--- |
| ENVR 2500 | Biostatistics |

Capstone
Complete one of the following:

| SOCL 4600 | Senior Seminar |
| :--- | :--- |
| ENVS 4997 | Senior Thesis |
| ENVR 4900 | Earth and Environmental Science |
|  | Capstone |

## Sociology Elective A

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:

$$
\text { SOCL } 1000 \text { to SOCL } 2999
$$

## Sociology Elective B

Complete three additional sociology courses in the following range:
SOCL 3000 to SOCL 5999

## Environmental Studies Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Science Requirements |  |  |
| ENVR 1101 | Environmental Science | 4 |
| ENVR 1112 | Environmental Geology | 4 |
| or ENVR 1200 | Dynamic Earth |  |
| or ENVR 3125 | Global Oceanic Change |  |
| ENVR 3300 and ENVR 3301 | Geographic Information Systems and Lab for ENVR 3300 | 5 |
| EEMB 3460 | Conservation Biology | 4 |
| Environmental Studies Elective A |  |  |
| Complete one of $t$ | following: | 4 |
| PHIL 1180 | Environmental Ethics |  |
| PHIL 1185 | The Ethics of Food |  |
| POLS 1150 | American Government |  |
| POLS 2395 | Environmental Politics and Policy |  |
| ENVR 1110 | Global Climate Change |  |


| ENVR 2900 | Special Topics in Environmental Studies |  |
| :---: | :---: | :---: |
| Environmental Studies Electives B |  |  |
| Complete three | following: | 12 |
| ENVR 3000 to ENVR 5999 |  |  |
| EEMB 3000 to EEMB 5999 |  |  |
| PPUA 3000 to PPUA 5999 |  |  |
| Integrative Requirements |  |  |
| Code | Title | Hours |
| SOCL 1246 | Environment and Society | 4 |
| ENVR 4515 | Sustainable Development | 4 |

## Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Sociology and Environmental Studies Combined-Major Credit Requirement

Complete 81 semester hours in the major.

## Program Requirements

128 total semester hours required

## Sociology and International Affairs, BA

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Sociology Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Sociology Required Courses |  |  |
| ANTH 2305 | Global Markets and Local Culture | 4 |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2320 | Statistical Analysis in Sociology | 4 |
| SOCL 2321 | Research Methods in Sociology | 4 |
| Sociology Electives A | 8 |  |
| Complete two courses in the following range: | 8 |  |

SOCL 1000 to SOCL 2999

| Sociology Electives B |  |  |
| :--- | :---: | :---: |
| Complete two courses in the following range: |  |  |
| SOCL 3000 to SOCL 5999 |  | 8 |
| Capstone Requirement |  |  |
| SOCL 4600 Senior Seminar <br> 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. Peoples and Cultures (ANTH 1101), The World Since 1945 (HIST 2211), and International Relations (POLS 1160) may not be used as global dynamics courses. See department for additional courses.

| Code | Title | Hours |
| :---: | :---: | :---: |
| Required Courses |  |  |
| ECON 1115 | Principles of Macroeconomics | 4 |
| or HIST 2211 | The World Since 1945 |  |
| INTL 1101 | Globalization and International Affairs | 4 |
| INTL 3400 | International Conflict and Negotiation | 4 |
| POLS 1155 | Comparative Politics | 4 |
| Global Dynamics |  |  |
| POLS 1160 | International Relations | 4 |
| Global Dynamics Elective 1 |  |  |
| Complete one of the following courses: |  | 4 |
| INTL 2240 | Global Population and Development |  |
| INTL 2480 | Women and World Politics |  |
| INTL 2300 | Religion in International Affairs |  |
| POLS 3418 | Nationalism |  |
| PHIL 5001 | Global Justice |  |
| Global Dynamics Elective 2 |  |  |
| Complete one of the f | following courses: | 4 |
| INTL 2240 | Global Population and Development |  |
| INTL 2300 | Religion in International Affairs |  |
| INTL 2400 | Politics of Islam and Gender |  |
| INTL 2480 | Women and World Politics |  |
| or WMNS 2480 | Women and World Politics |  |
| INTL 3200 | Cities in a Global Context |  |
| INTL 5200 | Political Economy: Interdisciplinary Perspectives |  |
| AFAM 2600 | Contemporary Issues: Race, Science, and Technology |  |
| AFAM 2639 | Globalism, Racism, and Human Rights |  |
| AFRS 3424 | Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora |  |
| ANTH 1101 | Peoples and Cultures |  |
| ANTH 2305 | Global Markets and Local Culture |  |
| ANTH 2315 | Religion and Modernity |  |
| ANTH 2350 | Urban Anthropology |  |
| COMM 2303 | Global and Intercultural Communication |  |
| MSCR 2325 | Global Media |  |
| CRIM 4630 | Political Crime and Terrorism |  |
| ECON 1290 | History of the Global Economy |  |
| ECON 1291 | Development Economics |  |


| ECON 3404 | International Food Economics and Policy |
| :---: | :---: |
| ECON 4635 | International Economics |
| ENGL 2450 | Postcolonial Literature |
| ENTR 2206 | Global Social Enterprise |
| ENTR 3306 | Global Entrepreneurship |
| ENVR 1110 | Global Climate Change |
| ENVR 4515 | Sustainable Development |
| HIST 1218 | Pirates, Planters, and Patriots: Making the Americas, 1492-1804 |
| HIST 2211 | The World Since 1945 |
| HIST 2214 | War in the Modern World |
| HIST 2311 | Colonialism/Imperialism |
| INTB 1203 or INTB 1209 | International Business and Global <br> Social Responsibility <br> International Business and Global Social <br> Responsibility |
| INTB 3310 | Cultural Aspects of International Business |
| JRNL 3300 or INTL 3300 | Covering Conflicts: Peace, War, and the Media <br> Covering Conflicts: Peace, War, and the Media |
| JRNL 5360 | Global Reporting |
| LPSC 2302 | Global Human Rights: A Social and Economic Perspective |
| MUSC 1140 | Global Pop Music |
| PHIL 5001 | Global Justice |
| PHTH 5230 | Global Health |
| POLS 2370 | Religion and Politics |
| POLS 3405 | International Political Economy |
| POLS 3406 | International Law |
| POLS 3407 | International Organizations |
| POLS 3408 | International Security |
| POLS 3420 | U.S. National Security Policy |
| POLS 3430 | Revolution, Civil War, and Insurrection |
| POLS 3487 | Politics of Developing Nations |
| POLS 4910 | Model United Nations |
| POLS 4918 | Model NATO |
| POLS 4938 | Dialogue of Civilizations: International Politics Abroad |
| PHIL 1270 | Judaism, Christianity, and Islam: Abrahamic Religions |
| PHIL 1271 | Sex in Judaism, Christianity, and Islam |
| PHIL 1272 | Ethics in the World's Religions |
| SOCL 1246 | Environment and Society |
| nternational Experiential Learning |  |
| omplete at least o broad, internation proved short-term | "international semester" via study internship, international co-op, or two programs abroad. |

## Regional Analysis Requirement

Code Title Hours

Complete two of the following courses, both of which must 8 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.

## Africa

| AFRS 2307 | Africa Today |
| :---: | :---: |
| AFRS 2465 | The Scope and Dynamics of Conflicts in Africa |
| 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 | Africa and the World in Early Times |
| Asia |  |
| ANTH 4350 or INTL 4350 | Ethnography of Southeast Asia Ethnography of Southeast Asia |
| ASNS 1150 or HIST 1150 | East Asian Studies 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 |
| HIST 2360 | History of Capitalism in East Asia |
| PHIL 1275 | Hinduism, Buddhism, and Beyond: Eastern Religions |
| PHIL 1290 | Chinese Philosophy and Religion |
| PHIL 2394 | Chinese Buddhism |
| PHIL 2395 | Japanese Buddhism |
| PHIL 4545 | Religion and Politics in South Asia |
| Europe |  |
| CLTR 1501 | Introduction to French Culture |
| CLTR 1503 | Introduction to Italian Culture |
| CLTR 1504 | Introduction to Spanish Culture |
| ECON 1293 | European Economic History |
| HIST 1170 | Europe: Empires, Revolutions, Wars, and Their Aftermath |
| HIST 2280 | Hitler, Germany, and the Holocaust |
| HIST 2370 | Renaissance to Enlightenment |
| HIST 2376 | Britain and the British Empire |


| HIST 4946 | Independent Field Research Abroad: <br> Central Europe |
| :---: | :--- |
| POLS 3435 | Politics and Governance of Europe and <br> the European Union |
| Antin America | Latin American Society and <br> Development |
| or INTL 4500 | Latin American Society and Development |

## International Affairs Foreign Language Requirement

Complete course work 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 $3465 \quad$ Globalization and the Evolution of

## 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

## 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. 41).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 40).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

Sociology Requirements

| Code Title | Hours |
| :--- | :--- | :--- |


| SOCL 1101 | Introduction to Sociology | 4 |
| :--- | :--- | :--- |
| SOCL 2300 | Social Theory | 4 |

Sociology Introductory Electives
Complete two courses in the following range: ..... 8
SOCL 1200 to SOCL 1999
Sociology Intermediate Elective
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

| POLS 2400 | Quantitative Techniques |
| :--- | :--- |
| and POLS 2399 | and Research Methods in Political <br> Science |

Political Science Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Political Science | Required Courses |  |
| POLS 1150 | American Government | 4 |
| POLS 1155 | Comparative Politics | 4 |
| POLS 1160 | International Relations | 4 |
| POLS 2330 | American Political Thought | 4 |

Political Science Electives
Complete two of the following: 8

| POLS 2345 | Urban Policies and Politics |
| :---: | :--- |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3418 | Nationalism |
| Political Science Upper-Level Electives |  |
| Complete two courses in the following range: | 8 |

## POLS 3000 to POLS 5999

Political Science Electives
Complete two courses in the following range:
POLS 2300 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. 889).

- American Political Institutions
- Campaigns and Elections
- Identity, Culture, and Politics
- Public Policy


## 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 "The Wire" and the Study of Urban 4 Inequalities
POLS $3324 \quad$ Law and Society 4

## Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Program Requirement

128 total semester hours required

## 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 3305 | The American Presidency |
| POLS 3307 | Public Policy and Administration |
| POLS 3310 | Public Opinion, Voting, and Elections |

## CONCENTRATION IN CAMPAIGNS AND ELECTIONS

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Required Courses |  |
| With advisor approval, a co-op or internship may be <br> substituted in place of POLS 4947: |  |
| POLS 3160 | Campaign Strategy |
| POLS 4947 | 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:

| POLS 2345 | Urban Policies and Politics |
| :--- | :--- |
| POLS 2355 |  |
| POLS 3310 | Public Opinion, Voting, and Elections |
| POLS 3162 | Local Campaigns and Elections |
| POLS 3320 | Politics and Mass Media |
| POLS 3402 |  |
| POLS 3304 |  |

CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS
Code Title Hours

| Core Course |  |
| :--- | :--- |
| POLS 3418 | Nationalism |

## Electives

Complete three of the following:

| POLS 2360 | Politics of Poverty |
| :--- | :--- |
| POLS 2368 | Music and Politics in America and <br> Abroad |
| POLS 2370 | Religion and Politics |
| POLS 3309 | Lesbian, Gay, Bisexual, and Transgender <br> Issues in Public Policy |
| POLS 3324 | Law and Society |


| CONCENTRATION IN PUBLIC POLICY  <br> Code Title | Hours |  |
| :--- | :--- | ---: |
| Core Requirement |  | 4 |
| POLS 3307 | Public Policy and Administration | 4 |
| Electives |  | 12 |


| POLS 2334 | Bureaucracy and Government <br> Organizations |
| :--- | :--- |
| 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 <br> Suburbs |
| :--- | :--- |
| POLS 2390 | Science, Technology, and Public Policy |
| POLS 2395 | Environmental Politics and Policy |
| POLS 3425 | U.S. Foreign Policy |

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Sociology Major Requirements

Code Title Hours

## Required Sociology

SOCL 1101 Introduction to Sociology 4
SOCL 2300 Social Theory 4
SOCL $2320 \quad$ Statistical Analysis in Sociology 4

SOCL 2321 Research Methods in Sociology 4
Cultural Anthropology
ANTH 1101 Peoples and Cultures 4
ANTH $2305 \quad$ Global Markets and Local Culture 4
Advanced Methods Requirement
Complete one of the following:

| ANTH 3410 | Ethnographic Field Experience |
| :--- | :--- |
| CRIM 4800 | Crime Mapping |
| DA 5030 | Introduction to Data Mining/Machine <br> Learning |
| DS 4100 | Data Collection, Integration, and <br> Analysis |
| DS 4400 | Machine Learning and Data Mining 1 |
| HINF 5301 | Personal Health Technologies: Field <br> Deployment and System Evaluation |
| POLS 2400 | Quantitative Techniques |
| SOCL 2323 | Ethnographic Methods |
| SOCL 3487 | Applied Sociology: Practice and Theory |
| Senior Seminar | Senior Seminar |
| SOCL 4600 |  |

## Required Sociology Electives

| Code Title | Hours |
| :--- | :--- | :--- |
| Introductory-Level Electives |  |

Complete two courses in the following range: 8
SOCL 1100 to SOCL 1999
Intermediate-Level Electives
Complete three courses in the following range: 12
SOCL 2000 to SOCL 3999
Elective in Social Change
Complete one of the following: 4

| SOCL 1260 | Gender in a Changing Society |
| :--- | :--- |
| SOCL 1280 | The 21 st-Century Workplace |
| SOCL 2268 | Social Movements |
| SOCL 2450 | Class, Power, and Social Change |

Elective in Social Inequality
Complete one of the following:

| SOCL 1245 | Sociology of Poverty |
| :--- | :--- |
| SOCL 1275 | Social Stratification |
| SOCL 2205 | Law and Social Justice |
| SOCL 2270 | Race and Ethnic Relations |

Advanced-Level Electives
Complete two courses in the following range:

## SOCL 4000 to SOCL 4999

## Social Science Electives

Complete five social science courses in the following subject areas: AFRS, AFAM, ANTH, CRIM, ECON, HUSV, HIST, INTL, LING, LPSC, POLS, or PSYC.

## Sociology Experiential Learning Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Complete one of the following courses or a study abroad or a <br> co-op: | 4 |  |
| SOCL 3487 | Applied Sociology: Practice and Theory |  |
| SOCL 4971 | Junior/Senior Honors Project 2 |  |
| SOCL 3488 | Doing Sociology in the City Abroad |  |

## 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

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 |
| :--- | :---: | :---: | :---: | ---: | ---: | Hours


| ANTH 1101 | 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 |  | 16 | 0 | 0 |
| Year 2 |  |  |  |  |  |
| Fall | Hours | Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| SOCL 2300 |  | SOCL $1200-$ <br> level elective | 4 Vacation | 0 Co-op | 0 |
| SOCL 2320 | 4 | SOCL 2321 | 4 |  |  |
| Elective |  | SOCL intermediatelevel 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 ENGW 3315 | 4 Social <br> science <br> elective | 4 Co-op | 0 |

Year 4

| Fall | Hours Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op | 0 SOCL <br> intermediatelevel elective |  | Social science elective | 4 | Co-op | 0 |
|  | Social science elective | 4 | Elective | 4 |  |  |
|  | SOCL intermediatelevel elective | 4 |  |  |  |  |
|  | SOCL <br> advanced- <br> level elective | 4 |  |  |  |  |
|  | 0 | 16 |  | 8 |  | 0 |

## Year 5



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 $1200-$ level elective | 4 Vacation | 0 Vacation | 0 |
| SOCL 1101 | 4 | SOCL 1200- <br> level elective | 4 |  |  |
| ENGW 1111 | 4 | Elective | 4 |  |  |
| MATH 1215 | 4 | Elective | 4 |  |  |
| ANTH 1101 | 4 |  |  |  |  |
|  | 17 |  | 16 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: |
| SOCL 2300 | 4 Co-op | 0 Co-op | $\begin{aligned} & 0 \text { SOCL 1200- } \\ & \text { level elective } \end{aligned}$ | 4 |
| SOCL 2320 | 4 |  | SOCL intermediatelevel elective | 4 |
| Social science elective | 4 |  |  |  |
| Elective | 4 |  |  |  |
| EESH 2000 | 1 |  |  |  |
|  | 17 | 0 | 0 | 8 |

Year 3

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| ENGW 3315 | 4 Co-op | 0 Co-op | 0 SOCL <br> intermediate- <br> level elective | 4 |
| SOCL 2321 | 4 |  | Elective |  |$\quad 4$


| Year 4 |  |  |  |  |
| :--- | :---: | :---: | ---: | ---: |
| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| SOCL | 4 Co-op | 0 Co-op | 0 Vacation | 0 |

intermediate-

| level elective |  |  |  |
| :--- | :--- | :--- | :--- |
| Social <br> science <br> elective | 4 |  |  |
| Elective 4 4 0 |  |  |  |
| SOCL <br> intermediate- <br> level elective | 16 | 0 | 0 |

Year 5

| Fall | Hours | Spring |
| :--- | :---: | ---: | Hours 0

$\left.\begin{array}{lll}\begin{array}{l}\text { Social } \\ \text { science } \\ \text { elective }\end{array} & 4 \text { Elective } & 4 \\ \begin{array}{lll}\text { Social } \\ \text { science } \\ \text { elective }\end{array} & \begin{array}{l}4 \text { SOCL } \\ \text { advanced- } \\ \text { level elective }\end{array} & 4\end{array}\right]$

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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Computer Science Courses

Code Title Hours

Computer Science Overview

| CS 1200 | Leadership Skill Development | 1 |
| :--- | :--- | :--- |
| CS 1210 | Professional Development for CCIS Co- | 1 |

Computer Science Fundamental Courses
A grade of C - or higher is required in computer science
fundamental courses:

| CS 1800 | Discrete Structures |  |
| :--- | :--- | ---: |
| and CS 1802 | and Seminar for CS 1800 | 5 |
| CS 2500 | Fundamentals of Computer Science 1 | 5 |
| and CS 2501 | and Lab for CS 2500 |  |
| CS 2510 Fundamentals of Computer Science 2 <br> and CS 2511 and Lab for CS 2510 | 5 |  |

Computer Science Required Courses

| CS 3000 | Algorithms and Data | 4 |
| :--- | :--- | :---: |
| CS 3200 | Database Design | 4 |
| CS 3500 | Object-Oriented Design | 4 |
| IS 2000 | Principles of Information Science | 4 |
| Computer Science Writing-Intensive Requirement | 4 |  |


| CS 4500 | Software Development |
| :--- | :--- |
| IS 3500 | Information System Design and |
|  | Development |



| Sociology <br> introductory <br> elective | 4 |  |  |  |
| :--- | :---: | :---: | :--- | :--- |
| Elective | 4 |  |  | 8 |
| THTR 1170 | 1 | 0 | 0 | 8 |

Year 4


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 <br> and CS 1802 | S CS 2510 <br> and CS 2511 | 5 Vacation | Vacation |  |
| CS 2500 <br> and CS 2501 | 5 IS 2000 | 4 |  |  |
| CS 1200 | 1 SOCL 2320 | 4 |  |  |
| ENGW 1111 | 4 ANTH 1101 | 4 | 0 | 0 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | :---: |
| CS 3000 | 4 Co-op | Co-op | Vacation |  |
| CS 3500 | 4 |  |  |  |
| CS 1210 | 1 |  |  |  |
| SOCL 2321 | 4 |  | 0 | 0 |



Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| CS 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 |  |  |  |
| CS elective 2 | 4 | SOCL 4600 | 4 |  |  |  |
| Sociology advanced elective |  | CS writingintensive requirement | 4 |  |  |  |
| Elective | 4 | CS elective 3 | 4 |  |  |  |
| Elective | 4 | Elective | 4 |  |  |  |
| 16 |  |  | 16 |  |  |  |

Total Hours: 134

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Cultural Anthropology Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Cultural Anthropology |  |  |
| 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 |
| Advanced Area Courses | 8 |  |
| Complete two of the following. Additional courses taken in <br> this section may be used as electives. |  |  |

this section may be used as electives.

| ANTH 4350 | Ethnography of Southeast Asia |
| :--- | :--- |
| ANTH 4500 | Latin American Society and <br> Development |


| ANTH $4505 \quad$ Native North Americans |
| :--- |
| ANTH $4510 \quad$ Anthropology of Africa |
| ANTH $4515 \quad$ 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. |
| 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. |
| 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.

## Program Requirement

128 total semester hours required

## Plan of Study

Five Years, Three Co-ops in Summer 2/Fall


| 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 |  | Social science elective | 4 |  |  |  |
|  |  | EESH 2000 | 1 |  |  |  |
|  | 16 |  | 17 |  | 0 | 0 |



Year 4

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-op |  | 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 <br> 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 |  |  |  |  |$\quad 4$|  |  |
| :--- | :--- |
| Social <br> science <br> elective | 4 ENGW 1111 |

Year 2

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | ---: | ---: |
| ANTH 2300 | 4 Co-op | 0 Co-op | 0 Anthropology | 4 |
| Anthropology <br> elective | 4 |  | Social | 4 |
| science |  |  |  |  |
| elective |  |  |  |  |


| Social <br> science <br> elective | 4 |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Elective | 4 | 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 |

## Year 4

| Fall | Hours Spring | Hours Summer 1 | Hours Summer 2 | Hours |
| :--- | :---: | :---: | :---: | ---: |
| Anthropology <br> elective | 4 Co-op | 0 Co-op | 0 Vacation | 0 |
| Elective | 4 |  |  |  |
| Advanced <br> area ANTH | 4 |  |  |  |
| 4500-ANTH <br> 4515 |  |  |  |  |
| Elective | 4 |  |  | 0 |

Year 5
$\left.\begin{array}{lrr}\text { Fall } & \text { Hours Spring } & \text { Hours } \\ \begin{array}{l}\text { Advanced } \\ \text { area ANTH }\end{array} & 4 \text { ANTH 4600 } & 4 \\ \begin{array}{l}\text { 4500-ANTH } \\ 4515\end{array} & 4 \text { Social } \\ \text { science } \\ \text { elective }\end{array}\right]$

Total Hours: 130

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Sociology Major Requirements

| Code | Title | Hours |
| :--- | :--- | ---: |
| Required Sociology |  | 4 |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2321 | Research Methods in Sociology |  |
| Sociology Electives |  | 8 |
| Introductory Electives |  |  |
| Complete two courses in the following range: |  |  |

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 4
abroad or a dialogue of civilizations:

| 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

Cultural Anthropology Core Courses

| ANTH 1101 | Peoples and Cultures | 4 |
| :--- | :--- | :--- |
| ANTH 3410 | Ethnographic Field Experience | 4 |
| ANTH 3421 | Foundations of Anthropological Theory | 4 |
| Advanced Area Courses | 8 |  |


| ANTH 4350 | Ethnography of Southeast Asia |
| :--- | :--- |
| ANTH 4500 | Latin American Society and <br> 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.

## 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 |
| :--- | :--- | ---: |
| Required Course | Global Markets and Local Culture | 4 |
| ANTH 2305 |  | 4 |
| Capstone | Senior Seminar |  |
| 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.

## Program Requirement

128 total semester hours required

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath
Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## Human Services Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Human Services Overview |  |  |
| HUSV 1101 | Human Services Professions | 4 |
| HUSV 2300 | Counseling in Human Services | 4 |
| HUSV 3570 | The Nonprofit Sector, Philanthropy, and Social Change | 4 |
| HUSV 3900 | Introduction to Social Policy | 4 |
| Research Methods |  |  |
| Complete option A or option B: |  | 4 |
| Option A |  |  |
| HUSV 3700 | Research Methods for Human Services |  |
| Option B |  |  |
| Complete the following and one additional HUSV course: |  |  |
| SOCL 2321 | Research Methods in Sociology |  |
| Organization |  |  |
| SOCL 3440 | Sociology of Human Service Organizations | 4 |

Human Services Internship
HUSV $4994 \quad$ Human Services Internship 6
Human Services Elective
Complete one additional HUSV course. 4
Senior Capstone ${ }^{1}$
HUSV $4700 \quad$ Senior Seminar in Human Services 4

1 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 |
| :---: | :---: | :---: |
| Required Sociology Courses |  |  |
| SOCL 1101 | Introduction to Sociology | 4 |
| SOCL 2300 | Social Theory | 4 |
| SOCL 2320 | Statistical Analysis in Sociology | 4 |
| SOCL 3440 | Sociology of Human Service Organizations | 4 |
| Introductory Electives |  |  |
| Complete two | llowing: | 8 |


| SOCL 1120 | Society and Health |
| :--- | :--- |
| SOCL 1220 | Sociology of Boston |
| SOCL 1228 | Social Problems |
| SOCL 1241 | Sociology of Violence |
| SOCL 1245 | Sociology of Poverty |
| SOCL 1246 | Environment and Society |
| SOCL 1255 | Sociology of the Family |
| SOCL 1260 | Gender in a Changing Society |
| SOCL 1275 | Social Stratification |
| SOCL 1285 | Deviant Behavior and Social Control |
| SOCL 1290 | Juvenile Delinquency |
| SOCL 1295 | Drugs and Society |
| ANTH 1101 | Peoples and Cultures |
| Intermediate-Level Elective |  |
| Complete one of the following: | 4 |


| SOCL 2205 | Law and Social Justice |
| :--- | :--- |
| SOCL 2268 | Social Movements |
| SOCL 2270 | Race and Ethnic Relations |
| SOCL 2358 | Current Issues in Cities and Suburbs |
| SOCL 2450 | Class, Power, and Social Change |
| SOCL 3441 | Sociology of Health and Illness |
| SOCL 3487 | Applied Sociology: Practice and Theory |
| ANTH 2302 | Gender and Sexuality: A Cross-Cultural |
| ANTH 2305 | Gerspective |
| ANTH 2315 | Religion and Morkets and Local Culture |
| ANTH 2350 | Urban Anthropology |

Advanced-Level Elective
Complete one of the following:

| SOCL 4514 | "The Wire" and the Study of Urban <br> Inequalities |
| :--- | :--- |
| SOCL 4518 | Law and Society in a Digital World |
| SOCL 4520 | Race, Class, and Gender |
| SOCL 4523 | Sexualities |
| SOCL 4580 | Special Topics in Sociology |
| ANTH 4350 | Ethnography of Southeast Asia |
| ANTH 4500 | Latin American Society and <br> ANTH 4505 |
| ANTH 4510 | Native North Americans |
| ANTH 4515 | Culture and Politics in Modern India |
| ANTH 4580 | Special Topics in Anthropology |
| Senior Seminar ${ }^{2}$ |  |
| SOCL 4600 | Senior Seminar |

2 With permission of the sociology head advisor, 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 <br> HUSV 2350 Ethnic Relations, Cultural Identity, and Human Services

## 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.

## Program Requirement

128 total semester hours required

## 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. 41).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 37).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 622).

## 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 |
| :---: | :---: | :---: |
| Introductory Linguistics |  |  |
| LING 1150 | Introduction to Language and Linguistics | 4 |
| Intermediate/Advanced Linguistics |  |  |
| LING 2350 | Linguistic Analysis | 4 |
| LING 3422 | Phonology | 4 |
| LING 3442 | Sociolinguistics | 4 |
| LING 3450 | Syntax | 4 |
| LING 3456 | Language and Gender | 4 |
| Linguistics Electives |  |  |
| Complete two | following: | 8 |


| DEAF 2700 | ASL Linguistics |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| LING 3420 | Phonetics |  |  |  |  |  |
| LING 3424 | Morphology |  |  |  |  |  |
| LING 3434 | Bilingualism |  |  |  |  |  |
| LING 3452 | Semantics |  |  |  |  |  |
| LING 3454 | History of English |  |  |  |  |  |
| LING 3458 | Topics in Linguistics |  |  |  |  |  |
| LING 4654 | Seminar in Linguistics |  |  |  |  |  |
| PSYC 3464 | Psychology of Language |  |  |  |  |  |
| PSYC 4610 | Laboratory in Psycholinguistics |  |  |  |  |  |
| PSYC 4658 |  |  |  |  |  | Seminar in Psycholinguistics |
| Linguistics Research | 4 |  |  |  |  |  |
| Complete one of the following: |  |  |  |  |  |  |


| 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 |
| Foundation Courses |  |  |
| ANTH 1101 | Peoples and Cultures | 4 |
| ANTH 2305 | Global Markets and Local Culture | 4 |
| ANTH 4600 | Senior Seminar | 4 |
| Anthropology Advanced Area Courses |  |  |
| Complete three of | 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 AN | courses not already taken. | 12 |

## Linguistics/Anthropology Integrative Requirement

| Code | Title | Hours |
| :--- | :--- | ---: |
| Integrative Course |  |  |
| 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.

## 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 |  | 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 |
| LING 3422 | 4 | LING 3442 | 4 | Vacation |  | Co-op |  |
| Foreign language course | 4 | LING 3450 | 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 |  |
|  | Linguistics <br> elective | 4 Elective | 4 |  |
|  | Anthropology <br> elective | 4 |  |  |
|  | Elective | 4 | 8 | 0 |

Year 4
$\left.\begin{array}{llccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { Co-op } & \begin{array}{l}\text { Linguistics } \\ \text { elective }\end{array} & 4 \text { Elective } & 4 \text { Co-op }\end{array}\right]$

| Year 5 | Hours Spring | Hours |
| :--- | :---: | ---: |
| Fall | ANTH 4600 | 4 |
| Co-op | Anthropology <br> advanced <br> area course | 4 |
| Linguistics <br> research | 4 |  |
|  | Elective | 4 |
| 0 | 16 |  |

Total Hours: 128

## Four Years, No Co-op

Year 1
$\left.\begin{array}{lcccc}\text { Fall } & \text { Hours Spring } & \text { Hours Summer 1 } & \text { Hours Summer 2 } & \text { Hours } \\ \text { LING 1150 } & 4 \text { LING 2350 } & 4 & \text { Vacation } & \text { Vacation }\end{array}\right]$

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LING 3422 | 4 | LING 3442 | 4 | Vacation |  | Vacation |  |
| Foreign language course | 4 | LING 3450 | 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 |  | Linguistics elective | 4 |  |  |  |  |
| Elective |  | Anthropology advanced area course | 4 |  |  |  |  |
| ENGW 3315 | 4 | Elective | 4 |  |  |  |  |
|  | 16 |  | 16 |  | 0 |  | 0 |

Year 4

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| Linguistics <br> research | 4 ANTH 4600 | 4 |
| Anthropology <br> advanced <br> area course | Linguistics <br> elective | 4 |
| Elective | 4 Elective | 4 |
| Elective | 4 Elective | 4 |
|  | 16 | 16 |

Total Hours: 128

## 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

## Research Methods

An intermediate- or advanced-level SOCL elective may be substituted for Research Methods in Sociology (SOCL 2321) with departmental approval.

| Code | Title |
| :--- | :--- |
| SOCL 2300 | Social Theory |
| or SOCL 2321 | Research Methods in Sociology |

Code or SOCL 2321

Title

Research Methods in Sociology

Hours

## Introductory-Level Required Electives

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Complete two courses in the following range: | 8 |
| SOCL 1100 to SOCL 1299 |  |
| Intermediate-/Advanced-Level Required Elective |  |
| Code $\quad$ Title | Hours |
| Complete one course in the following range: | 4 |

SOCL 3400 to SOCL 4599

## GPA Requirement

2.000 GPA required in the minor

## 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

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 |
| :--- | :--- | ---: |
| ANTH 1101 | Peoples and Cultures | 4 |
| ANTH 3421 | Foundations of Anthropological Theory | 4 |
| or ANTH 3410 | Ethnographic Field Experience |  |

Advanced Area Courses
Code Title Hours

Complete one of the following: 4

| ANTH 4350 | Ethnography of Southeast Asia |
| :--- | :--- |
| ANTH 4500 | Latin American Society and <br> Development |
| ANTH 4505 | Native North Americans |
| ANTH 4510 | Anthropology of Africa |
| ANTH 4515 | Culture and Politics in Modern India |

## Anthropology Electives

| Code $\quad$ Title | Hours |
| :--- | ---: |
| Complete two ANTH courses. | 8 |

## GPA Requirement

2.000 GPA required in the minor

## Accelerated Bachelor/Graduate Degree 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).

While a number of PlusOne bachelor's/master's degree programs have been predefined, students may propose to combine other CSSH undergraduate and graduate programs. For more information on the formal process of proposing student-initiated PlusOne programs, please visit the CSSH graduate programs website (https:// www.northeastern.edu/cssh/graduate/programs/plusone-programs)

Northeastern University School of Law also admits students from a small number of programs in the College of Social Sciences and Humanities to a 3+3 program that allows students to count their first year of law school toward their undergraduate degree.

## Programs

## Criminal Justice

- Criminal Justice, BS/Criminal Justice, MS
- Criminal Justice, BS/JD


## Economics

- Economics, BA/Economics, MA
- Economics, BS/Economics, MA


## English

- English, BA/English, MA


## History

- History, BA/History, MA
- History, BS/History, MA
- History, BA/JD
- History, BS/JD


## Human Services

- Human Services, BA/College Student Development and Counseling, MS
- Human Services, BS/College Student Development and Counseling, MS


## International Affairs

- International Affairs, BA/MA


## Philosophy and Religion

- Philosophy, BA/JD
- Philosophy, BS/JD


## Political Science

- Political Science, BA/Political Science, MA
- Political Science, BA/Public Administration, MPA
- Political Science, BA/Security and Resilience Studies, MS
- Political Science, BA/International Affairs, MA
- Political Science, BS/Political Science, MA
- Political Science, BS/Public Administration, MPA
- Political Science, BS/Security and Resilience Studies, MS
- Political Science, BA/JD
- Political Science, BS/JD


## Sociology

- Sociology, BA/Sociology, MA
- Sociology, BS/Sociology, MA


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## Emad Aboelela

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## Ali Abur

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## Laurie Achin

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## George G. Adams

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Pharmaceutical Sciences; University of Georgia, PhD

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## Samuel Chung

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## Pennsylvania, PsyD

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## Paul Closas

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Northeastern University has maintained its status as a member in good standing of the New England Association of Schools and Colleges (NEASC) Commission on Institutions of Higher Education (CIHE) since it was awarded its initial accreditation in 1940. The university was last reviewed by NEASC in 2008 and will be reviewed again in fall 2018.

Northeastern University possesses degree-granting authority in Massachusetts, under the auspices of the Massachusetts Board of Higher Education.

| Program | Accrediting Agency |
| :--- | :--- |
| Northeastern University | New England Association of |
|  | Schools and Colleges (NEASC) |

## BOUVÉ COLLEGE OF HEALTH SCIENCES

| Program | Accrediting Agency |
| :---: | :---: |
| BS in Athletic Training | Commission on Accreditation of Athletic Training Education (CAATE) |
| BS in Health Science | Council on Education for Public Health |
| MS in Speech-Language Pathology and Audiology | Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association (ASHA), Massachusetts Board of Education ${ }^{1}$ |
| BS in Nursing | Commission on Collegiate Nursing Education (CCNE) and Massachusetts Board of Registration in Nursing ${ }^{2}$ |
| MS in Physician Assistant Studies | Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA) |
| MS in Nursing | Commission on Collegiate Nursing Education (CCNE) and Massachusetts Board of Registration in Nursing ${ }^{2}$ |
| MS in Nursing in Anesthesia | Council on Accreditation of Nurse Anesthesia Educational Programs (COA); Commission on Collegiate Nursing Education (CCNE) and Massachusetts Board of Registration in Nursing ${ }^{2}$ |
| Registered Nurse/BSN ${ }^{3}$ | Commission on Collegiate Nursing Education (CCNE) and Massachusetts Board of Registration in Nursing ${ }^{2}$ |

$\left.\begin{array}{ll}\begin{array}{l}\text { Post BS Doctor of Nursing Practice US } \\ \text { Army Program in Anesthesia Nursing } \\ \text { (USAGPAN) }\end{array} & \begin{array}{l}\text { Council on Accreditation of } \\ \text { Nurse Anesthesia Educational } \\ \text { Programs (COA) }\end{array} \\ \hline \text { DPT in Physical Therapy } & \begin{array}{l}\text { Commission on Accreditation } \\ \text { of Physical Therapy Education } \\ \text { (CAPTE) }\end{array} \\ & \begin{array}{l}\text { Commission on Collegiate } \\ \text { MS/MBA (two-year program) } \\ \text { Nursing Education (CCNE) } \\ \text { and Massachusetts Board } \\ \text { of Registration in Nursing }\end{array} \\ \text { Commission on Collegiate }\end{array}\right\}$

## College of Arts, Media and Design

Program
Master of Architecture (Urban Architecture)

Accrediting Agency
National Architectural Accreditation Board (NAAB)

## D'Amore-McKim School of Business

| Program | Accrediting Agency |
| :--- | :--- |
| BS in Business Administration | AACSB International-The <br> Association to Advance <br> Collegiate Schools of Business |
| BS and MS in International Business | AACSB International-The <br> Association to Advance <br> Collegiate Schools of Business |
| MBA | AACSB International-The <br> Association to Advance <br> Collegiate Schools of Business |
| MS in Finance | AACSB International-The <br> Association to Advance <br> Collegiate Schools of Business |


| MS in Taxation | AACSB International-The <br> Association to Advance <br> Collegiate Schools of Business |
| :--- | :--- |
| MS in Accounting | AACSB International-The <br> Association to Advance <br> Collegiate Schools of Business |
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| MS in Technological Entrepreneurship | AACSB International-The <br> Association to Advance <br> Collegiate Schools of Business |
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Program Accrediting Agency

BS in Computer Science
Computing Accreditation
Commission of ABET
(Accreditation Board for
Engineering and Technology)

## College of Engineering

| Program | Accrediting Agency |
| :--- | :--- |
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|  | Commission of ABET |
| BS in Chemical Engineering | Engineering Accreditation |
|  | Commission of ABET |
| BS in Civil Engineering | Engineering Accreditation |
|  | Commission of ABET |
| BS in Electrical Engineering | Engineering Accreditation |
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## College of Professional Studies

| Program | Accrediting Agency |
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| BS in Management ${ }^{1}$ | AACSB International-The Association to Advance Collegiate Schools of Business |
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| BS and AS in Electrical Engineering Technology | Accredited by the Technology Accreditation Commission of ABET, 111 Market Place Suite 1050 Baltimore, MD 21202-4012 <br> Telephone: 410.347.7700 |


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| 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 Science, 5-8, 8-12 | Massachusetts Department of Elementary and Secondary Education |
| Teacher of Mathematics, 5-8, 8-12 | Massachusetts Department of Elementary and Secondary Education |
| Teacher of Physics, 8-12 | Massachusetts Department of Elementary and Secondary Education |
| Elementary Education, 1-6 | Massachusetts Department of Elementary and Secondary Education |
| Teacher of English, 8-12 | Massachusetts Department of Elementary and Secondary Education |
| Teacher of Foreign Language: Spanish, 5-12 | Massachusetts Department of Elementary and Secondary Education |
| Teacher of History, 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 Students with Moderate Disabilities Pre-K-8, 5-12 | Massachusetts Department of Elementary and Secondary Education |
| MS in Leadership with Project Management | Project Management Institute's Global-Accreditation-Center |
| MS in Technology Commercialization | AACSB International-The Association to Advance Collegiate Schools |

1 Accredited under the aegis of the "sponsoring" full-time college.
College of Social Science and Humanities

| Program | Accrediting Agency |
| :---: | :---: |
| BS in Criminal Justice | Massachusetts Board of Education ${ }^{1}$ |
| MS in Criminal Justice | Massachusetts Board of Education ${ }^{1}$ |
| PhD in Criminal Justice | Massachusetts Board of Education ${ }^{1}$ |
| Master of Public Administration | National Association of Schools of Public Affairs and Administration |

${ }^{1}$ The Massachusetts Board of Education approves (not accredits) programs.

## School of Law

Program
JD

## Accrediting Agency

American Bar Association Association of American Law Schools ${ }^{4}$

4
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. See the corresponding addendum on the Online and Graduate Professional Degree Programs website (http://www.northeastern.edu/online/about-northeastern-online/stateagreements.php) for up-to-date, state-prescribed regulatory information applicable to all degree levels.

## Resources

## Online Resources

The following online resources supplement this catalog:

## Course descriptions:

https://registrar.northeastern.edu/article/catalog-2017-2018/
Class schedules:
https://registrar.northeastern.edu/article/schedule-of-classes/

## Academic calendars:

www.northeastern.edu/registrar/calendars.html (http:// www.northeastern.edu/registrar/calendars.html)

## Campus maps:

www.northeastern.edu/campusmap (http://www.northeastern.edu/ campusmap)

## General Information

The Northeastern University Undergraduate Catalog (Full-Time Day Programs) contains the university's primary statements about these academic programs and degree requirements, as authorized by the president or the Board of Trustees. For information about other academic policies and procedures; student responsibilities; student academic and cocurricular life; faculty rights and responsibilities; or general personnel policies, benefits, and services, please refer to the Undergraduate Student Handbook, Graduate Catalog, Cooperative Education Student Handbook, Faculty Handbook, and related procedural guides, as appropriate.

Accreditation. Northeastern University is accredited by the New England Association of Schools and Colleges, 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.

The Northeastern University Undergraduate 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.

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.

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.

Emergency Closing of the University. Northeastern University posts emergency announcements, including news of weather-related closings, on its homepage (http://www.northeastern.edu) and notifies members of the community individually through the NU ALERT system. In addition, the university has made arrangements to notify students, faculty, and staff by radio and television when it becomes necessary to cancel classes because of extremely inclement weather. AM stations WBZ (1030), WILD (1090), and WRKO (680), and FM station WBUR (90.9), are the radio stations authorized to announce the university's decision to close. Television stations WBZ-TV4, WCVB-TV5, and WHDH-TV7 will also report cancellations. Since instructional television courses originate from live or broadcast facilities at the university, neither the classes nor the courier service operates when the university is closed. Please listen to the radio or television to determine whether the university will be closed.

If a storm occurs at night, the announcement of university closing is given to the radio stations at approximately 6 a.m. Classes are generally canceled for that entire day and evening at all campus locations unless stated otherwise. When a storm begins late in the day, cancellations of evening classes may be announced. This announcement is usually made between 2 and 3 p.m.

Equal Opportunity Policy. Northeastern University does not discriminate on the basis of race, color, religion, sex, sexual orientation, age, national origin, disability, or veteran status in admission to, access to, treatment in, or employment in its programs and activities. In addition, Northeastern University will not condone any form of sexual harassment. Handbooks containing the university's nondiscrimination policies and its grievance procedures are available in the Office of Institutional Diversity and Inclusion, 125 Richards Hall. Inquiries regarding the university's nondiscrimination policies may be directed to:

Office of Institutional Diversity and Inclusion
125 Richards Hall
Northeastern University
Boston, Massachusetts 02115
617.373.2133

Inquiries concerning the application of nondiscrimination policies may also be referred to the:

Regional Director
Office for Civil Rights
U.S. Department of Education

8th Floor
5 Post Office Square
Boston, MA 02109-3921
Disability Resource Center. The Disability Resource Center provides a variety of disability-related services and accommodations to Northeastern University's students and employees 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.

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 printed in the Undergraduate Student Handbook and Graduate Student Handbook and are distributed annually at registration for the university's colleges and graduate schools.

Cleary 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 upon request from the Northeastern University Director of Public Safety, 360 Huntington Avenue, Boston, MA 02115 , or by calling 617.373.2696.

Persistence Rates under the Student Right-to-Know Act. In the fall of 2017, the persistence rate for students who entered in the fall 2016 cohort was $96.7 \%$ percent.

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To educate students for a life of fulfillment and accomplishment.
To create and translate knowledge to meet global and societal needs.
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Political Science and Economics, BS ..... 686
Political Science and Economics, BS ..... 686
Political Science and Human Services, BA ..... 757
Political Science and Human Services, BA ..... 757
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Political Science and Human Services, BS ..... 766
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Political Science and International Affairs, BA ..... 800
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Political Science and Philosophy, BA ..... 843
Political Science and Philosophy, BS ..... 859
Political Science and Philosophy, BS ..... 859
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Rhetoric, Minor ..... 727
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Sociology and International Affairs, BA ..... 805
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Sociology and Political Science, BA ..... 888
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Spanish and International Affairs, BA ..... 654
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Theatre and Interaction Design, BA ..... 102
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[^0]:    Total Hours: 130

[^1]:    ARCH $3370 \quad$ Topics in Architectural History

[^2]:    Total Hours: 130

[^3]:    Total Hours: 133

[^4]:    Communication Studies Integrative Course

[^5]:    MISM $2510 \quad$ Fundamentals of Information Analytics

[^6]:    Challenge (STRT 4516) both satisfy the capstone requirement.

[^7]:    Total Hours: 134

[^8]:    Total Hours: 134

[^9]:    Total Hours: 134

[^10]:    Total Hours: 139

[^11]:    Total Hours: 137

[^12]:    Total Hours: 136

[^13]:    Total Hours: 130

[^14]:    Total Hours: 133

[^15]:    Total Hours: 134

[^16]:    Total Hours: 134

[^17]:    Total Hours: 129

[^18]:    Total Hours: 128

[^19]:    Total Hours: 125

[^20]:    Nineteenth-, Twentieth-, and Twenty-First-Century Literature
    Complete one of the following:

[^21]:    Total Hours: 129

[^22]:    PHIL 3343 Existentialism

[^23]:    Total Hours: 134

[^24]:    Philosophy Electives
    Complete two additional PHIL courses.

[^25]:    Total Hours: 127

[^26]:    Total Hours: 129

[^27]:    POLS 4910 Model United Nations

[^28]:    Campaigns and Elections Electives

[^29]:    Total Hours: 130

